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Maternal-Fetal Relationship in Pregnancy After Perinatal Loss Among African American Women

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**MATERNAL-FETAL RELATIONSHIP IN PREGNANCY AFTER PERINATAL LOSS AMONG AFRICAN
AMERICAN WOMEN**

by

Jeri M. Antilla

A Dissertation Submitted in
Partial Fulfilment of the
Requirements for the Degree of
Doctor of Philosophy
in Nursing
at
University of Wisconsin-Milwaukee

August 2020

ABSTRACT

MATERNAL-FETAL RELATIONSHIP IN PREGNANCY AFTER PERINATAL LOSS AMONG AFRICAN AMERICAN WOMEN

by

Jeri M. Antilla

University of Wisconsin-Milwaukee, 2020
Under the Supervision of Teresa S. Johnson, PhD, RN

Purpose: Explore perceptions of chronic stressors of African American women before, during and after a perinatal loss and during a subsequent pregnancy to a loss. Explore the perceptions of stress and loss and its association with establishing a positive maternal-fetal relationship early in subsequent pregnancies to a perinatal loss.

Design: Qualitative study using thematic analysis was conducted.

Setting: Participants were recruited from clinics where women receive care, perinatal loss support groups, community centers, churches, hair salons, and social media throughout the United States.

Participants: African American women (n=22), who reported a history of pregnancy loss at ≥ 14 weeks gestation or a newborn ≤ 28 days of life, and who were currently pregnant or had given birth to a live child after their loss.

Methods: Data was collected using semi-structured individual interviews and was analyzed using Black feminist thought and intersectionality alongside a life-course perspective.

Results: Women identify complex stressors before, during, and after their perinatal loss and in subsequent pregnancies to their loss. Their mental well-being was at the center of their narratives. Women experienced heightened anxiety and fear as they entered into a subsequent

pregnancy to her loss. They admitted these emotions created a delay in establishing a relationship with her fetus until later in pregnancy. Women also perceived experiencing racial discrimination by their healthcare provider at some point over the course of their perinatal loss. Women used comforting coping strategies which included social support, religious and spiritual beliefs, and practices to help manage their stress.

Conclusion: Women placed chronic stress and their mental well-being at the center of their narratives as powerful indicators that frequent prenatal assessment and early follow-up care is needed from healthcare providers after perinatal loss and during a subsequent pregnancy to a loss.

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DEDICATION

To my children, Aaron, Shelbi, Jacob, Sophie, and Andrew, thank you for your patience, support, and the many sacrifices made during this journey. I know it was not always easy during the times my studies impeded on our family time, but your understanding and reassurance helped to lessen the guilt. I hope I have instilled in you the drive to reach for your dreams and never stop learning. I love so much you.

To my mom, with you all things are possible. Thank you for being my constant throughout this long, and at times, endless journey. Your ongoing encouragement and support helped me see this through. I love you.

To the women who experienced the devastating loss of a baby and yet had the courage to share their intimate stories with me, I thank you. Through your words, the memories of your sons and daughters will live on and your voice will help to change the way care is given to mothers and their babies.

TABLE OF CONTENTS

Abstract	ii
Dedication	v
List of Figures	ix
List of Tables	x
Acknowledgments	xi
Chapter I: Introduction	1
Background	1
Problem Statement	2
Target Population and Rationale	2
Purpose Statement	4
Research Aim and Questions	5
Theoretical Framework	5
Black Feminist	5
Intersectionality	6
Life-course Perspective	8
Method	8
Manuscript Placement and Organization of Dissertation	9
Conclusion	11
Definition of Terms	12
Manuscript #1 <i>Reinscribing African American Women’s Position within Perinatal Loss with the Application of Black Feminist Thought</i>	15
Abstract	15
Introduction	16
Background	16
African American Women and Perinatal Loss	18
Black Feminist Thought	20
Intersectionality	21
Life-course perspective	22
Application of Theories	23
Having a Voice	26
Nursing Research	27
Conclusion	29
References	30
Chapter II: Literature Review	38
Chapter Introduction	38
Manuscript #2: <i>African American Women and Perinatal Loss: A Systematic Review of the Literature</i>	39
Abstract	39
Introduction	41
Theoretical Framework	43

Method	45
Inclusion Criteria	45
Search Strategies	45
Data Characteristics	45
Results	47
Description of Quantitative Studies	47
Description of Qualitative Studies	49
Outcome of Quantitative and Qualitative Studies	50
Quality and Bias	52
Discussion	54
Limitations	56
Implication for Research	57
Implication for Practice	57
Conclusion	58
References	59
Chapter III: Methods	79
Chapter Introduction	79
Theoretical Framework	80
Rational for Qualitative Research	82
Methods	83
Purpose and Research Questions	83
Sample	84
Recruitment	85
Protection of Human Subjects	86
Data Collection	88
Data Analysis	89
Scientific Rigor	90
Chapter IV: Results	94
Manuscript #3: <i>Perceived stressors of African American Women’s Experiences During their Perinatal Loss and Subsequent Pregnancies to their Loss: A Qualitative Study</i>	95
Abstract	95
Background	97
Theoretical Framework	100
Methods	103
Sample	104
Data Analysis	105
Trustworthiness	105
Ethical Considerations	106
Results	106
Perceived Stressors	106
Mental Well-being	114
Coping	118

Discussion	121
Limitations	128
Recommendations	129
Future Research	130
Conclusion	130
References	132
Chapter V: Discussion	148
Synthesis of Findings	148
Policy and Practice Recommendations	153
Limitations	156
Future Research	157
Conclusion	159
References	161
Appendices	174
Appendix A	174
Appendix B	175
Appendix C	181
Appendix D	182
Appendix E	203
Curriculum Vitae	205

LIST OF FIGURES

Chapter I: Introduction	1
Figure 1.1 Relationship of constructs to birth outcomes and maternal-fetal relationships in subsequent pregnancies through the lens of Black feminism	7
Chapter II: Literature Review	38
Figure 2.1 PRISMA Flow Diagram	69
Chapter IV: Results	94
Figure 4.1 Thematical figure linking constructs to birth outcomes through the lens of Black feminist thought and intersectionality alongside a life-course perspective	103

LIST OF TABLES

Chapter I: Introduction	1
Table 1.1 Manuscripts and Target Journals	10
Chapter II: Literature Review	38
Table 2.1 PsycINFO search strategy	70
Table 2.2 PubMed search strategy	71
Table 2.3 Quantitative studies included from systematic search	72
Table 2.4 Qualitative studies included from systematic search	74
Table 2.5 Abbreviations from literature review table 2.3 and 2.4	76
Table 2.6 Instruments used to measure outcomes in quantitative studies	77
Table 2.7 Scales and questionnaire descriptions	78
Chapter IV: Results	94
Table 4.1 Sociodemographic data of study population	146

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CHAPTER I: Introduction

Chapter Introduction

The purpose of this chapter is to provide the introduction and basis for this dissertation. Black feminist thought and intersectionality, alongside a life-course perspective are introduced as the theoretical frameworks in the format of a manuscript. The focus of the manuscript in this chapter is to demonstrate the utility of Black feminist thought and intersectionality, alongside a life-course perspective, in research concerned with African American women's experiences with perinatal loss.

Background

African American women experience perinatal and infant loss at rates at twice that of other race or ethnic groups (MacDorman & Gregory, 2015; Center for Disease Control and Prevention [CDC], 2015). In general, fetal losses are usually treated as if they are insignificant or invisible for bereaved mothers regardless of their race or ethnic background. Many African American women tend to endure compounding negative life experiences such as racism, sexism, classism, and gender inequality that have potential to negatively affect the bereavement process.

Perinatal loss is defined as a fetal death occurring between 20 weeks gestation and the first 28 days of life (Armstrong, Hutti, & Myers, 2009; MacDorman & Gregory, 2015). In addition, infant mortality is defined as the death of an infant from birth to one year of life (CDC, 2015). According to MacDorman and Gregory (2015), the United States infant mortality rate was 5.96 infant deaths per 1,000 births, which totaled 23,595 in 2013. The neonatal (less than 28 days of life) mortality rate and post-neonatal or infant (28 days to one year of age) mortality

was 4.04 per 1,000 live births and 1.93 per 1,000 live births, respectively, in 2013 (CDC, 2015). Therefore, African American women are two times more likely to lose their fetus at > 20 weeks gestation than white women (MacDorman & Gregory, 2015). The disparity in the fetal and infant mortality rates between African American and white women has more than doubled over the past decade (CDC, 2015; MacDorman & Gregory, 2015), and, although, the U.S. infant mortality rate decreased from 5.96 to 5.87 infant deaths per 1,000 live births from 2013 to 2016, it is not statistically different (Xu, Murphy, Kochanek, Bastian, & Arias, 2018). When assessing the individual contribution for cases of death to racial and ethnic disparities in infant mortality, 54 percent of the higher infant mortality rate for African American women, when compared with white women, is due to their higher rate of preterm birth (CDC, 2015). Furthermore, 15% of deaths among African American infants is due to sudden unexpected infant death syndrome(SUID) (CDC, 2015).

Historically, researchers have not included the lives of African American women in their research, and as a result, little research has examined concurrent multiple oppressions associated with interlocking identities as predictors for adverse health and birth outcomes (Szymanski & Steward, 2010). As girls, then as adults, African American women struggle to keep their balance as they straddle between two identities- race and gender, being Black and being a woman (Jones & Shorter-Gooden, 2003). According to Collins (2000), both stress appraisal and coping responses exist for African American women within a unique historical and social context. The “weathering” concept indicates that the effects of social inequality on the health of populations may compound with age, leading to growing gaps in health status from young to middle adulthood that can impact fetal health (Geronimus, 1992). Theories on weathering and

allostatic load greatly influence how stress impacts health outcomes among African American women (Geronimus, 2001; Geronimus, Hicken, Keene, & Bound, 2006). Both weathering and allostatic frameworks emphasize how important it is for researchers to identify and examine multiple stress-related factors that might increase the risk for adverse health and pregnancy outcomes (Woods-Giscombe, 2010). Thus, the weathering effects of living in a race-conscious society may be greatest among African Americans. According to Geronimus et al. (2006), African American women are most likely to engage in high-effort coping when dealing with chronic stress. Acknowledging that social background factors can induce physiological responses in African American women may assist in narrowing the Black-white perinatal and infant mortality gap.

When women experience intense or prolonged periods of grief during the bereavement process, in conjunction with elevated stress levels, this may contribute to negative effects on maternal health and pregnancy outcomes. It may also affect the quality of life and relationships of bereaved mothers. Although there is limited research surrounding maternal-fetal relationships in subsequent pregnancies to a perinatal or infant loss, what the literature does provide is a glimpse that anxiety, depression, and stress can inhibit the natural relationship process between a woman and her fetus. Women exposed to chronic stressors are more likely to suffer depressive symptoms and have smaller social networks to rely on for assistance (Costello, Compton, Keeler, & Angold, 2003). Both factors can negatively influence a woman's ability to establish a positive maternal fetal relationship early in a subsequent pregnancy to a perinatal loss (Delavari, Mirghafourvand, & Mohammad-Alizadeh-Charandabi, 2018). The perspectives of African American women who have experienced a perinatal loss and its

association with maternal-fetal relationships in subsequent pregnancies are not reported in the literature, resulting in a distinct gap in the literature.

Study Purpose and Specific Aims

The dissertation study provided a deeper understanding of the constructs that could potentially influence the health, pregnancy, and birth outcomes of African American women. In addition, the study helped to inform the understanding surrounding the effects of oppression on pregnancy and maternal-fetal relationships by centering the voices of African American women. Racism cannot be seen, so to examine its effects on health outcomes of African American women, a qualitative approach allowed women to share their feeling, emotions, and experiences surrounding their marginalized position. This study assisted in narrowing the Black-white gap by examining the social history of African American women and identifying potential concepts, such as chronic stress, that may contribute to a higher fetal and infant mortality rate among this population.

This dissertation used three approaches to address problems in the study of African American women who have experienced a perinatal loss. This study advances the science on its relationship to maternal-fetal relationships in subsequent pregnancies to a loss by performing a review of the literature. Next, a qualitative study was conducted using thematic analysis. Finally, a synthesis of the findings from the literature review and qualitative study propose a model for research and clinical practice. Drawing from Black feminist thought and intersectionality, alongside a life-course perspective, the after study aims, and research questions are addressed in subsequent chapters:

- 1) Explore the perceptions of how racism contributes to women's chronic stress and ultimately impacts their pregnancy and birth experiences.
- 2) Explore women's perceptions about relationships between chronic stress and poor birth outcomes.

The research questions for the study are:

- 1) What are stressors experienced by women in their day-to-day life?
- 2) What way does perceived stress affect a pregnancy?
- 3) What perceived stressors are experienced during pregnancy?
- 4) What role do social networks play in stress reduction and do they contribute to a positive mental wellbeing?

Theoretical Framework

Black Feminist Thought

Feminism, at its core, is a movement to abolish the inequalities women face. However, the Black feminist movement was the result of white feminists' continued legacy of rejecting and alienating Black women (Taylor, 1998). The demands of racist, elite, white women spurred Black women to shape feminist theory and praxis to include issues unique to themselves (Taylor, 1998). The 1977 statement of the Combahee River Collective (2015) argued that the liberation of Black women entails freedom for all people since it would require the end of racism, sexism, and class and gender oppression. Proponents of Black feminism dispute that African American women are positioned within structures of power in fundamentally different ways than their white counterparts (Combahee River Collective, 2015).

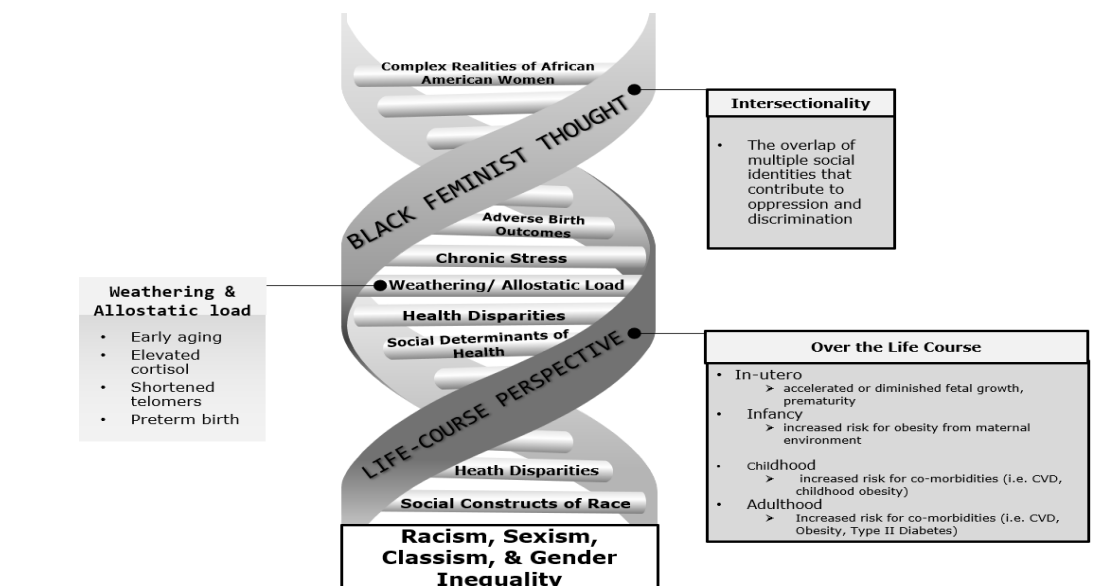
Intersectionality

An intersectional approach was also used to inform the research by providing a deeper understanding of the multiple axes of racism, sexism, classism, and gender inequality and how their oppressive nature affects African American women's health. Rooted in Black feminist thought, intersectionality is viewed as a disposition, method, and analytical tool (Carbado, Crenshaw, Mays, & Tomlinson, 2013). Black feminism is a school of thought which argues that racism, sexism, classism, and gender inequality are inseparable and cannot be teased apart. The way these concepts relate to and intersect with one another is referred to as intersectionality. Crenshaw (1989), who coined the term intersectionality, argues that the experiences of being a Black woman cannot be understood in terms of being Black or of being a woman. Likewise, Collins (2000) introduced the idea of the "matrix of domination." Collins used the matrix to describe the origination, development, and containment of intersecting oppressions that affect the social organizations of Black women's lives (Rice, Harrison, & Friedman, 2019). Intersectionality allows the ability to think through the limits and distortions of single-axis approaches to discrimination and assists in combatting and understanding the inequities that shape women's lives (Rice, Harrison, & Friedman, 2019). The concepts of racism, sexism, classism, and gender inequality is considered independent, but include intersecting axes, which frequently reinforce the other. Therefore, African American women are subjected to numerous oppressions that occur simultaneously that involve multiplicative relationships (Beal, 2008).

Because a high rate of African American women's stress is linked to their oppression it is not unreasonable to look at feminist theories for an explanation. Marginalization for African American women can be a source of distress, potentially causing poor maternal and pregnancy

outcomes. Together, Black feminist thought and intersectionality, provide a framework to strengthen the understanding regarding social conditions of African American women throughout their life course that may potentially impact their health and possibly influence their pregnancy (Anderson, 2002). The use of both Black feminist thought, and intersectionality allowed for the exploration into multiple intersecting axes of African American women. Through the lens of Black feminist thought and intersectionality, constructs such as racism, social determinants of health, health disparities, weathering, and chronic stress were identified. In addition, the relationships between the constructs and pregnancy and birth outcomes, were explored. A model (Fig.1) was developed, using Black feminist thought and intersectionality, alongside a life-course perspective to guide the study and capture key constructs that contribute to oppression and the mental health and well-being of African American women. Each construct has the ability to influence the next, adding to the risk factors that may affect African American women, their mental health, and their pregnancy outcomes.

Figure 1.1 *Relationship of constructs to birth outcomes and maternal-fetal relationships in subsequent pregnancies to a loss through the lens of Black feminism*



Life-course Perspective

The dissertation study uses a life-course perspective to explore the relationship between health disparities and pregnancy and birth outcomes in African American women. A life-course perspective is used to examine how the place people are born, grow, work, and age contributes to their health outcomes, searching for critical periods of risk and effects of cumulative exposures (Berkman, 2009; Jones et al., 2019). According to Lu and Halfon (2003), disparities in pregnancy and birth outcomes are the consequences of early life experiences and cumulative allostatic load throughout the life course. This perspective opens ways for health care providers and researchers to link health and wellness across the life span. It also tracks the impact of social inequities as it builds upon itself over time to create shorter life expectancies and fewer life opportunities for disproportionately affected populations (Verbiest, Kiko, Drummonds, & Kotelchuck, 2016). African American women are more likely to report higher levels of psychological stress and anxiety (Giurgescu et al., 2013). According to Chae et al. (2015), socioeconomic status, neighborhood effects, and racial discrimination may all have a direct link to an individual's health by engaging physiological responses induced by chronic stress.

Methods

This dissertation study focused on the perceptions of African American women who have experienced a perinatal loss and the impact it can have on maternal-fetal relationships in subsequent pregnancies to a loss. A qualitative approach was taken using thematic analysis and the data collection and analysis was informed by Black feminist thought and intersectionality, alongside a life-course perspective.

The dissertation study laid the foundation for future qualitative and quantitative studies surrounding perinatal loss and maternal-fetal relationships in African American women. Using a qualitative approach for the study allowed participants to describe how particular social constructs such as racism, sexism, classism, and gender inequality impacted their daily lives and possibly influenced their health and pregnancy outcomes. The effects of discrimination are not something African American women tend to speak freely about (Woods-Giscombe, 2010). By electing a qualitative approach, it allowed for the exploration into this disparity and examined the lived experience of African American women, their perinatal loss experiences, and subsequent pregnancies to their loss. The qualitative study sought to appreciate the distinctive experiences and qualities of African American women, while exploring their responses and societal influences on personal perceptions (Palmer, 2009).

Manuscript Placement and Organization of the Dissertation

In chapter one, a theoretical manuscript was developed to review Black feminist thought, alongside a life-course perspective, and discussed the frameworks implications for nursing research and practice. Both frameworks show promise for guiding nursing research on perinatal loss in African American women and how each framework assists in exploring the experiences of African American women. In addition, it is discussed how Black feminist thought and intersectionality, alongside a life-course perspective may assist in the development of culturally congruent prenatal and postnatal assessment tools. Chapter two presents the second manuscript in the form of a systematic review of the literature. The review follows PRISMA guidelines and the results of a systematic literature review reflected both qualitative and quantitative studies. In addition, the review of the literature examined the breadth of studies

on perinatal loss in African American women and maternal-fetal attachment in subsequent pregnancies to a perinatal loss. Chapter three presents the methodology used for the dissertation research. Next, chapter four presents a synthesis of the findings from the qualitative study. A manuscript was developed of the study’s findings and its implications for policy and practice. The content for all three manuscripts is detailed in Table 1.1. Finally, chapter five concludes with a discussion of the research, policy and practice recommendations, and future direction for research.

Table 1.1 Manuscripts and Target Journals

Manuscript	Title	Aim	Target Journal
1	“Reinscribing African American Women’s Position within Perinatal Loss with the Application of Black Feminist Thought”	Report the utility of Black feminist thought in research concerned with African American women’s experiences with perinatal loss.	<i>Advances in Nursing Science</i>
2	“African American Women and Perinatal Loss: A Systematic Review of the Literature”	Report findings in current literature on maternal-fetal relationships in subsequent pregnancy to a perinatal loss and outline current evidence concerning African American women’s well-being.	<i>Midwifery</i>
3	“Perceived stressors of African American Women’s Experiences During their Perinatal Loss and Subsequent Pregnancies to their Loss: A Qualitative Study”	Reported findings on the chronic stressors experienced by African American Women who have experienced a perinatal loss.	<i>Journal of Midwifery & Women’s Health</i>

Conclusion

This dissertation aimed to understand the perceived stressors of African American women who have experienced a perinatal loss and subsequent pregnancy to a loss. Consistent with a Black feminist perspective, this study highlights how racism, sexism, classism, and gender inequality impact women's experiences, and their access to healthcare and quality resources. In addition, it explores the impact of women's complex realities on their mental well-being. The manuscripts created from this study will be submitted for publications to the targeted journals listed in Table 1.1. The findings from this study will contribute to the advancing literature on the complex realities of African American women who have experienced a perinatal loss, and may assist in how healthcare providers and researchers are able to improve practices, develop resources, and promote social change for marginalized women.

Definition of Terms

Allostatic load is the physiological burden imposed by chronic stress as indicated by two categories of biomarkers. The first category, primary mediators, include the elevation of substances (norepinephrine, epinephrine, cortisol, and dehydroepiandrosterone sulfate (DHEA-S)) the body releases in response to stress. The second category comprises the effects that result from the primary mediators in the first category (Geronimus, 2006).

Classism represents negative beliefs, attitudes, and/or behaviors directed toward individuals with less power or who are socially devalued (Lott, 2012).

Fetal mortality/Fetal death/Fetal loss, which is defined by the National Vital Statistics Reported as the intrauterine death of a fetus at 20 weeks or greater gestation (MacDorman & Gregory, 2015).

Gender inequality exists when men and women are not considered equal and when gender affects the living experiences of individual. Gender inequality intersects other types of inequality such as economic, education, and political (Dorius & Firebaugh, 2010).

Gendered racism is a unique form of oppression due to the intersection of race/ethnicity and gender (Rosenthal & Lobel, 2018).

Health disparities is defined as any imbalances of health that burdens a particular subgroup of the population (Noonan, Velasco-Mondragon, & Wagner, 2016).

Infant mortality/Infant loss, which is defined as the death in the post-neonatal period; birth to one year of age (CDC, 2015).

Chronic stress is where the eliciting stimulus remains in the environment for an extended period of time, imposing a threat to self (Miller, Chen, & Zhou, 2007).

Low birth weight is the birth of a fetus weighing less than 2,500 grams or 5 pounds, 8 ounces (Hamilton, Martin, Osterman, Driscoll, & Rossen, 2017).

Miscarriage is traditionally defined as the involuntary termination of a pregnancy before the fetus reaches twenty-week gestation, while stillbirth or fetal loss is characterized as a birth of a dead fetus after 20 weeks gestation, and newborn or neonatal death as a death within the first 28 days of life (Armstrong, Hutti, & Myers, 2009).

Oppression is the state of being subject to unfair or unjust treatment. For example, African American women frequently deal with multiple intersecting sources of oppression including racist events, gendered racism, and sexual objectification (Carr, Szymanski, Taha, West & Kaslow, 2013).

Perinatal mortality/Perinatal loss, which is defined as the death of a fetus greater than 20 weeks gestation or neonate in the first 28 days of life (MacDorman & Gregory, 2015). For this study, the most inclusive definition of the fetal and/or perinatal loss period is used which includes fetal deaths at 20 weeks or more gestation or the death of newborn infants in the first 28 days of life (MacDorman & Gregory, 2015).

Preterm/Premature birth is the birth of a fetus prior to 37 weeks gestation (March of Dimes, 2018).

Racism is defined as a belief that race is the primary determinate of human traits, characteristics, and abilities and that racial differences produce an inferiority or superiority of a specific race (Noonan et al., 2016).

Sexism is the discrimination of an individual based on their sex (Stevens-Watkins, Perry, Pullen, Jewell, & Oser, 2014).

Small for gestational age is the definition used for a fetus born weighing below the 10th percentile of babies of the same gestational age (McGuire, 2017).

Social determinants of health are conditions in the environment in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and present risks to the individual (Healthy People 2020, 2019).

Social justice is defined as full participation in society and the balancing of benefits and burdens by all citizens, resulting in equitable living and a just ordering of society (Buettner-Schmidt & Lobo, 2011).

Stress refers to a situation that the average individual would appraise as threatening and exceeding her/his inability to cope (Miller, Chen, & Zhou, 2007).

Subsequent pregnancy to a loss is a pregnancy after a previous perinatal loss or live birth.

Weathering hypothesis is proposed that the health of African American women may begin to deteriorate in early adulthood as a physical consequence of cumulative socioeconomic disadvantage which can impact pregnancy and birth outcomes (Geronimus, 1992).

**Manuscript 1: Reinscribing African American Women's Position within Perinatal Loss with the
Application of Black Feminisms**

Abstract

Black feminist thought is a culturally based perspective that takes into account the contextual and interactive effects of race, sex, social class, and gender inequality as well as other forms of oppression. This framework provides a contextualized understanding of African American women's experiences and perspectives. Although Black feminist thought has been used as a framework in nursing research, nursing literature continues to focus on white feminist concerns. By disregarding the relevance of African American women's experiences, nursing will continue to produce research viewed through a white feminist lens and not take into account the unique health needs of African American women. This article demonstrates the utility of Black feminist thought, alongside a life-course perspective, using an intersectional approach, in research concerned with African American women's experiences with perinatal loss. In addition, this article signifies the need for a theoretical perspective that can be used to produce nursing research that accurately explores the lives of African American women. Our conclusions are that using an intersectional approach when applying Black feminist thought, in combination with a life-course perspective, more clearly illuminates how context affects perinatal loss in African American women.

**Keywords: Black Feminism, methodology, African American Women, Nursing Research,
Perinatal Loss**

Introduction

Many nurse scholars are using feminist theories to understand the health needs of women (Aranda, 2017); however, the approach used continues to be one that is more focused on a white feminist lens (Brewer & Dundes, 2018). According to Harding (1987), it is implausible for one universal women's experience to exist because gender alone does not shape women's lives. Race, sex, social class, and gender identity can influence how individuals interpret, react, and value their own existence (Kogan, Yu, Allen, & Brody, 2015). By dismissing how the realities of African American women uniquely impact their health experiences (Prather et al, 2018), nurse researchers will continue to recommend interventions and health policy informed solely from a white feminist perspective, which may not be effective to enhance health outcomes for African American women. The purpose of this article is to demonstrate how Black feminist thought and intersectionality, alongside a life-course perspective, can help us understand African American women's experiences with perinatal loss. The life-course perspective complements Black feminist thought and intersectionality in enhancing our understanding of the experiences of African American women. The emphasis of this article is on understanding perinatal loss from the perspective of women who have lived the experience.

Background

Maternal and infant health outcomes continue to be key indicators by which to measure the overall health of a community, particularly African American mothers and their babies (Cole, Rojas, & Joseph, 2018). Racial disparities can negatively influence health outcomes for particular groups of individuals, thus, making it likely to affect the health of the community as a whole. Despite the advances in technology and healthcare spending, the U.S. persistently

underperforms compared to other industrialized countries such as Greece and Sweden, and even some middle- and low-income countries such as Malta and Bulgaria, when it comes to maternal and infant health (Central Intelligence Agency [CIA], 2017; World Health Organization [WHO], 2019). Globally, the U.S. ranks 48th for maternal mortality and 57th in the world for infant mortality (CIA, 2017). Although the U.S. has seen some improvement in infant mortality rates, and already achieved the benchmark (6.0 infant death per 1,000 live births) of Healthy People 2020, the racial disparity persists (HealthyPeople.gov, 2020). Profound disparities such as racism, sexism, classism, and gender inequality negatively influence obstetrical outcomes in minority populations. Many of these disparities are deeply rooted in the physical and social environments in which individuals live, as well as having access to and quality of health care services (Boyden, Kavanaugh, Issel, Eldirawi, & Meert, 2014; Lu, 2018). Social determinants of health are defined as “conditions in which people are born, grow, work, live, and age” (Kaiser Family Foundation [KFF], 2020, para. 1). Thus, these determinants may put African American women at greater risk for experiencing a perinatal or infant loss (Amjad et al., 2018; Boyden et al., 2014; Lu, 2018; Pearl, Ahern, Hubbard, Laraia, 2018; WHO, 2017).

Researchers have estimated that more than one million pregnancies end in a fetal loss each year in the United States, with a large majority occurring before 20 weeks gestation, thus, contributing to the overall miscarriage rate (Center for Disease Control and Prevention [CDC], 2015). In the United States (U.S), the fetal mortality rate in 2013 was 5.96 fetal deaths at or greater than 20 weeks gestation per 1,000 live births, which totaled 23,595 in that given year (MacDorman & Gregory, 2015). The fetal mortality rate for African American women (10.53), in 2013, was more than twice the rate of white women (4.88) (MacDorman & Gregory, 2015).

Therefore, African American women are two times more likely to lose their fetus at > 20 weeks gestation than white women (MacDorman & Gregory, 2015). The disparity in the fetal and infant mortality rates between African American and white women has more than doubled over the past decade (CDC, 2015; MacDorman & Gregory, 2015), and, according to the Xu, Murphy, Kochanek, Bastian, and Arias (2018), although, the U.S. infant mortality rate decreased from 5.96 to 5.87 infant deaths per 1,000 live births from 2013 to 2016, it is not statistically different.

African American Women and Perinatal Loss

African American infants are more likely to be born preterm and, on average, are two times more likely to face the risk of death before their first birthday than white infants (MacDorman & Gregory, 2013). Linking social factors to chronic stress may assist in narrowing the Black-white perinatal and infant mortality gap. The concept of “weathering”, introduced by Geronimus (1992), indicates the effects of social inequality on the health of populations may compound with age, leading to growing gaps in health status from young to middle adulthood that can impact fetal health. Geronimus (2001) and Geronimus, Hicken, Keene, and Bound (2006) suggest that life experiences of African American women historically have included an accumulation of racial inequality; social, economic, and political exclusion; and lack of and access to quality health care. These inequalities decrease access to resources and increase susceptibility to psychological stress and premature illness (Geronimus, 2001). According to the weathering concept, societal factors contribute to the disparities between the health of African American women and their white counterparts (Geronimus, 2001).

Similarly, the theory of allostatic load suggests that exposure to chronic psychological stressors can lead to cumulative risk and psychological unbalance, contributing to poor health

outcomes (Edes & Crews, 2017). Both weathering and allostatic frameworks emphasize the importance of identifying and examining multiple stress-related factors that might increase the risk of adverse health outcomes (Louis, Menard, & Gee, 2015; Woods-Giscombe, 2010). The weathering effects of living in a race-conscious society may be greatest among African Americans. According to Geronimus et al. (2006), African Americans are most likely to engage in high-effort coping when dealing with chronic stress. High-effort coping is a problem-focused coping strategy, which sustains emotional and cognitive engagement causing greater levels of sustained energy expenditures and effort in order to cope with prolonged periods of stress (Cole & Omari, 2003; Felix et al., 2019; Hudson, Neighbors, Geronimus, & Jackson, 2017; Jones et al., 2019; Louis, Menard, & Gee, 2015). High-effort coping strategies are exercised in situations with increased exposure to psychosocial stressors, particularly responses to race-related obstacles such as racism or discrimination (Hudson et al., 2017). Thus, African American women who are exposed to chronic stressors that evoke high-effort coping strategies are more likely to experience poor pregnancy and health outcomes (Giurgescu et al., 2013; Smith et al., 2020).

Several researchers reported a relationship between perceived racism, stress, and pregnancy-related outcomes, including preterm birth and low infant birth weight (Dominguez, 2008; Gadson, Akpovi, & Mehta, 2017; Slaughter-Acey et al., 2019). In an overarching context of historical and structural inequity, it is important to acknowledge the role racism and chronic stress has on racial disparities in maternal health care (Gadson et al., 2017; Louis, Menard, & Gee, 2015). Racism and discrimination are likely to play a pivotal role in health system engagement and pre- and postnatal care utilization among African American women (Gadson

et al., 2017). Many times, the vigilance of women engaging in good prenatal practice (Nowak & Stevens, 2011) can be overshadowed by racial disparities and social determinants of health; therefore, African American women may be more likely to delay prenatal care or be inadequate users of pre- and postnatal care, which may also negatively influence their health and pregnancy outcomes (Gadson et al., 2017).

Black Feminist Thought

Feminism, at its core, is a movement to abolish the inequalities women face. The Black feminist movement came about as a result of white feminists' continued legacy of rejecting and alienating Black women (Taylor, 1998). The demands of racist, elite, white women spurred Black women to shape their own feminist theory and praxis to include issues unique to themselves (Taylor, 1998). The 1977 statement of the Combahee River Collective (2015) argued that the liberation of Black women entails freedom for all people since it would require the end of racism, sexism, classism, and gender inequality. Proponents of Black feminist thought argue that African American women are positioned within structures of power in fundamentally different ways than their white women counterparts (Combahee River Collective, 2015). Black feminist thought recognizes a shared history of African American women, which is necessary to researching health-related issues (Love, 2016), including poor birth outcomes. Living in a sociohistorical context that includes a history of slavery, racial discrimination, and oppression has resulted in the uneven allocation of economic resources (i.e. education, employment, and living place) for African American women (Assari, 2018; Green, 2019).

Intersectionality

Black feminism is a school of thought which argues that racism, sexism, classism, and gender inequality are inextricably bound together. The way these concepts relate to and overlap one another is referred to as intersectionality (Crenshaw, 1989). Rooted in Black feminist thought, intersectionality is viewed as a disposition, method, and analytical tool (Carbado, Crenshaw, Mays, & Tomlinson, 2013). Intersectional analysis maintains its integration of how the complicating effects of social forces, such as patriarchy and racism, limit the lives of marginalized individuals, particularly African American women (Harris & Leonardo, 2018).

Crenshaw (1989), who first introduced and developed intersectionality as a theory and analytical tool, argues that the experiences of being a Black woman cannot be understood in terms of being Black or of being a woman (Rice, Harrison, & Friedman, 2019). Crenshaw employed a metaphor of an intersection to describe how African American women's experiences of discrimination are similar to but different from the oppressions experienced by white women and African American men (Rice, Harrison, & Friedman, 2019). Termed as double jeopardy, African American women's experiences are doubled in ways that combine the effects of racism and sexism, and in unique ways emerging from clashing oppressions (Beal, 2008). Likewise, Collins (2000) introduced the idea of the "matrix of domination." Collins used the matrix to describe the origination, development, and containment of intersecting oppressions that affect the social organizations of Black women's lives (Rice, Harrison, & Friedman, 2019).

Intersectionality allows the ability to think through the limits and distortions of single-axis approaches to discrimination and assists in combatting and understanding the inequities that shape women's lives (Rice, Harrison, & Friedman, 2019). The concepts of racism, sexism,

classism, and gender inequality is considered independent, but include intersecting axes, which frequently reinforce the other. Therefore, the lives of African American women are exposed to numerous oppressions which occur concurrently and involve numerous relationships (Beal, 2008). In order to address the multiplicity of subordination, the attempt must be made to identify, explain, and assuage the challenges experienced by African American women and other marginalized groups (Harris & Leonardo, 2018). Intersectionality offers the ability to assist nurses in informing research by providing a deeper understanding of the multiple axes of racism, sexism, classism and gender inequality and how their oppressive nature affects African American women's health.

Life-course Perspective

A life-course perspective also aided in the exploration of the relationship between health disparities and pregnancy and birth outcomes in African American women. A life-course perspective can be used to examine how the place people are born, grow, work, and age contributes to their health outcomes. The life-course perspective searches for critical periods of risk and effects of cumulative exposures throughout an individual's lifetime (Berkman, 2009; Jones et al., 2019). According to Lu and Halfon (2003), disparities in pregnancy and birth outcomes are the consequences of early life experiences and cumulative allostatic load throughout the life course. This perspective opens ways for health care providers and researchers to link health and wellness across the life span. It also tracks the impact of social inequities as it builds upon itself over time to create shorter life expectancies and fewer life opportunities for disproportionately affected populations (Verbiest et al., 2016). A life-course perspective, along with Black feminist thought, allows for the exploration of intergenerational

stress among African American women. The use of both perspectives allows for an exploration of how racism, sexism, classism, and gender inequality can potentially alter the biomarkers of African American women while in utero, ultimately, shaping their life course.

An Intersectional Approach to Applying Black Feminist Thought and a Life-course Perspective

African American women are uniquely positioned when it comes to the intersection of race, sex, social class, and gender. Taking an intersectional approach when applying Black feminist thought alongside a life-course perspective will enable nurse researchers to account for the complexity and situatedness of identity of African American women, while enabling the ability to recognize the exchange of the many similarities and differences. Intersectionality is a product of Black feminism and by foregrounding that intersectionality is a historically contingent concept, nurse researchers are able to advocate new ways of constructing the relationship between intersectionality and Black feminist thought (Nash, 2011). Black feminist thought supports the core values of nursing in that caring is seen as a political act, a fight for change, and as a way of moving toward the end goal of social justice (Love, 2016). According to Love, who developed the mid-range nursing theory “Empowered Holistic Nursing Education” (Love, 2014, p. 47), these are valid aspects of nursing knowledge development that allow for a focus on emancipatory knowing and empowerment research.

Obtaining deeper knowledge of how the constructs of racism, sexism, classism, and gender inequality can intersect one another can contribute to the health disparities experienced by African American women over the life course may benefit both the provision of inclusion-centered, evidence-based health care for marginalized groups. This knowledge also contributes to health care policy and the development of interventions that allow for

assessment of the physical and mental well-being of African American women pre- and postnatally. Together, intersectionality and Black feminist thought may help nurses situate themselves to better understand the unique positionality of African American women, which may influence nursing care and improve women's mental, physical, and spiritual health. The dissemination of Black feminist research goes beyond providing insight, to raising the awareness of society as a whole (Love, 2016).

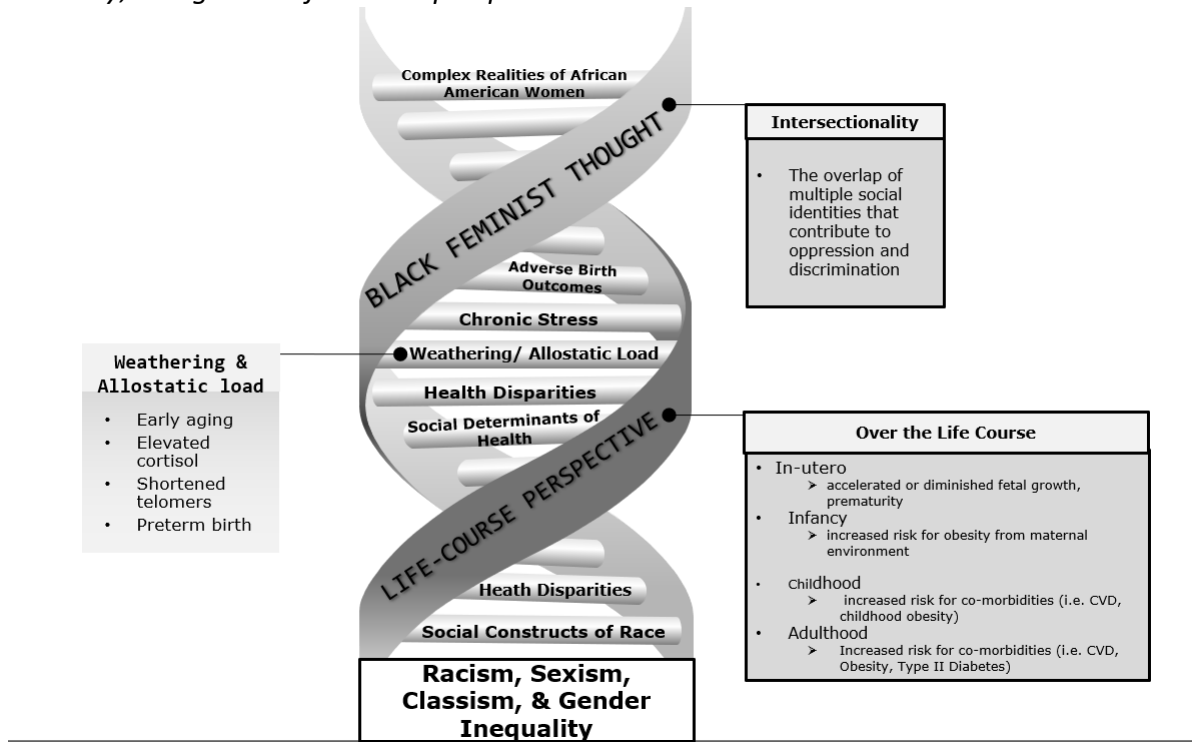
Social and cultural influences surrounding the physical and mental well-being of African American women may endanger their overall health throughout their life course. Using a Black feminist lens, the lived experiences of African American women can be explored. An analytical approach, using intersectionality and a life-course perspective, better accounts for the connections between women's individual narratives and systems of domination that impinge upon the everyday lives of racialized African American women (Ferrer, Grenier, Brotman, & Koehn, 2017). Applying a life-course perspective using an intersectional lens highlights the intersections of structural oppression that impinge on the everyday experiences of African American women as well as over their life course. Through the lens of intersectionality, a life course perspective demonstrates the possibilities of considering the connections between life events, identities, categories of difference, domination, and resilience (Ferrer, Grenier, Brotman, & Koehn, 2017). Intersectionality and the life-course perspective give insight in how the life course trajectory of marginalized groups have implications that extend well past an individual into families, communities, and beyond (Ferrer, Grenier, Brotman, & Koehn, 2017).

The multifaceted influences of race, sex, class, and gender inequality act in ways that render African American women less healthy and more vulnerable to illness than white women

(Perry, Harp, & Oser, 2013). Knowing that African American women are subjected to these risk factors does not necessarily inform researchers about what these factors mean in terms of African American women's lives. Black feminisms will allow for a deeper understanding of the nuances of these risk factors as told through the voices of African American women. In addition, a life-course perspective allows us to engage in analyses that can assist in finding solutions to high mortality rates affecting African American women and infants. Black feminist thought and a life-course perspective acknowledges that racism and stress can have lethal effects on maternal and infant health outcomes. Using an intersectional approach when applying Black feminist thought alongside a life-course perspective, will provide clarity surrounding the experiences of African American women can be analyzed in their given socially and historically specific contexts (Moore, 1988). Both Black feminist thought and a life-course perspective allow for the creation of a space where African American women can articulate their experiences with perinatal loss, maternal-fetal relationships in subsequent pregnancies to a perinatal loss, and the issues that most concern them.

A model (Fig.1) was developed using Black feminist thought and a life-course perspective to provide a deeper understanding of the frameworks and to capture key constructs that contribute to oppression and the mental health and well-being of African American women. Each construct has the ability to influence the next, adding to the risk factors that may affect African American women, their mental health, and their pregnancy outcomes.

Figure 1.1 *Relationship of constructs to birth outcomes through the lens of Black feminism and intersectionality, alongside a life-course perspective*



Having a Voice

A feminist epistemological approach is invaluable because it calls for the creation of a space where women’s voices can inform the development of health interventions and health policy. Black feminist praxis creates an inroad to countering the ‘objectivity’ imposed by hegemonic discourses (Hill-Collins, 2000; Holloway, 1989). According to Hooks (1989), research that explores multiple subjectivities allows an individual to define their own realities and establish their own identities. For African American women, little research has directed a sole focus on their experiences with perinatal loss. Through the authentic voices of African American women, the development of knowledge surrounding their experiences as women who have experienced perinatal loss, and pregnancy after loss can be obtained. This knowledge will help advance health policy and clinical practice.

This manuscript advocates creating ways of constituting perinatal loss that take into account individual experiences of African American women. Analyzing and researching perinatal loss from a Black feminist perspective can serve to situate the lives of African American women in a context far beyond medical or scientific discourses (Foster, 2007). Black feminist thought can assist nurse researchers in peeling away at categories or groupings that comprise African American women and to “see the experience of their femaleness living in their Blackness and their Blackness living within their femaleness” (Williams & Jackson, 2019, p. 227).

Repositioning African American Women who have Experienced a Perinatal Loss through Nursing Research

There is limited nursing literature that uses a feminist approach, more specifically Black feminism, that is relevant to the experiences of African American women. With a Black feminist lens, nurse researchers have the power to consider the unique health needs of African American women by bringing their realities to the forefront. Providing care to all women requires a great deal of knowledge and skill (Williams & Jackson, 2019). Racial, ethnic, sociocultural, and political factors can influence societal and family dynamics which ultimately affect the health and well-being of African Americans. The lack of theoretical knowledge and resultant lack of understanding of these dynamics can lead to ineffective interventions that are not tailored to the actual needs and realities of African American women (Williams & Jackson, 2019).

Although a feminist approach is not new to nurse researchers, very few have used a Black feminist epistemological framework when researching perinatal loss. For example, a study by MacConnell, Aston, Randel, and Zwaagstra (2013) used feminist poststructuralism to guide

their research on nurses who provide bereavement follow-up care with families after pregnancy loss. In another study guided by a feminist phenomenological methodology, Simmons and Goldberg (2011) explored women's experiences of living with a high-risk pregnancy after a perinatal loss. The lack of the use of Black feminist thought in nursing research continues to demonstrate a gap in the literature as it produces limited research that accurately examines the lives of African American women. Through the use of Black feminist thought, nurse researchers can raise new questions about issues that otherwise remain invisible to conventional research and work with marginalized and underserved populations in health care and community settings (Im, 2010). It is important to note how discrimination resulting in health disparities may be deconstructed when the focus is placed on different research questions and different interventions offered that contribute to more effective action (Love, 2016).

In addition, through a feminist lens, nurse researchers will have the ability to analyze traditional research and their methods so that bias based on race, sexuality, class, gender identity, or disability can be avoided (Im, 2010). Lastly, taking an intersectional approach when applying Black feminist thought and a life-course perspective can aid the researcher to address the complex issues of inequalities and social justice. When Black feminism guides the research method, there is a greater representation of African American women's voices (Love, 2016). Through this lens, power inequity will be unveiled, and knowledge built to eliminate unjust ideologies in both research and practice (Rogers & Kelly, 2011).

Conclusion

Applying an intersectional approach to Black feminist thought and a life-course perspective in nursing research allows for the identification of and relationship to intersecting axes of race, sex, class and gender inequality, and their potential impact on maternal, pregnancy and infant outcomes can be explored in African American women. Black feminism serves as a lens through which researchers can understand perinatal loss within the historical context of what it means to be an African American woman. This allows for the deconstruction of the dichotomies that typify women's experiences and further oppress them. Life-course perspective aids researchers to understand the mental, physical, and social health and health trajectory of African American women. Together, these two frameworks may assist scholars to move away from generalization of experiences, improving the understanding of health disparities, and thereafter broadening our social awareness as researchers (Love, 2016).

The ultimate goal of the two frameworks goes beyond achieving statistically significant results to achieving social justice by uncovering African American women's perspectives, views, values, attitudes, and opinions about their own experiences. Black feminist thought, alongside a life-course perspective, allows African American women's voices to be heard, ultimately, reinscribing African American women in perinatal loss discourses.

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Chapter II: Literature Review

Chapter Introduction

This chapter will present the review of the literature that creates the basis for this study. The literature addresses the gap in the lived experiences of African American women and perinatal loss. The review provides the examination of literature related to perinatal loss and subsequent pregnancies to a loss. It also explores how perinatal loss can impact establishing a positive maternal-fetal relationship in subsequent pregnancies to a loss.

Manuscript 2: African American Women and Perinatal Loss: A Systematic Review of the Literature

Abstract

Background: African American women experience perinatal and infant loss at rates at least twice that of other race or ethnic groups (Gregory, Drake, & Martin, 2018; Center for Disease Control and Prevention [CDC], 2015). Historically, the lives of African American women have not been included in a vast amount of research examining concurrent multiple oppressions associated with interlocking identities as predictors for adverse health and birth outcomes (Szymanski & Steward, 2010).

Objective: The purpose of this paper is to conduct a systematic review of all literature on maternal-fetal relationships in subsequent pregnancy to a perinatal loss in order to outline current evidence concerning African American women's well-being.

Design: Literature was obtained from PubMed, PsycINFO, and CINAHL. Inclusion criteria were: 1) quantitative, qualitative or mixed methods studies that investigated perinatal loss, subsequent pregnancies to a loss, and maternal-fetal relationship; 2) included either a focus on all women and/or African American women's voices separately; 3) involving primary data collection; 4) published in English, and; 5) published between 2000 to 2018.

Findings: An initial search of the literature generated 455 results. A final sample of 22 articles met the inclusion criteria, of which 10 were quantitative, 11 were qualitative, and one used mixed methods. Quantitative and mixed method studies indicated more depressive symptoms, pregnancy-specific anxiety, and guarded emotions in subsequent pregnancies to a loss. Qualitative studies indicated a change in self; and increased pregnancy-specific anxiety, stress,

and depression during subsequent pregnancies to a loss, which often led to delayed maternal-fetal relationship.

Conclusions and Implications for Practice: Further research is needed on African American women's experiences of perinatal loss and the establishment of maternal-fetal relationships in subsequent pregnancies to a perinatal loss, focusing on social and cultural differences.

Keywords: Perinatal loss, Subsequent, Maternal-fetal relationship, Systematic review

Introduction

A perinatal or infant loss can potentially be a traumatic event for women. Disparities such as racism, sexism, classism, and gender inequality have been reported by many researchers and, may have the ability to negatively impact obstetrical outcomes in minority populations (Domiguez, Dunkel-Schetter, Glynn, Hobel, & Sandman, 2008; Giscoombe & Lobel, 2005; Lorch & Enlow, 2016). Many of these disparities are deeply rooted in physical and social environments, health behaviors, and access to and quality of health care services (Bryant, Worjolah, Caughey, & Washington, 2010). These high-risk conditions have the potential to negatively impact fetal well-being; thus, contributing to an increased risk of perinatal or infant loss for African American women (Boyden, Kavanaugh, Issel, Eldirawi, & Meer, 2014).

In the United States, the perinatal mortality rate from 2014 through 2016 was 6.00 fetal deaths \geq 24 weeks gestation and early neonatal deaths \leq 7 days after birth per 1,000 live births (Gregory, Drake, & Martin, 2018). In addition, the perinatal mortality rate for non-Hispanic Black women was 10.66 per live births, in 2016, and was more than twice the rate of their white counterparts at 4.98 per 1,000 live births (Gregory, Drake, & Martin, 2018). Furthermore, researchers have estimated that \geq 1 million pregnancies end in a fetal loss before 20 weeks gestation each year in the United States (CDC, 2015).

The disparities in the infant mortality rate between African American women and white women has more than doubled over the past decade (CDC, 2015). The neonatal (less than 28 days of life) mortality rate and post-neonatal or infant (28 days to 1 year of age) mortality was 4.04 per 1,000 live births and 1.93 per 1,000 live births, respectively, in 2013 (CDC, 2015). Although the overall infant mortality rate in the United States has decreased from 5.96 infant

deaths per 1,000 live births in 2013 to 5.87 infant deaths per 1,000 live births in 2016, it is not statistically different (Xu, Murphy, Kochanek, Bastian, & Arias, 2018). Researchers reported that 54 percent of the higher infant mortality rate for African American women, when compared with white women, is contributed by their higher rate of prematurity (CDC, 2015).

There is a significant body of literature that has reported many examples of how the effects of discrimination and health disparities have contributed to poorer pregnancy and reproductive outcomes in African American women than white women (Duvall, Oser, Mooney, Staton-Tindall, Havens, & Leukefeld, 2013; Earnshaw et al., 2013, Rosenthal et al., 2014). However, fewer studies focused on the psychological effects of health disparities have on women during subsequent pregnancies to a perinatal loss. Even fewer studies have explored how psychological effects of health disparities may impact maternal-fetal relationships in subsequent pregnancies to a loss. Linking social background factors to biological mechanisms may assist researchers and clinicians to address the Black-white perinatal and infant mortality gap.

African American women experience both race-related stress appraisal and coping responses. Their stress and coping exist within a unique historical and social context (Collins, 2000). Stress, according to Lazarus and Folkman (1984) is a subjectively perceived discrepancy between the demands of one's environment and psychological and social resources. An important element in understanding the definition of stress appraisal is the individual's perception of the environmental demands or threats and their perceived ability to meet these demands (Lazarus & Folkman, 1994). African American women are most likely to engage in high-effort coping when dealing with chronic stress cause by racism, discrimination, or

socioeconomic status (Felix et al., 2019; Geronimus, Hicken, Keene, & Bound, 2006; & Hudson, Neighbors, Geronimus, & Jackson 2017). High-effort coping is a problem-focused coping strategy, which sustains emotional and cognitive engagement causing greater levels of sustained energy expenditures and effort in order to cope with prolonged periods of stress (Cole & Omari, 2003; Felix et al., 2019; Hudson et al., 2017; Jones et al., 2019; Louis, Menard, & Gee, 2015). African American women who are exposed to chronic stressors that evoke high-effort coping are more likely to suffer symptoms of depression and have smaller social networks to rely on for assistance. These factors can influence the quality of maternal-fetal relationship that is formed (McNamara, Townsend, & Herbert, 2019; Nagle-Yang, et al., 2019; Ohara et al., 2017). The perspectives of affected African American women who have experienced a perinatal loss and its association with maternal-fetal relationships in subsequent pregnancies to a loss are clearly not documented, resulting in a distinct gap in the literature.

This paper provides a systematic review of research findings from all empirical research designs regarding psychological symptoms in subsequent pregnancies to a perinatal loss. The aim of this systematic review is to describe the nature and characteristics in current research regarding the impact of psychological symptoms on maternal-fetal relationships during subsequent pregnancies to a perinatal loss. It provides a solid base for future empirical research that addresses gaps in the literature.

Theoretical Framework

Feminism, at its core, is a movement to abolish the inequalities women face in a patriarchal society. However, the Black feminist movement was the result of white feminists' continued legacy of rejecting and alienating African American women (Taylor, 1998). The

demands of racist, elite, white women spurred black women to shape feminist theory and praxis to include issues unique to themselves (Taylor, 1998). Black feminism is a school of thought which argues that racism, sexism, classism, and gender inequality are inextricably bound together. The way these concepts relate to one another is referred to as intersectionality. Black feminist thought will help to guide the systematic review by providing a deeper understanding of racism, sexism, classism, and gender inequality and how their oppressive nature affects African American women's health.

Because a high rate of African American women's stress is linked to their oppression it is not unreasonable to look at feminist theories for an explanation. Marginalization for African American women can be a source of distress, potentially causing poor maternal health and pregnancy outcomes. Black feminist thought will provide a framework to strengthen the understanding regarding social conditions of African American women throughout their life course that may potentially impact their health and possibly influence their pregnancy (Anderson, 2002). Through the lens of Black feminist thought, constructs such as racism, social determinants of health, and health disparities will be identified and the relationships between the constructs and birth outcomes and maternal-fetal relationships will be explored.

In addition to using Black feminist thought, a life course perspective, which is made up of five basic principles, can be used to examine how the place people are born, grow, work, and age contributes to their health outcomes; searching for critical periods of risk and effects of cumulative exposures (Berkman, 2009; Jones et al., 2019). This perspective opens ways to link health and wellness across the life span. Black feminist thought and a life course perspective allows for the exploration of intergenerational stress among African American women. The use

of both frameworks will assist in examining how racism, sexism, classism, and gender inequality can potentially impact the health of African American women, ultimately, effecting their life course and subsequent reproductive outcomes.

Method

Inclusion Criteria

A systematic review of the literature on African American women and perinatal loss was conducted after the Preferred Reporting Items for Systemic Reviews and Meta-Analyses (PRISMA) guidelines. Literature was obtained from PubMed, PsycINFO, and CINAHL. Search words and databases used are displayed in table 2.1 and 2.2. Inclusion criteria were: 1) quantitative, qualitative or mixed methods studies that investigated the impact of perinatal loss on subsequent pregnancies to a loss and maternal-fetal relationship; 2) included either a focus on all women and/or include African American women's voices separately; 3) involving primary data collection; 4) published in English, and; 5) published from 2000 to 2018. The studies that met inclusion criteria were conducted in the United States, United Kingdom, Australia, Switzerland, Ireland, Netherlands, France, Jordan, and Iran. Studies were excluded from the review that 1) had a primary focus directed towards the effects of perinatal loss rather than subsequent pregnancies to a loss and/or maternal-fetal relationship; 2) had a primary focus on fathers; 3) did not involve primary data collection, and; 4) were not published in English.

Search Strategy and Data Extraction

An initial search of PubMed was undertaken to identify subject headings and potential keywords. The subject headings and potential keywords identified in the initial search were: African continental ancestry group, African American, Black, women, mothers, fetal mortality,

spontaneous abortions, fetal death, infant mortality, infant death, perinatal death, perinatal mortality, neonatal death, maternal behaviors, emotions, mother-child relations, bereavement, pregnant women/psychology, psychological stress, and psychotherapy. A second search was undertaken in PubMed using these keywords, subject headings and index terms. The search then was conducted in PsycINFO and CINAHL, and reference lists for full text review were searched for articles of relevance. Search strategies from PubMed and PsycINFO are outlined in Tables 2.1 and 2.2. The final date for inclusion was June 2018.

The initial search of PubMed, PsycINFO, and CINAHL generated 455 results, which is outlined in Figure 2.1. After all abstracts were reviewed, 78 articles were retrieved, and the full texts of these articles were reviewed. The primary reason for exclusion of the remaining 377 articles was a primary focus on the effects of perinatal loss, rather than subsequent pregnancies to a loss and maternal-fetal relationships in those pregnancies. Of the 78 articles retrieved for full-text examination, 22 met all inclusion criteria. Eleven qualitative, 10 quantitative studies and one mixed methods were used in for the systematic review. The details of all 22 included studies are outlined in Table 2.3 and 2.4.

The overall quality and risk of bias was assessed using the Cochrane Collaboration's tool for assessing bias (The Cochrane Collaboration, 2011). After reviewing the studies, none were excluded based on quality given the low number of studies that met the inclusion criteria. The after section contains discussion of overall risk of bias in this body of research. In addition, important characteristics of the studies were extracted using a predesigned table (Table 3 and 4). This information included: country where the research was conducted, date of publication,

study design, number and characteristics of participants, and psychological and physical health outcome measures.

Results

This search resulted in 22 articles that met the inclusion criteria for this systemic review. Eleven of the included articles were qualitative, 10 were quantitative, and one used mixed methods. Two of the studies utilized the same data and population from previous studies but reported on different aspects of the findings, so they were included in the review. The process used to screen and select articles are displayed in the PRISMA diagram in Figure 1.

Description of Quantitative Studies

Table 2.3 provides details of the key characteristics of the 10 quantitative studies. Most studies were published between 2011 and 2016. Of the 10 studies, four had predominately white participants, and two had Arabic participants. Four studies did not report the demographics of their sample. Most participants in all studies were married, college educated, and employed. Four of the studies aimed to examine the effects of anxiety, depression, and stress on subsequent pregnancies to a perinatal loss, while two of the studies explored the effects of anxiety and depression on maternal-fetal relationships in subsequent pregnancies to a perinatal loss. One study focused on the impact of grief on maternal-fetal relationships while another study focused on the effects of anxiety on maternal-fetal relationships. One mixed methods study aimed to describe the range and prevalence of emotional cushioning and examine the relationship between emotional cushioning and pregnancy specific anxiety in subsequent pregnancies to a loss. Lastly, one study compared maternal-fetal relationship in women who have and have not experienced a prior perinatal loss.

Most of the quantitative and mixed methods studies were conducted in the United States ($n= 4$), and the United Kingdom ($n= 2$), and participants were most commonly recruited from hospitals or clinics ($n= 6$), meaning that they were convenience samples. Sample size of participants included in the studies ranged from 59 to 13,330 but most were commonly between 70 and 200. The time since the perinatal loss and the time of gestation in which the loss occurred was not reported in most studies. The time of gestation at which the first interview took place varied among studies, but most of the initial interviews were conducted ($n= 6$) in the second trimester of the subsequent pregnancy to a loss. Three studies were a longitudinal design and data was collected over the course of pregnancy and the postpartum period (Armstrong, Hutti, & Myers, 2009; Cote-Arsenault & Donato, 2011; Robertson-Blackmore et al., 2011). One study only collected data at four weeks postpartum (Al-Maharma, Abujaradeh, Mahmoud, & Jarrad, 2016). The identified gaps in the quantitative studies include gestational age at which the studies took place, diversity of participants, and specific information about the recruitment sites.

Table 2.6 provides details of the psychological instruments, including reliability and validity, that were used to measure outcomes in the quantitative studies. The psychological variables that were measured most often were anxiety, depression, and stress. The most commonly used instruments were Pregnancy Outcome Questionnaire (POQ) (Armstrong, 2002; Armstrong, 2004; Tsartsara & Johnson, 2006), and The Center of Epidemiologic Studies-Depression Scale (CES-D) (Armstrong, 2002; Armstrong, 2004; Armstrong 2009).

Description of Qualitative Studies

The key characteristics of the 11 Qualitative studies are displayed in table 2.4. Most studies were published between 2011 and 2018 (n=7), which may indicate attempts to address gaps that were uncovered in earlier quantitative studies. Of the 11 studies, seven had predominately white participants, one had solely African American participants, and three studies did not report the demographics of their sample. Most of the studies were undertaken in the United States (n=5) and the United Kingdom (n=2), and participants were most commonly recruited through pregnancy loss support groups (n=6) and snowball sampling/word of mouth (n=3). Several of the studies used more than one method of subject recruitment.

Sample sizes in the studies varied from six to 82 but most were between 10 and 20. Time since the perinatal loss occurred and when individuals participated in the research varied from four months to 36 years. The time that the pregnancy loss occurred was mostly between 18 to 41 weeks gestation. Two studies recruited women who experienced a miscarriage less than 12 weeks (Cote-Arsenault, Donato, & Sullivan, 2006; Cote-Arsenault & Marshall, 2016). Seven of the studies adopted a phenomenological approach using thematic analysis, in which the researchers conducted semi-structured interview with each participant (Campbell-Jackson, Bezance, & Horsch 2014; Cote-Arsenault & Morrison-Beedy, 2001; Moore & Cote-Arsenault, 2018; Meaney, Everard, Gallagher, & O'Donoghue, 2016; Meredith, Wilson, Branjerdporn, Strong, & Desha, 2017; Ockhuijsen, van den Hoogen, Boivin, Macklon, & de Boer, 2014; Ustunda-Budak, Larkin, Harris, & Blissett, 2015). Three of the studies used a grounded theory design (Cote-Arsenault & Marshall, 2000; Lee, McKenzie-McHarg, & Horsch 2013; Van & Meleis, 2003). Other designs that were utilized included a descriptive design and a multiple-

triangulated longitudinal design (Cote-Arsenault et al., 2006). Similar to the quantitative studies, the gaps identified in the qualitative studies include both limited diversity of participants and recruitment sites.

Outcome of Quantitative and Qualitative Studies

Researchers who conducted quantitative studies reported an association between depressive symptoms, pregnancy-specific anxiety, and maternal-fetal relationships in subsequent pregnancies to a loss, and that women had more depressive symptoms and pregnancy-specific anxiety than those who did not experienced a loss (Armstrong, 2002; Armstrong, 2004; Armstrong et al., 2009; Tsartsara & Johnson, 2006). In the quantitative studies reported, women who had experienced more than one perinatal loss had higher levels of perceived stress, depression, and anxiety in subsequent pregnancies to a loss (McCarthy et al., 2015; Robertson-Blackmore et al., 2011). In addition, Robertson-Blackmore et al. (2011) reported that perceived stress, depression, and anxiety remained constant across both the prenatal and postnatal period, indicating the impact of previous loss did not diminish significantly after the birth of a healthy newborn. In quantitative studies that focused attention on couples who experienced a previous perinatal loss, women had higher levels of anxiety and depressive symptoms during subsequent pregnancies to a loss than did men (Armstrong, 2002; Armstrong, 2004). A positive correlation was found between depressive symptoms and pregnancy-specific anxiety and a woman's increasing concern and emotional investment of their infant, raising concern about maternal-fetal relationship in subsequent pregnancies to a loss (Armstrong et al., 2009).

Pregnancy-specific anxiety in subsequent pregnancies to a perinatal loss was a theme in the qualitative studies (Cote-Arsenault et al., 2006; Cote-Arsenault & Marshall, 2000; Lee et al., 2013; Ustundag-Budak, 2015; Van & Meleis, 2002). Women described feelings of persistent awareness and anxiety during subsequent pregnancies to a loss, which resulted in seeking reassurance through frequent visits with their health care provider. In addition, women's heightened anxiety remained constant until women passed the point of their previous loss. A unique characteristic reported in some quantitative studies was that women with longer gestations experienced a decrease in their pregnancy-specific anxiety, and a significant rise in maternal-fetal relationships after a previous loss (Gaudet, Sejourne, Camborieus, Rogers, & Chabrol, 2010; Tsartsara & Johnson, 2006).

Likewise, in the quantitative studies, women who experienced a prior perinatal loss guarded their emotions, fearing another loss might occur at any time during their subsequent pregnancies to a loss (Cote-Arsenault, 2001; Cote-Arsenault & Donato, 2011). Cote-Arsenault and Donato (2011) reported that women who showed emotional cushioning had a significantly higher delay in maternal-fetal relationships during their subsequent pregnancies to their loss which positively correlated with pregnancy-specific anxiety. In contrast, Mehran, Simbar, Shams, and Ramezani-Tehrani (2013) reported that the overall ability to establish a maternal-fetal relationship among women with a history of a perinatal loss was not significantly different from women who had not experienced a loss. However, women with a history of loss did have a significantly lower score than the control group for the behaviors related to "differentiation of self from fetus" (p. 187). It seems that some women with a history of perinatal loss tend to resist imagining the future of their fetus independently outside the womb (Mehran et al.,

2013). In addition, Armstrong (2002) found that women who had experienced a perinatal loss did not differ in their level of maternal-fetal relationship during subsequent pregnancies to a loss compared to women who had not experienced a previous perinatal loss.

In five of the qualitative studies, a common coping mechanism that was also described was that of delayed maternal-fetal relationship, whereby women withdrew emotionally or chose not to establish a relationship with her fetus (Campbell-Jackson, 2014; Cote-Arsenault & Morrison-Beedy, 2001; Moore & Cote-Arsenault, 2018; Ockhuijsen et al., 2014; Van & Meleis, 2002). Due to the uncertainty of another loss occurring, participants used self-protective measures such as delaying preparation for their unborn child or avoidance to build a maternal-fetal relationship (Campbell-Jackson, 2014; Cote-Arsenault & Morrison-Beedy, 2001; Moore & Cote-Arsenault, 2018; Ockhuijsen et al., 2014; Van & Meleis, 2002). Cote-Arsenault and Donato (2011) describe this complex self-protective mechanism as emotional cushioning. It is a response used by women to cope with the anxiety, uncertainty, and sense of vulnerability experienced in subsequent pregnancies to a perinatal loss (Cote-Arsenault & Donato, 2011). Participants in Cote-Arsenault and Donato's study described fear of experiencing another loss which resulted in holding back their emotions and delaying establishing a maternal-fetal relationship.

Quality and Bias

The overall quality of the studies was impacted by several issues relating to participant selection and sample size. For example, many studies made no mention of ethnicity or culture at all (Ockhuijsen et al., 2014; Ustunda-Budak et al., 2015; Robertson-Blackmore, 2011; Tsartsara & Johnson, 2006), or included a majority of white participants in United States studies

(Armstrong, 2002; Armstrong, 2004; Armstrong et al., 2009; Cote-Arsenault et al., 2001; Cote-Arsenault et al., 2006; Cote-Arsenault & Marshall, 2000; Cote-Arsenault & Morrison-Beedy, 2001; Cote-Arsenault & Donato, 2011; Moore & Cote-Arsenault; 2018). These issues are likely to interfere with researcher's ability to obtain knowledge of African American women's health outcomes and outcomes of women's maternal- fetal relationship in subsequent pregnancies to a perinatal loss. Therefore, this method of recruitment and subsequent sample may present issues for data collection concerning the retrospective health impacts of perinatal loss for African American women due to the limited sample diversity of the research. The literature offers little insight into the experiences of African American women after perinatal loss, subsequent pregnancies to a loss, and maternal-fetal relationships

Similarly, the fact that the majority of studies were conducted with middle to high income participants or that income level was not identified in the participant demographics also presents a bias in the evidence base (Al-Maharma et al., 2016; Armstrong, 2002; Armstrong, 2004; Armstrong et al., 2009; Cote-Arsenault & Marshall, 2000; Campbell-Jackson et al., 2014; Cote-Arsenault et al., 2006; Cote-Arsenault & Morrison-Beedy, 2001; Gaudet et al., 2010; Lee et al., 2013; McCarthy et al., 2015; Meaney et al., 2016; Mehran et al., 2013; Meredith et al., 2017; Moore & Cote-Arsenault, 2018; Ockhuijsen et al., 2014; Roberson-Blackmore et al., 2011; Tsartsara & Johnson, 2006; Ustunda-Budak et al., 2015; Van & Meleis, 2003). Although perinatal loss occurs in all races, ethnicities, ages, and income levels, African American women are at higher risk of experiencing a perinatal loss. Including or noting income levels of all participants would make the findings more generalizable to specific populations of women.

Discussion

Overall, several common themes were identified among studies that explored women's experiences of motherhood after perinatal loss. Specifically, these findings indicated that women typically feel a change in self after experiencing a loss, that included developing an elevated level of stress, anxiety, and depression during subsequent pregnancies to a loss (Armstrong, 2002; Armstrong, 2004; Armstrong et al., 2009; Cote-Arsenault et al., 2001; Cote-Arsenault et al., 2006; Cote-Arsenault & Marshall, 2000; Moore & Cote-Arsenault, 2018; McCarthy et al., 2015; Robertson-Blackmore et al., 2011; Ustunda-Budak et al., 2015; Tsartsara & Johnson, 2006). In addition, several studies have indicated that perinatal loss may lead to a loss of identity to the anticipated role as a new mother after her loss experience, and how to cope with the feelings of grief and loss which may follow (Al-Maharma et al., 2016; Campbell-Jackson et al., 2014; Lee et al., 2013; Ockhuijsen et al., 2014; Van & Meleis, 2003).

Some research has also indicated that women who experienced a perinatal loss may emotionally distance themselves from a subsequent fetus, displaying lower levels of maternal-fetal relationships in subsequent pregnancies to a loss (Cote-Arsenault & Morrison-Beedy, 2001; Mehran et al., 2013). Finally, existing research illustrated that support from family, friends, and health care providers is important in times of uncertainty during subsequent pregnancies to a perinatal loss (Cote-Arsenault et al., 2006; Cote-Arsenault & Marshall, 2000; Meaney et al., 2016; Meredith et al., 2017).

While the results of this review indicate that the feelings associated with perinatal loss are often similar between all women, the manifestations of these feelings may be different for some individuals, indicating that African American women's health and well-being is an

important research area in itself. Factors such as racism, discrimination, health disparities, and life stressors are critically important when considering the uniqueness of the experience of perinatal loss for African American women.

An important finding from this review are the methodological issues in previous research concerning African American women's experience of perinatal loss. For example, African American women have tended to be interviewed as part of a sample group of primarily middle-class, married, white participants, and those studies that are solely from the African American woman's perspective tend to be in the context of perinatal loss but lack focus on subsequent pregnancies to a loss and maternal-fetal relationships and/or have some issues with generalizability due to population, sampling, and response bias. Van's (2001) study was the first in which African American women comprised the entire sample and their personal experiences of perinatal and infant loss were illustrated. However, this study focused on coping mechanisms of African American women who experienced a perinatal loss rather than maternal-fetal relationship in subsequent pregnancies to a loss. In the same study, the participants were not limited to low-income as it included a cross section of diverse communities and socioeconomic status. Moreover, most qualitative studies of African American women's experiences have had small sample sizes and often used convenience/snowball sampling to obtain participants through recruitment via health care centers, community-based health centers or functions, and word of mouth. This may indicate that the women interviewed may already have a vested interest in their health and well-being after a perinatal loss and may not be representative of the general population of African American women who are experiencing the impact of subsequent pregnancies to a perinatal loss.

As discussed previously, a common theme evident in nine studies involving entirely women, as well as couples, and subsequent pregnancies to a perinatal loss is one of depression and anxiety. Studies reviewed from different countries as well as different cultures included the US, the UK, Ireland, Australia, Switzerland, Netherlands, Iran, and Jordan explored subsequent pregnancies to a loss and maternal-fetal relationships after perinatal loss from a women's perspective. In terms of social bias, they do not explore how reactions to a loss may be influenced by the historical and cultural positioning of women (for example, in understanding the social construction of racism that African American women experience and its association with maternal-fetal relationships in subsequent pregnancies to a perinatal loss).

There are no previous systematic reviews which aim to describe the nature of perinatal loss as experienced by African American women with a specific focus on maternal-fetal relationship in subsequent pregnancies to a perinatal loss. This may be due to the limited research surrounding exclusively African American women. Past reviews have been conducted which focused on the subsequent pregnancies to a perinatal loss and include one systematic review (San Lazaro-Campillo, Meaney, McNamara, & O'Donoghue, 2017), one meta-analysis review (Mills et al., 2014), and one integrative review (Hill et al., 2008). Reviews which aim to describe maternal-fetal relationship in subsequent pregnancy to loss include two integrative reviews (Lamb, 2002; Lee, McKenzie-McHarg, & Horsch, 2017).

A potential limitation of this review is that only peer-reviewed studies written in English were included, so this may be considered a source of bias and future studies may benefit from including grey literature (i.e. unpublished, non-commercial, hard-to-find information that organizations such as professional associations, research institutes and government

departments produce) as well as literature in languages other than English. The scope of the review was necessarily broad to capture the paucity of current literature based on the subject. Due to this fact, a quality screening was not undertaken, and a meta-analysis was not done due to the heterogeneity among the studies. Future studies may be able to utilize meta-analysis to examine psychological impacts on women, during subsequent pregnancies to a loss, in greater depth.

Implications for Practice and Research

Chronic stress, exposure to racism, and symptoms of depression in women during pregnancy may be associated with premature birth and adverse consequences on infant development (Boyden et al., 2014; Dunkel-Schetter & Tanner, 2012). Approaching African American women's experiences of maternal-fetal relationships in subsequent pregnancies to a perinatal loss from a biopsychosocial perspective may lead to a better understanding in health care of how perinatal loss may affect African American women both physically and mentally. Having a greater understanding of this concept may assist in how health care providers and researchers are able to improve practices and resources with this group of women.

Future empirical research would benefit from recruiting a more diverse selection of participants that include single women, same-sex couples, and those from all socioeconomic and cultural groups. Future studies may also benefit from recruiting a larger sample of African American women to show how the effects of a perinatal loss may differ in relation to social and cultural context. Large scale studies may be necessary to compare the differences and the relationship between levels of psychological distress and maternal-fetal relationships, considering individual meaning of perinatal loss and subsequent pregnancies to a perinatal loss.

Finally, additional longitudinal studies may also be necessary to understand how the psychological effects of perinatal loss change throughout the course of pregnancy, into the postpartum period, and beyond (Alhusen, 2008).

Conclusion

Studies show that perinatal loss can cause psychological distress in subsequent pregnancies to a loss for some women. However, it is not clear whether or how such distress can affect maternal-fetal relationships as studies have yielded conflicting results. For many African American women, the time of a new pregnancy may be overshadowed by pregnancy-related stress as well as stress connected to their historical and cultural positioning (Dominguez et al., 2008). Racial and gender discrimination is an evident additional stressor that racial minorities encounter simply because they are minorities (Myers, Lewis, & Parker, 2003; Perry, Harp, & Oser, 2013). Therefore, excluding race from considerations may underestimate the amount of stress in African American women's lives (Giscombe & Lobel, 2005). There is a strong argument that anxiety, depression, and stress can impact the mental health of African American women and, if not identified, may contribute to poor pregnancy and birth outcomes (Boyden et al., 2014; Giurgescu et al., 2013).

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Figure 2.1 PRISMA Flow Diagram

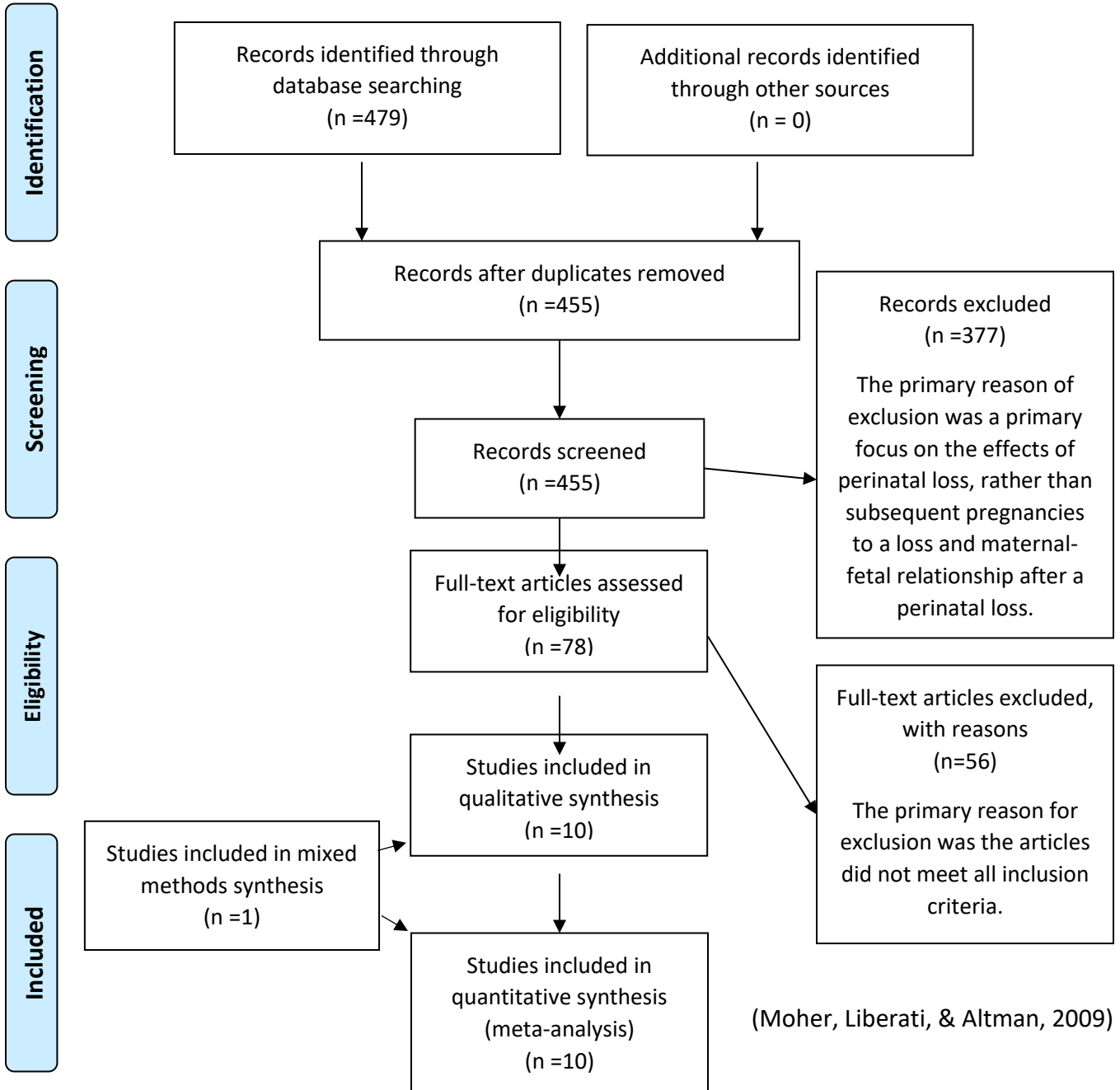


Table 2.1 *PsycINFO search strategy*

Pregnancy loss American women	Maternal-fetal relationship	African
DE "Spontaneous Abortion" OR TI(stillborn OR stillbirth OR "pregnancy loss" OR miscarriage OR miscarriages OR "Neonatal Death" OR "perinatal death" OR "fetal death" OR "Fetal Mortality") OR AB(stillborn OR stillbirth OR "pregnancy loss" OR miscarriage OR miscarriages OR "Neonatal Death" OR "perinatal death" OR "fetal death" OR "fetal Mortality")	DE "Maternal-Fetal Relationship" OR TI("Mother- Child" OR "Maternal Fetal" OR "Maternal-Child Relationship")	(DE "Blacks") AND (DE "Human Females" OR DE "Mothers" OR DE "Adolescent Mothers" OR DE "Single Mothers" OR DE "Unwed Mothers")

Table 2.2 *PubMed search strategy*

Pregnancy loss women	Maternal-fetal relationship	African American
<p>“Fetal Mortality”[MeSH] OR “Abortion, Spontaneous”[MeSH] OR “Fetal Death”[MeSH] OR “Perinatal Death”[MeSH] OR “Infant Death”[MeSH] OR “Perinatal Mortality”[MeSH] OR “Infant Mortality”[MeSH] OR stillborn[tiab] OR “pregnancy loss”[taib] OR miscarriage[taib] OR miscarriages[taib] OR “Neonatal Death”[taib] OR “perinatal death”[taib] OR “fetal death”[taib] OR “Fetal Mortality”[taib] OR stillborn[taib] OR stillbirth[taib]</p>	<p>“Maternal Behavior”[MeSH] OR OR “Emotions”[MeSH] OR “Mother-Child Relations”[MeSH] OR “Mother- Child”[tiab] OR “Maternal Fetal”[tiab] OR “Mother Fetus”[tiab] OR “Pregnant Women/psychology”[MeSH] OR “Bereavement”[MeSH] OR “Pregnancy/psychology”[MeSH] OR “Maternal-Fetal Relationships”[MeSH]</p>	<p>(“African Continental Ancestry Group”[MeSH] OR “African Americans”[MeSH] OR black[tiab] OR blacks[tiab]) AND (“Women”[MeSH] OR “Mothers”[MeSH] OR women[tiab] OR woman[tiab] OR pregnant[tiab] OR pregnancy[tiab])</p>

Table 2.3 Quantitative studies included from systematic searches

Author	Purpose	Sample	Method/Reliability and Validity	Results/Conclusion
Al-Maharma et al./2016/ Jordan	Examine the relationship between maternal grieving after PNL and the perception of MFR in SP.	N= 190 (Arabic women) Arabic women; age 17- 45 yrs; 82.6% high school education; 99.5% Muslim.	Cross-sectional descriptive correlation design. Scales used were: PGS, MPAS, & NPI II. The reliability coefficients for the total PGS score varied from 0.92 to 0.96, showing excellent internal consistency reliability as well as construct and convergent validity.	PNG was negatively related to MFR in a SP. A significant negative correlation was found between grief intensity and relationship. A positive correlation ($r = .28$, $p = .000$) between MFR and neonatal perception. High levels of grief were associated with lower levels of MFR. No specific relationship was identified between grief intensity & neonatal perception.
Armstrong/2002/ United States	Evaluate the association between previous PNL & DS, PSA, & MFR in SP.	N= 206 (103 couples) Majority of couples were white; married; upper-middle income; college educated; age 18-45yrs; average of two prior losses.	Cross-sectional survey via in-person and telephone interviews. Scales used included: PAI, POQ, CES-D. Data collected between 16 & 32 wks of pregnancy. For women, PAI (0.87) demonstrated internal consistency & Cronbach's alfa had high internal consistency reliability for POQ (0.88) and CES-D (0.91).	Women with a history of a loss had more DS than women in their first pregnancy. PSA was higher in mothers in general, as well as in the loss group. Women demonstrated higher levels of MFR in all group.
Armstrong/2004/ United States	Evaluate effects of previous PNL on DS, PSA, & MFR in subsequent pregnancy.	N= 80 (40 couples) Majority white; employed; middle class; married; age 18 or older; & less than half attended support groups.	Cross-sectional, survey. Data was collected during a single phone interview. Scales used included: IES, CES-D, POQ, PAI. No discussion of reliability and validity were made.	There were significant differences for DS & PSA for those who attend a support group and those that did not. Women had higher levels of AX and DS surrounding the outcome of their current pregnancy.
Armstrong et al./2009/ United States	Evaluate the long-term influence of previous PNL on psychological distress during a SP.	N= 72 Majority white; married; middle class; most had college degree; age 18 or older. All had history of PNL.	Longitudinal cohort study design. Data collected in the 3rd trimester, and 3 & 8 months postpartum. Scales used include: IES, CES-D, STAI-A, and MAQ. No reliability and validity were identified for the scales used.	Levels of DS ($p < .001$), AX ($< .001$), & PTS ($p = .046$) significantly decreased over time. Levels of PTS remained moderate even at 8 months after birth. DS were significantly correlated with PTS. Correlation between the increase in DS and AX raises concern about establishing a positive maternal-fetal relationship.
Cote-Arsenault et al./2001/ United States	Determine the specific emotions & concerns in women who are pregnant after a PNL.	N=73 Primarily white women, most had college degree, annual income \$20- \$120,000; age 25-40 yrs; history of PNL.	Content analysis. Mailed questionnaire. The reliability coding was addressed under the areas of stability and reproducibility. Words used by women to describe emotion added additional support to construct validity.	"Anxious", "nervous", and "scared" were the most frequent emotions reported by these women. Many women questioned their ability to cope with another PNL. They guarded (delay in establishing a maternal-fetal relationship) their emotions, fearing bad news at any time.

Cote-Arsenault & Donato/2011/United States	Describe the range & prevalence of EC & examining relationships between EC & PA in pre- & postnatally in subsequent pregnancy.	N=63 Previous PNL, not yet feeling fetal movement, English speaking. Age 20-42 yrs; most had a college degree; varying income; primarily married; majority white.	Mixed methods. Part of a larger study. Convenience sample. Scales used include: PAS & self-reported questionnaire. Reliability estimates include parallel form ($r=0.97$) and internal consistency (Cronbach alphas of 0.74-0.83). Cronbach's alpha for this sample were 0.85-0.87.	Majority of women reported some EC (self-protective mechanism/delayed MFR) during subsequent pregnancy, which positively correlated with pregnancy AX.
Gaudet et al./ 2010/ France	Determine risk factors of psychological distress and disorders in establishing MFR in subsequent pregnancy.	N= 96 White; age 26-36 yrs; 50% of women were married; and 75% were employed.	Post-hoc power analysis. Scales used include: HADS, MAAS, PSEQ, & PGS. HADS & PSEQ showed good internal consistency, test-retest reliability, convergent validity. Cronbach's alpha was 0.83. MAAS showed good internal consistency and convergent validity. The Cronbach's alpha was (MAAS) 0.85 & (PSEQ) 0.91.	Most women who had a PNL experienced higher AX than the control. Women had a stronger MFR with longer gestation. Women who did not have follow-up after PNL had greater difficulty establishing MFR.
McCarthy et al./2015/ United Kingdom	Investigate higher levels of AX, DS, stress, & altered behaviors in a SP after PNL.	N= 5575 women White European- 3910, South Asian-106, Other-315.	Retrospective analysis. Scales used include: STAI, PSS, EPDS. No discussion of reliability and validity of scales.	Previous PNL associated with higher levels of perceived stress, DS, and altered limiting/resting behavioral responses to pregnancy in a SP. The magnitude of these effects tended to be greater in those with two pregnancy losses.
Mehran et al./ 2013/ Iran	Compare MFR behaviors of women with and without history of perinatal loss.	N= 100 Iranian; literate; in the 3 rd trimester; 18-40 yrs; no living children; with a singleton pregnancy; no psychological or medical history; & no addiction or fetal abnormalities.	Convenience sampling. Data collected by questionnaires and MFAS. Content validity was assessed and confirmed. Reliability of the scale was confirmed by Cronbach's alpha 0.83 and t-test reliability coefficient of 0.90. For the Persian version, Cronbach's alpha was 0.83-0.85.	The total score of MFR from women with a history of a PNL is not significantly different from women without a history of PNL ($p=0.05$). Women with a history of PNL had a significantly lower score from a subgroup of behaviors "differentiation of self from fetus" compared to women without a history.
Robertson-Blackmore et al./ 2011/ United Kingdom	Examine the degree to which DS and AX associated with previous PNL persisted during a SP.	N=13, 133 Women who had experienced a previous PNL. No other demographics given.	Longitudinal study. Measurement of AX and DS at 18 & 32 wks gestation and at 8 wks and 8, 21, and 33 months postnatally. Scales used include CCEI & EPDS. No mention of reliability and validity of scales.	The number of previous PNL significantly predicted DS & AX in a subsequent pregnancy. This association remained constant across pre- and postnatal period indicating the impact of previous PNL did not diminish significantly with birth of subsequent child.
Tsartsara & Johnson/2006/ Australia	Assess the implications a previous PNL has on women's PSA & feelings of MFR during the 1 st and 3 rd trimesters of a SP.	N=35 1 st trimester N=24 2 nd trimester Hx of a PNL; no Hx of ET; 18 years or older; majority married; & were in the 1 st trimester at recruitment.	Longitudinal design. Scales used include POQ, & MAAS during the 1 st and 3 rd trimester. The POQ Cronbach's coefficient alpha was 0.80. The Cronbach's coefficient alpha for MAAS was 0.82.	Women with a history of PNL reported significantly higher PSA during the 1 st trimester than women with no PNL. By the 3 rd trimester, PSA had decreased, and MFR had significantly risen for both prior PNL ($p=0.05$) and non-PNL women ($p=0.23$). Findings suggest PNL may not have a long-lasting adverse effect on a woman's psychological adaptation during a SP.

Table 2.4 Qualitative studies included from systematic searches

Author	Purpose	Sample	Method/Design	Results/Conclusion
Campbell-Jackson et al./2014/Switzerland	Explore experiences of becoming a parent to a child born after a recent a recent PNL & up to two years after SP.	N= 14 (7 couples) Seven couples who had experienced a PNL after 24 wks gestation; British, Polish, and Brazilian participants; all married; mean age 31.9 years; all employed; & all had PNL & subsequent child under the age of 2 years.	Interpretive phenomenological analysis. Individual semi-structured interviews.	Themes identified: living with uncertainty, coping with uncertainty, relationship with the child, the continuing grief processes, and identity as a parent. Women experienced high levels of AX and guilt during the SP and after the birth of the child. Despite difficulties with MFR in SP and at the time of birth, perceptions of relationship with subsequent child were positive.
Cote-Arsenault & Donato/2011/United States	Describe the range & prevalence of EC & examining relationships between EC & PA in pre- & postnatally in subsequent pregnancy.	N=63 Previous PNL, not yet feeling fetal movement, English speaking. Age 20-42 yrs; most had college degree; varying income; primarily married; majority white.	Mixed methods. Part of a larger study. Convenience sample. Scales used include: PAS & self-reported questionnaire. Reliability estimates include parallel form (r=0.97) and internal consistency (Cronbach alphas of 0.74-0.83). Cronbach's alpha for this sample were 0.85-0.87.	Majority of women reported some EC (self-protective mechanism/delayed MFR) during subsequent pregnancy, which positively correlated with pregnancy AX.
Cote-Arsenault et al./ 2006/ United States	Describe the pregnancy experience to 25 wks gestation in women who had a previously PNL & explore changes in common discomforts and events over time.	N= 82 Convenience and snowballing. Majority of participants were white, married, income >\$40,000, between 19-44 yrs; & had 1 to 2 PNL's.	Longitudinal design; descriptive with multi-triangulations. Study began between 10-17 wks until 25 wks gestation. Contact occurred via telephone or personal meetings.	Themes were identified: fluctuating worry, growing confident, interpreting signs, managing pregnancy, and having dreams. Other responses included: seeking reassurance, being hyper vigilant, and relying on internal beliefs.
Cote-Arsenault & Marshall/ 2000/United States	Gain insight into SP after PNL.	N= 13 Majority white; minimum of high school education; married; various income; age of 24-42 yrs; had experienced at least one PNL and a minimum of one SP.	Grounded theory analysis guided by Morse and Field's principles. Focus group (N=11) and individual interviews (N=2).	Women found themselves living in the context of, reliving the past, trying to find balance in the present, recognizing their changed reality, & living with wavering expectations. Women were able to navigate their pregnancy through 7 activities/themes: setting the state, weathering the storm, gauging where I am, honoring each baby, expecting the worst, supporting me where I am, and realizing how I've changed.
Cote-Arsenault & Morrison-Beedy/ 2001/ United States	Describe women's experiences of pregnancy after PNL.	N= 21 Majority white, most had college degree; married; employed; & moderate to high SES; age 27-60 yrs; previous PNL and subsequent child.	Phenomenology analysis Three focus groups were conducted, and data was analysis was guided by Colaizzi's procedural steps.	Women revealed that they did not feel emotionally safe in their pregnancies after loss and were afraid that those babies too would die. Themes identified: dealing with uncertainty, wondering if the baby is healthy, waiting to lose the baby, holding back their emotions, acknowledging that loss, and changing self.

Lee et al./2013/ United Kingdom	Increase understanding of women's thoughts and feelings about decision making and the experience SP after PNL.	N= 11 Majority white; English speaking; married or cohabitating; age 26-43 yrs; & experienced a PNL within the previous 6 to 12 months.	Modified grounded theory analysis Individual interviews were conducted.	Women employed coping strategies to cope with the emotional experiences of SP. Support from partners, significant others, and health care providers were important. PSA was felt by all participants. Grief, guilt and AX were felt during a SP. Themes identified: outcome of decision-making process, the emotional experience of SP, and coping with the emotional experience of SP and maintaining hope.
Moore & Cote-Arsenault/2018/ United States	Give insight into women's experiences over the course of a SP after a PL.	N= 19 Recruited between 2007-2009; white- 14; AA- 3, Hisp-1, and AIAN-1; SP after PNL; English speaking; age 23-41 yrs; ≥ high school education; & various income.	Phenomenological design, Interpretive cross-sectional. Inductive thematic analysis of pregnancy diary entries.	Women pregnant after a PNL wrote about changes in their sense of self across a SP. Self-image and self-competence had changed in part to their previous PNL. Positive social support was needed.
Meaney et al./2016/Ireland	Understand the importance of clinical and emotional care after PL and how it influences a SP.	N= 15 Ten Irish women and five Irish men who had experienced a PNL.	Interpretative Phenomenological analysis. Semi-structured interviews were conducted 4 & 16 months after PNL.	Themes related to SP after PNL emerged: aspirations for future pregnancy and expectations of future care. Women disclosed they had fears about the potential loss of another child. They were also unsure of what to expect in terms of care that would be provided to them in a SP. Women viewed additional appointments with their healthcare provider crucial in providing reassurance during a SP.
Meredith et al./ 2017/ Australia	Investigate the experiences of women with previous PNL in relation to their SP, & the Pregnancy After Loss Clinic (PALC).	N= 10 White, Aboriginal, and Maori women; age 22-39 yrs; in a relationship; & attended the Mater Mothers' PALC during their SP.	Phenomenological analysis. Individual semi-structured interviews were conducted.	Themes identified: the overall PALC experience, the unique experience of pregnancy after loss, support from the PALC, experiences of other services, recommendations for the PALC, need for appropriate alternative services, and advice- mother to mother.
Ockhuijsen et al./2014/ Netherlands	Examine how women experience PNL, including coping strategies, conception and the early pregnancy waiting period in a SP.	N=24 Women who had experienced PNL; pregnant or wish to become pregnant; age < or > 35 yrs; & Dutch speaking.	Phenomenological analysis. Semi-structured interviews were conducted in Dutch and focused on issues relevant to PNL.	Overarching theme: balancing between loss of control and searching for control. Although women realized there was little they could do to influence pregnancy outcome, they searched for strategies to increase their feelings of control during PNL, conception, and early SP.
Ustunda-Budak et al./2015/ United Kingdom	Explore the meaning of PNL experience to women and its influence on SP and parenting from the woman's perspective.	N=6 Women who experienced PNL and SP.	Interpretative phenomenological analysis. Semi-structured interviews were carried out by email.	Women revealed that the experience of a PNL is a process where women re-visit the experience and reflect on their experiences throughout life events such as SP. The experience of a PNL appears to influence the MFR and parenting of a subsequent infant. Some women managed to integrate the loss into their life's while others remained very concerned and anxious.
Van & Meleis/2003/ United States	Identify coping strategies used by AAW after a PNL.	N= 20 AAW; history of PNL; & English speaking.	Grounded theory analysis. Semi-structured audiotaped individual interviews.	Themes identified: I talked, haven't dealt with it, I prayed, and going inside myself. Participants who experienced SP reported increased AX and decreased MFR.

Table 2.5 *Abbreviations for Literature Review Table 2.3 and 2.4*

AX	Anxiety
DS	Depressive Symptoms
EC	Emotional Cushioning
ET	Elective Termination
HX	History
MFR	Maternal-fetal Relationship
PA	Pregnancy Anxiety
PNG	Perinatal Grief
PNL	Perinatal Loss
PSA	Pregnancy Specific Anxiety
PTS	Posttraumatic Stress
SP	Subsequent Pregnancy
SES	Socioeconomic Status

Table 2.6 *Instruments used to measure outcomes in the quantitative studies*

Studies	Number of Studies
Grief	3
Perinatal Grief Scale (PGS)	3
Maternal-fetal relationship	9
Maternal Postnatal Attachment Scale (MPAS)	1
Maternal Antenatal Attachment Scale (MAAS)	3
Cranley's Maternal-Fetal Attachment Scale (MFAS)	1
Neonatal Perception Inventory II (NPI II)	1
Prenatal Attachment Inventory (PAI)	2
Maternal/Paternal Attitudes Questionnaire (MAQ)	1
Pregnancy Outcome Questionnaire (POQ)	3
Pregnancy Anxiety Scale (PAS)	1
Spielberger State-Trait Anxiety Inventory (STAI-A)	1
Crown-Crisp Experiential Index (CCEI)	1
Open-ended Response Questionnaire	1
Hospital Anxiety and Depression Scale (HADS) ^a	1
Impact of Event Scale (IES)	2
Perceived Stress Scale (PSS)	1
Depression	5
The Center of Epidemiologic Studies-Depression Scale (CES-D)	3
Edinburgh Postnatal Depression Scale (EPDS)	1

^a This instrument is listed under 'anxiety' but is also counted under 'depression'

Table 2.7 Scales and Questionnaire Descriptions

Scale	Description
Center for Epidemiologic Studies- Depression Scale (CES-D)	A 20-item scale developed to identify the duration and frequency of DS.
Cranley's Maternal-Fetal Attachment Scale (MFSA)	A 24-item questionnaire to measure antenatal maternal feelings for unborn baby.
Edinburgh Postnatal Depression Scale (EPDS)	A 10-item questionnaire to screen postpartum depression.
Hospital Anxiety and Depression Scale (HADS)	A 14-item scale to assess the presences of anxio-depressive symptoms.
Impact of Event Scale (IES)	A 15-item scale to measure current subjective distress related to a specific traumatic life event.
Maternal Prenatal Attachment Scale (MAAS)	A 21-item Likert scale to assess the MFR during the prenatal period.
Maternal Postnatal Attachment Scale (MPAS)	A self-report instrument to assess the affective aspect of MFR during the first year.
Maternal Attitude Questionnaire (MAQ)	A 46-item questionnaire to assess a mother's attitude towards her infant/child.
Neonatal Perception Inventory II (NPI II)	A questionnaire to measure maternal perceptions of infant behavior.
Perceived Stress Scale (PSS)	A questionnaire to measure the perceptions of stress.
Perinatal Grief Scale (PGS)	A 33-item questionnaire to evaluate the differenced dimensions of perinatal grief.
Perinatal Grief Intensity Scale (PGIS)	A 14-item questionnaire to evaluate grief intensity after PNL.
Pregnancy Outcome Questionnaire (POQ)	A 15-item questionnaire to examine PSA.
Pregnancy Anxiety Scale (PAS)	A 9-item scale to measure concerns about pregnancy and its outcome.
Prenatal Attachment Inventory (PAI)	A 21-item questionnaire to measure MFR.
State-Trait Anxiety Inventory (STAI-A)	A questionnaire to measure two dimensions of anxiety; current feelings (state) & general feelings (trait).

Chapter III: Methods

Chapter Introduction

A perinatal loss can be a potentially traumatic event for some women. Profound disparities such as racism, sexism, classism, and gender inequality can influence obstetrical outcomes in minority populations. Many of these disparities are deeply rooted in genetics, physical and social environments, and access to and quality of health care services (Bryant, Worjolah, Caughey, & Washington, 2010). African American women are, thus, at greater risk for experiencing a perinatal, or infant loss due to significantly higher fetal and infant mortality rates (Boyden et al., 2014).

It is estimated that more than 1 million pregnancies end in a fetal loss each year in the United States, with a large majority of the losses occurring before 20 weeks gestation, thus, contributing to the overall miscarriage rate (CDC, 2015). In the United States, the fetal mortality rate in 2013 was 5.96 fetal deaths at or greater than 20 weeks gestation per 1,000 live births, which totaled 23,595 in that given year (MacDorman & Gregory, 2015). In addition, the fetal mortality rate for non-Hispanic Black women (10.53), in 2013, was more than twice the rate of white women (4.88) (MacDorman & Gregory, 2015). Therefore, African American women are at greater risk for experiencing a perinatal loss due to significantly higher fetal and infant mortality rates (Boyden, Kavanaugh, Issel, Eldeirawi, & Meert, 2014). The disparity in the fetal and infant mortality rates between African American and white women has more than doubled over the past decade (CDC, 2015; MacDorman & Gregory, 2015), and, according to Xu et al. (2018), although the United States infant mortality rate has decreased from 5.96 infant deaths per

1,000 live births in 2013 to 5.87 infant deaths per 1,000 live births in 2016 it is not statistically different.

Theoretical Framework

In studying chronic stress and pregnancy, perinatal loss, maternal-fetal relationships in African American women, Black feminist thought, alongside a life-course perspective, informed the research by providing a deeper understanding of chronic stress. In addition, it assisted in the exploration of how the oppressive nature of racism, sexism, classism, and gender inequality affects African American women's health. More so, how the 'double jeopardy' of being Black and being female can be a potential contributor to poor health outcomes in African American women.

African American women are subjected to numerous oppressions that occur simultaneously and involve multiplicative relationships (Beal, 2008). Hooks (1990) discusses that it has been easier for individuals who do not experience race or class oppression to focus exclusively on gender, while others who focus on class and gender tend to dismiss race. The use of a Black feminist framework allowed for the exploration into multiple intersecting axes. It also gave emphasis on understanding the sociocultural experiences from the perspective of the women who live the experience. Because a high rate of African American women's stress is linked to their oppression, it is not unreasonable to look at feminist theories to help analyze women's experiences.

The identification of the root of oppression must deal with the interrelations of race, sex, social class, and gender (Barbee, 1994). Hooks (1983) stresses that women's experiences of patriarchal oppression differ by race, class, and cultures. African American women's

experiences are not the same as white women's and tend to be diminished or deemed insignificant when viewed through a white female lens (Hooks, 1983). By ignoring these differences, "then women of Color become 'other,' the outsider whose experience and tradition is too 'alien' to comprehend" (Lourde, 1984, p. 117). This is reflected by the gap in the literature as the majority of research surrounding perinatal loss and maternal-fetal relationships is more applicable to white middle-class women (Lamb, 2002). Black feminism insists that there needs to be an understanding of the differences among women before we can deal effectively with the commonalities (Barbee, 1994). This study explored the perceptions of African American women and their lived experiences of oppression and differences in association with perinatal loss, subsequent pregnancies to a loss, and the early development of a positive maternal-fetal relationship. Through a Black feminist lens, the influence of multiple oppressions is understood, more specifically racism, on African American women (Collins, 1990). Black feminism places African American women's experiences and ideas at the center of the analysis (Collins, 1990).

A life-course perspective also aided in the exploration of the relationship between health disparities and pregnancy and birth outcomes in African American women. A life-course perspective can be used to examine how the place people are born, grow, work, and age contributes to their health outcomes, searching for critical periods of risk and effects of cumulative exposures (Berkman, 2009). This model opens ways to link health and wellness across the life span. It also tracks the impact of social inequities as it builds upon itself over time to create shorter life expectancies and fewer life opportunities for disproportionately affected populations (Verbiest et al., 2016).

Through Black feminist thought alongside a life-course perspective, the experiences of African American women were analyzed in their given socially and historically specific contexts (Moore, 1988). The approach of Black feminist thought, alongside a life-course perspective, allowed African American women in this study to articulate their experiences with perinatal loss, maternal-fetal relationships in subsequent pregnancies to perinatal loss, and the issues that concern them.

Rationale for Qualitative Research

This dissertation study focused on the perceptions of African American women who have experienced a perinatal loss and the impact it can have on maternal-fetal relationships in subsequent pregnancies to a loss. A qualitative approach was taken using the method of thematic analysis, and the collection and analysis of data was informed by Black feminist thought. The design began with a thorough review of the literature, centering on perinatal loss and African American women and identifying gaps in previous research.

Most women who have experienced perinatal loss have not been able to tell their stories and experiences due to the fact those around them do not understand or are not able to support them in a way that is helpful (Moore et al., 2011). Using a qualitative design assisted the exploration of African American women's feelings, emotions, and attitudes surrounding perinatal loss and the impact it has had on their pregnancy after the loss. It also allowed for the examination of oppressive constructs that have the potential of impacting maternal health and pregnancy outcomes. This approach provided insights into the problem being studied as well as help to develop new ideas for future qualitative and quantitative research.

Methods

Purpose of the Study and Research Questions

The purpose of this dissertation was to gain a deeper understanding of the perceptions of perceived stress experienced by African American women, and its role in perinatal loss, subsequent pregnancies to a loss, and the establishment of positive maternal-fetal relationships. The significance of the research was to explore how chronic stress induced by racism, sexism, classism, and gender inequality effects African American women's health, pregnancy outcomes, and future maternal-fetal relationships in subsequent pregnancies to perinatal loss. Drawing from Black Feminist thought and a life-course perspective, the research questions and aims that guided this dissertation study are as follows:

Study aims:

- 1) Explore the perceptions of how racism contributes to women's chronic stress and ultimately impacts their pregnancy and birth experiences.
- 2) Explore women's perceptions about relationships between chronic stress and poor birth outcomes.

The research questions for the study are:

- 1) What are stressors experienced by women in their day-to-day life?
- 2) What way does perceived stress affect a pregnancy?
- 3) What perceived stressors are experienced during pregnancy?
- 4) What role do social networks play in stress reduction and do they contribute to a positive mental wellbeing?

Participation Selection Strategies

This section will include a discussion on the sample selection, sample size, recruitment, and the protection of human subjects.

Sample Selection

This study recruited women who identified as African American or Black. Although, one woman was an African immigrant and another was second generation Haitian, the remaining women in the study identified as African American. Therefore, this study utilizes the term African American to reflect the cultural and sociohistorical influences including past slavery, racism, and a legacy of oppression which has resulted in the uneven allocation of resources (Green, 2019).

The sample for this study consisted of 22 African American women who had experienced a perinatal loss and subsequent pregnancies to a loss. The age of participants was between 18 to 56 ($M= 34.63$, $SD= 9.17$). The majority ($n=11$) of the participants lived in the Midwestern United States. The other women interviewed lived in the Northeastern ($n=4$), Central ($n=1$), West ($n=2$), and Southern ($n=4$) regions of the United States. The average income for participants was \$41,500 per year. Seven of the women interviewed reported an annual income of less than \$20,000, while six reported an annual income of greater than \$80,000. One woman had less than a high school education; four women completed high school; eight women completed some college; and, nine women were college graduates. Twelve women reported federal-state program insurance as their main health care coverage. Sixteen women were employed; five were unemployed; one was a full-time student. Perinatal losses experienced among the women ranged from one to eight ($M= 2.09$, $SD= 1.630$). Nine women reported one loss; four women

reported two losses; four women reported having three losses; one woman reported four losses; and one woman reported having eight losses. In addition, four women experienced newborn losses within the first 28 days of life.

The inclusion criteria for this study were as follows:

1. Self-identifies as an African American or Black woman at the time of the interview.
2. Participant is older than 18 years of age.
3. Participant has experienced one or more perinatal losses, at 14 weeks gestation through 28 days of life, and who are currently pregnant at any gestational week or have given birth to a live child within the past five years of the study's start date.
4. Participant is of any education level, socioeconomic status, marital status, or religion.
5. Participant can fluently speak and read English.
6. Participant lives in the United States.

Recruitment

In the initial phase of recruitment, purposive sampling was utilized. This sampling method assures that the participants are able to provide insight that strengthen the understanding of their lived experiences surrounding perinatal loss and subsequent pregnancies to loss, which is the objective of this study (Ritchie, Lewis, & Elam, 2013).

Participants were recruited from clinics where women receive prenatal care, perinatal loss support groups, community centers, churches, and hair salons throughout the United States.

Snowball sampling was also utilized for recruitment for this study. This recruitment strategy looks to existing participants to help recruit future participants from within their own social networks. Snowball sampling is often used because the population being investigated is

hard to find either due to low numbers or the sensitivity of the topic (Browne, 2005). This method of sampling was ideal for this study as participants were otherwise leery of coming forward to share their birth experiences. Even with the use of snowball sampling, recruiting participants was found to be challenging. Recruitment began May 2019 and ended December 2019.

Flyers were posted at the sites for recruitment of participants including clinics where women receive prenatal care, attend perinatal loss support groups, community centers, churches, and hair salons throughout the United States. The same flyer was used at each recruitment location. This recruitment technique allowed for potential participants to self-identify. In addition, social media and word-of-mouth was also utilized as recruiting methods. Social media (Facebook) was also used to recruit participants. A public Facebook page was created that allowed individuals to view the recruitment flyer and contact information of the researcher. The flyer used for social media recruitment was the same flyer used at each recruitment location.

Protection of Human Subjects

To protect the rights, welfare, and well-being of human subjects involved in this research, the study's proposal was submitted to the University of Wisconsin-Milwaukee's Institutional Review Board (IRB) prior to commencing the recruitment of participants. Participants who met the inclusion criteria and consented to participate in the study, were interviewed. The setting in which this study took place was the participants choice. Participants who lived within a 50-mile radius of the researcher had the option of an in-person, face-to-face interview or an interview via telephone, FaceTime, Skype, or ZOOM. Participants residing

greater than a 50-mile radius or who lived outside of the state of Michigan, were given the option to have the interview conducted via telephone or face-to-face via FaceTime, Skype, or ZOOM. Prior to the interview, the consent form was reviewed, and participants were informed of their right to terminate the interview at any time or be removed from the study. Upon completion of the interview, participants received a \$25 Target gift card as a gift of appreciation for sharing their story.

Ensuring confidentiality was a critical component of this research process. To maintain confidentiality, all consent forms, field notes, and ID key linking study identifiers to subject identifiers were scanned, downloaded, and saved on a non-network laptop with password protection and encryption software. Audio recordings were also downloaded onto a non-networked computer with password protection using encryption software (VeraCrypt). The flash memory card containing the audio recordings as well as notebooks used during the study are stored in a locked file cabinet in the researcher's home. The sending and receiving of transcripts were done via email using the encrypt message contents and attachment feature in Outlook. The audio recordings, consent forms, field notes, study ID key, transcripts and notebooks will be destroyed seven years after the study's end date to maintain confidentiality.

There was also risk of participants experiencing emotional distress as the interviewer posed questions regarding their perinatal loss. Prior to the interview, handouts were given to each participant with information to national support groups and online support programs to assist the women's emotional needs. In addition, a distress protocol (Appendix A) was developed to help navigate the potential distress of participants.

Data Collection

To collect data, individual interviews were conducted on 22 African American women who had experienced a perinatal loss and were either currently pregnant or had given birth to a live child within the five years of the study's start date. Sociodemographic information was collected at the beginning of each interview to enhance to study's findings and further examine the lives of the participants (Table 4.1). Along with the sociodemographic data, perceptual information was also gathered from the participants. Individual perceptions are a vital component of qualitative research as it is a way to gain access to understanding the meaning of experiences for an individual and how their perceptions can be influenced by the embeddedness of the context in which they occupy (Given, 2008).

Perceptual data was collected using open-ended questions during semi-structured individual interviews, which are outlined in Appendix B. Semi-structured interviews are the most commonly used and most frequent data sources in qualitative research (DeJonckheere & Vaughn, 2019). This method of dialogue between researcher and participant allows flexibility in exploring thoughts, feelings and beliefs, and to delve deeper into sensitive information using open-ended questions and supplemental follow-up questions. These questions were structured to elicit participants' experiences.

Each interview interaction with the participants was informed by the principles of affect-responsive interviewing. This model of interviewing allows the interviewer to be the central factor of how the interview unfolds (Minikel-Lacocque, 2018). According to Minikel-Lacocque, affect-responsive interviews recognizes that an important relationship between the interviewee and interviewer is created and sustained during the interview process. In addition, with the use

of this method, participants gain greater insight into their lived experiences through the process of the interview, especially interviews on sensitive topics (Minikel-Lacocque, 2018). Although face-to-face interviews are ideal during the interviewing process, most interviews in this study were conducted over the telephone due to the geographic location of the participants. To protect the participant's privacy and ensure confidentiality, interviews were conducted in a private area within the participants home. All interviews were conducted by the researcher and were consented to be audio-recorded by the participants. Subsequently, each audio-recorded interview was transcribed for data analysis.

In addition, field notes were also collected before, during, and after each interview, and throughout the research process. Notetaking helped to give meaning and aided the researcher in gaining a deeper understanding of the women's perceptions surrounding their perinatal loss. Field notes are an essential part of rigorous qualitative research as they enhance the data and provide rich context for analysis (Phillippi & Lauderdale, 2017).

Data Analysis

Interviews were transcribed and analyzed using principles of thematic analysis. Thematic analysis is an analytical framework whereby researchers identify patterns or themes in the interview data of qualitative research (Maguire & Delahunt, 2017). A thematic analysis is a method rather than a methodology, and it is not tied to a particular epistemological or theoretical perspective (Braun & Clarke, 2006; Clarke & Braun, 2013). The goal of a thematic analysis is to identify and interpret both semantic and latent themes (Braun & Clarke, 2006). According to Braun and Clarke, to identify semantic themes, the researcher does not look beyond what a participant has said or what has been written. In contrast, latent themes

examine or identify underlying assumptions, ideas, conceptualizations, and ideologies that inform the semantic content of the collected data (Braun & Clarke, 2006). Using a Black feminist lens, participants stories were examined to explain the historical and social processes in the experiences of African American women, being cautious to distinguish between Black feminist beliefs and *a priori* knowledge. The steps used to analyze the data in this study include (Braun & Clarke, 2006; Ritchie & Lewis, 2014):

- 1) Familiarization of data through transcription of audio-recordings and field notes.
- 2) Generate initial codes
- 3) Identifying initial themes and sub-themes
- 4) Indexing, sorting, and reviewing themes
- 5) Defining and organizing themes.
- 6) Writing up the findings.

The thematic diagram in Appendix C illustrates the themes and sub-themes identified from the individual interviews conducted with the women.

Scientific Rigor

One of the questions that arises with qualitative research is the reliability of the interpretations of the participants narratives. Since there is no statistical test to check reliability and validity in qualitative research, the researcher must rely on trustworthiness, transferability, dependability, and confirmability (Sutton & Austin, 2014). Using these four methods assisted in maintaining rigor. Rigor in qualitative research requires the use of trustworthy instruments which include triangulations, reflective journals, respondent validation, audit trail, case analysis,

and prolonged engagement (Guba & Lincoln, 1985). The after section will outline the methods used to enhance the trustworthiness of this study results.

Credibility

Credibility refers to the truth of the data or in the case of this study, the truth of the participants views and the interpretation and representation of them by the researcher.

According to Cope (2014), a researcher can enhance credibility by describing his or her experiences as a researcher and verifying the research findings with the study's participants.

Triangulation involved multiple sources of data to confirm findings. In the case of this study, analyst triangulation and theoretical triangulation were used to ensure credibility. Employing the expertise of my major professor was used to check the credibility of identified themes.

Triangulation was also established using field notes to confirm the authenticity of findings. The researcher utilized another analyst, to review the findings and to illuminate any blind spots in the data analysis process.

Verification of the data was also necessary to ensure credibility and dependability, thus, contributing to the rigor of the study. Respondent validation (member-checking) is necessary to ensure the themes being identified were authentic and credible. Participants were asked to review their transcribed interviews to ensure the results are recognizable and authentic. This step also allowed the researcher to refine her understanding of the collected data. In the context of this study, respondent validation occurred at different phases of the research process. During the interview phase, participants responses to specific questions were paraphrased or repeated back to the participant for verification and accurate interpretation. In addition, respondent validation was achieved by having the participant review their transcript

for authenticity. Each participant was sent their transcript via secured email. Twelve participants verified accuracy of the transcribed data, while 10 did not respond.

Transferability

Transferability is also an essential component when adding to the rigor of a study. Transferability refers to the process of applying the findings of research in one situation to other similar situations. This can be achieved through the use of robust and detailed descriptions of the event being studied, allowing the findings to be transferable to other situations (Lincoln & Guba, 1985). In this study, transferability was enhanced using in-depth descriptions of the research setting, the study's participants, the researcher's role, and research assumptions surround perinatal loss (Morrow, 2005).

Dependability

Dependability allows the findings of a study to be replicated with similar participants in similar conditions (Cope, 2014). One of the best ways to establish dependability is to have an outside researcher conduct and inquiry audit, or external audit, on the research study (Cope, 2014). It involves having a researcher outside the data collection and analysis examine the process of the collection of data, data analysis, and results of the study (Cope, 2014). For this study, dependability was enhanced by having frequent discussions with my major professor and conducting an audit trail through documenting the research process.

Confirmability

Confirmability refers to the researcher's ability to demonstrate that the data presented by the participants is authentic and not the researcher's biases (Cope, 2014). In this study, the use of reflexivity, and audit trails were used to establish confirmability and contribute to the

overall trustworthiness of the research. For example, keeping a reflective journal made the researcher more aware of her own background and position which helped to limit its influence on the research process. A reflexivity statement was developed to ensure rigor of the study (Appendix C). Also, recording what topics were unique and interesting during the data collection, thoughts about coding, providing rationale for why certain codes were merged together, and explain what the emerging themes mean assisted in creating an audit trail.

Chapter IV: Results

Chapter Introduction

The results of this qualitative study, using thematic analysis, is presented in the form of a manuscript in this chapter. This chapter reported the perceived chronic stressor, mental well-being, and coping strategies experienced by African American women before, during and after their perinatal loss process as well as into subsequent pregnancies to a loss. The paper outlines a pertinent review of the literature, study methodology, a description of the findings, an analysis of the findings, and implications for policy and practice.

Manuscript 3: Perceived stressors of African American women's experiences during their perinatal loss and subsequent pregnancies after loss: A qualitative study

Abstract

Purpose: This study explored perceived chronic stressors of African American women before, during, and after a perinatal loss and during a subsequent pregnancy to a loss.

Design: A qualitative study was conducted using in-depth, semi-structured, individual interviews and the data was analyzed using Black feminist thought and a life course perspective.

Setting: Participants were recruited from clinics where women receive care, perinatal loss support groups, community centers, churches, hair salons, and social media throughout the United States.

Participants: African American women (n=22), who reported a history of pregnancy loss at ≥ 14 weeks gestation or a newborn ≤ 28 days of life, and who were currently pregnant or had given birth to a live child after their loss.

Results: In this study, women's narratives highlighted complex stressors that contributed to women's physical and mental health and well-being. Many women experienced heightened anxiety and fear as they entered into a subsequent pregnancy after loss. The majority of women admitted these emotions created a delay in establishing a relationship with her fetus until later in pregnancy. Women used comforting coping strategies which included social support and religious and spiritual beliefs and practices to help manage their stress. Many women perceived experiencing racial discrimination by their healthcare provider at some point

during their perinatal loss experience. Additionally, women had to be their own advocate as healthcare providers were not meeting their needs leading up to their loss.

Conclusion: The results uncover women's perceptions of their loss experience centered on their emotional needs. Women placed emotions at the center of their narratives as a powerful indicator that frequent prenatal assessment and early postpartum follow-up care is needed from healthcare providers. These findings will help advance clinical practice and provide further insight into the needs of African American women who experienced a perinatal loss and subsequent pregnancy.

Keywords: Perinatal loss, maternal-fetal relationship, subsequent pregnancy, bereavement, chronic stress

Background

It is estimated that more than 1 million pregnancies end in a fetal loss (death of a fetus anytime during pregnancy ≥ 9 weeks gestation) each year in the United States (U.S.), with a large majority of the losses occurring before 20 weeks gestation, thus, contributing to the overall miscarriage rate (Center for Disease Control and Prevention [CDC], 2015; CDC, 2018). In addition, one of every 10 infants in the U.S. is born prematurely at fewer than 37 completed weeks gestation (CDC, 2019; March of Dimes, 2019). Although there has been a decline in births among teens and young women, the preterm birth rate continues to rise (CDC, 2019). Furthermore, data collected in 2018 showed that racial and ethnic differences in preterm birth rates remained (CDC, 2019). For example, in 2018, African American women (14%) experienced a premature birth at a rate 50 percent higher than that of white women (9%) (CDC, 2019).

In the United States, the perinatal mortality rate from 2014 through 2016 was 6.0 fetal deaths ≥ 24 weeks gestation, and early neonatal deaths ≤ 7 days after birth per 1,000 live births (Gregory, Drake, & Martin, 2018). In addition, the perinatal mortality rate for non-Hispanic Black women was 10.66 per live births, in 2016, and was more than twice the rate of their white counterparts at 4.98 per 1,000 live births (Gregory, Drake, & Martin, 2018). Therefore, African American women are two times more likely to lose their fetus at > 20 weeks gestation than white women (MacDorman & Gregory, 2015). The infant mortality rate between African American women and white women has more than doubled over the past decade (CDC, 2015). The neonatal (less than 28 days of life) mortality rate and post-neonatal or infant (28 days to 1 year of age) mortality was 4.04 per 1,000 live births and 1.93 per 1,000 live births, respectively, in 2013 (CDC, 2015). Although the overall infant mortality rate in the United States has

decreased from 5.96 infant deaths per 1,000 live births in 2013 to 5.87 infant deaths per 1,000 live births in 2016, it is not statistically different (Xu, Murphy, Kochanek, Bastian, & Arias, 2018).

Disparities such as racism, sexism, classism, and gender inequality have been reported by many researchers and, may have the ability to negatively impact obstetrical outcomes in minority populations (Domiguez, 2008; Rosenthal & Lobel, 2011; Lorch & Enlow, 2016). Racism, sexism, classism, and gender inequality can influence health outcomes for groups of individuals, thus, making it likely to affect the community as a whole. In addition, profound disparities such as racism, sexism, classism, and gender inequality can also influence obstetrical outcomes in minority populations. Many of these disparities are deeply rooted in the physical and social environments in which individuals live, as well as having access to and quality of health care services (Boyden, Kavanaugh, Issel, Eldirawi, & Meert, 2014; Lu, 2018). The World Health Organization (WHO) (2017) defines social determinants of health as “conditions in which people are born, grow, work, live, and age.” Social determinants of health have been used to frame poor pregnancy outcomes mediated by social inequities (Amjad et al., 2018; Lu, 2018; WHO, 2017). When compared to foreign-born non-Hispanic Black women, African American women born in the United States have higher rates of prematurity and low birth weight (Culhane & Goldenberg, 2011; Elo, Vang, & Culhane, 2014). For example, a study by Elo et al. concluded that a historical legacy of slavery in conjunction with life-time exposures disparities produce poor health and pregnancy and birth outcomes for U.S. African American women. Similarly, Mehra et al. (2019) reported that communities with higher levels of disadvantages were associated with an increased risk of poor birth outcomes.

African American infants are more likely to be born preterm and, on average, are two times more likely to face the risk of death before their first birthday than white infants (MacDorman & Gregory, 2013). Understanding of how social factors are linked to chronic stress may assist in narrowing the Black-white perinatal mortality gap. Several studies have found a relationship between perceived racism, stress, and pregnancy-related outcomes, including preterm birth and low infant birth weight (Dominguez, 2008; Gadson, Akpovi, & Mehta, 2017; Slaughter-Acey et al., 2019). Moreover, disparities in social determinates may also lead to chronic stress which may be responsible for poor health and birth outcomes in African American women. In an overarching context of historical and structural inequity, it is important to acknowledge the role of racism and chronic stress on racial disparities in maternal health care (Gadson et al., 2017; Louis, Menard, & Gee, 2015). In African American women, chronic stress, fueled by racism and discrimination, has been associated with higher levels of cortisol (Shapoor et al., 2013). Elevated cortisol and norepinephrine are the natural hormones responsible for triggering premature labor and preterm births (Lu & Halfon, 2003). When a fetus is exposed to high levels of cortisol through the placenta, it disrupts key hormone receptors (Wadhwa, 2005). This may influence an epigenetic process that prepare the fetus for life in a high-stress environment outside the womb (Goosby, Cheadle, & Mitchell, 2019). In addition, elevated cortisol levels may prematurely age African American women, increasing their vulnerability to stress-related complications during pregnancy (Giurgescue et al., 2013; Geronimus, 1992). The concept of “weathering”, introduced by Geronimus (1992), indicates the effects of social inequality on the health of populations may compound with age, leading to growing gaps in health status from young to middle adulthood that can impact fetal health.

Similarly, the theory of allostatic load suggests that exposure to chronic psychological stressors can lead to cumulative risk and psychological unbalance, contributing to poor health outcomes (Edes & Crews, 2017). Both weathering and allostatic affects emphasize the importance of identifying and examining multiple stress-related factors that might increase the risk for poor pregnancy and health outcomes (Louis, Menard, & Gee, 2015; Woods-Giscombe, 2010).

Furthermore, chronic stress has been associated with shorter telomere length in adults (Chae et al., 2014) as well as in the placenta of newborns of women who were exposed chronic stressors during pregnancy (Jones et al., 2017). Therefore, African American women who have an ongoing exposure to high levels of chronic stress during pregnancy may be more susceptible to elevated blood pressure, lower birth weight, and higher preterm birth risks (Goosby, Cheadle, & Mitchell, 2019; Shapiro et al., 2013).

Theoretical Framework

This study was guided using an intersectional approach to Black feminist thought and a life-course perspective. Black feminism is a school of thought which argues that racism, sexism, classism, and gender inequality are inextricably bound together. The Black feminist movement came about as the result of white feminists' continued legacy of rejecting and alienating Black women (Taylor, 1998). The demands of racist, elite, white women spurred Black women to shape their own theory and praxis to include issues unique to themselves (Taylor, 1998).

African American women are uniquely positioned when it comes to the intersection of race and gender. Black feminism argues that racism, sexism, classism, and gender inequality are inseparable and cannot be teased apart. The way these concepts relate to one another is referred to as intersectionality (Crenshaw, 1989). Rooted in Black feminist thought,

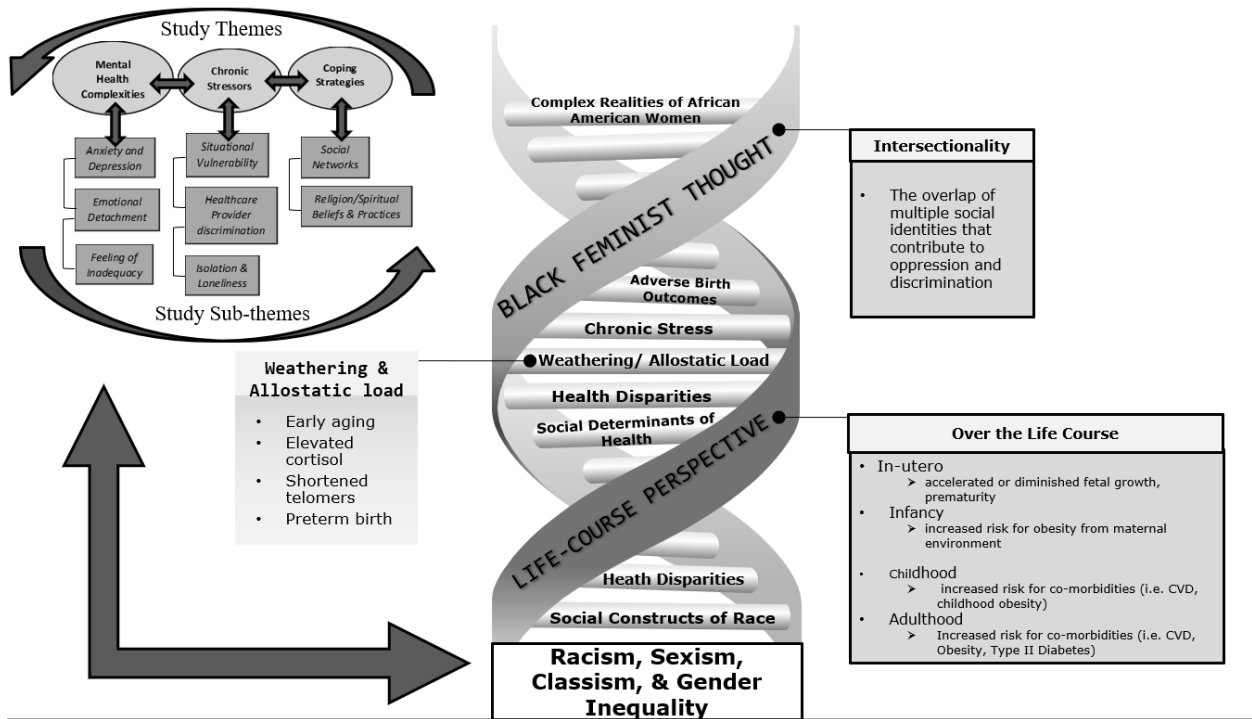
intersectionality is viewed as a frame of mind, method, and analytical tool (Carbado, Crenshaw, Mays, & Tomlinson, 2013). An intersectional approach helps to identify how the complicating effects of social forces, such as patriarchy and racism, limit the lives of marginalized individuals, particularly African American women (Harris & Leonardo, 2018). Social and cultural influences surrounding the health and physical and mental well-being of African American women may endanger their overall health over the life course. Black feminist epistemologies helped to guide this study by providing a deeper understanding of how the oppressive nature of racism, sexism, classism, and gender inequality creates perceived stressors which may affect African American women's health.

In addition, a life-course perspective was used to aid in the exploration of the relationship between health disparities, chronic stressors, and birth outcomes of African American women. A life-course perspective can be used to examine how the place people are born, grow, work, and age contributes to their health outcomes, searching for critical periods of risk and effects of cumulative exposures (Berkman, 2009; Jones et al., 2019). This perspective opens ways for health care providers and researchers to link health and wellness across the life span. An analytical approach, using intersectionality and a life-course perspective, better accounts for the connections between women's individual narratives and systems of domination that impinge upon the everyday lives of racialized African American women (Ferrer, Grenier, Brotman, & Koehn, 2017). Applying a life-course perspective using an intersectional lens highlights the intersections of structural oppression that encroach on the everyday experiences of African American women throughout their life course. Through the lens of intersectionality, a life course perspective demonstrates the possibilities of considering the

connections between identities, life events, difference, domination, and resilience (Ferrer, Grenier, Brotman, & Koehn, 2017). Intersectionality and a life-course perspective give insight in how the life course trajectory of marginalized groups have implications that extend well past an individual into their families, communities, and beyond (Ferrer, Grenier, Brotman, & Koehn, 2017).

Because a high rate of African American women's stress is linked to their oppression it is not unreasonable to look at feminist theories, as well as the life-course perspective, for an explanation. Marginalization for African American women can be a source of distress, potentially causing poor maternal and pregnancy health outcomes. Using an intersectional lens, Black feminist thought and a life-course perspective provided a framework to strengthen the understanding of how the oppressive social conditions of African American women throughout their life course may potentially impact their health and possibly influence their pregnancy outcomes (Perry, Harp, & Oser, 2013; Lu et al., 2010). Through this lens, constructs such as racism, social determinants of health, and health disparities were identified and the relationships between the constructs and chronic stress and birth outcomes were explored through the lived experiences of African American women. A model (Fig.4.1) was developed, using Black feminist thought and intersectionality, alongside a life-course perspective to guide the study and capture key constructs and identify themes that contribute to oppression and the mental health and well-being of African American women.

Figure 4.1 *Thematical figure linking constructs to birth outcomes through the lens of Black feminist thought and intersectionality alongside a life-course perspective.*



Methods

This qualitative study involved data collection using semi-structured individual interviews. Participants were asked open-ended questions to elicit in-depth responses. Socio-demographic information such as age, state, marital status, education level, type of healthcare insurance, annual income level, and employment status was collected on each participant. In addition, information regarding number of pregnancies and number of perinatal losses was also elicited. To collect information regarding chronic stress and coping strategies, women were asked the after questions: “What are some of the stressors that you experience day-to-day? In what ways have these stressors affected your current pregnancy? What type of support system do you have in which you can express your feelings regarding these stressors?”

This study recruited women who identified as African American or Black. Although one woman was an African immigrant and another was second generation Haitian, the remaining women in the study identified as African American. Therefore, this study utilizes the term African American to reflect the cultural and sociohistorical influences including past slavery, racism, and a legacy of oppression which has resulted in the uneven allocation of resources (Green, 2019). A total of 22 women were recruited from clinics where women receive care, perinatal loss support groups, community centers, churches, hair salons, and social media throughout the United States, and interviewed for this study. Interviews were conducted in-person, or via Skype, FaceTime, or telephone. Upon completion of the interview, women received a \$25 Target gift card as a gift of appreciation. Each interview was audio-recorded, and the average interview duration was 50 minutes. The interviews were transcribed and analyzed using the tenets of thematic analysis.

Sample

The age of participants was between 18 to 56 ($M= 34.63$, $SD= 9.17$). The majority ($n=11$) of the participants lived in the Midwestern United States. The other women interviewed lived in the Northeastern ($n=4$), Central ($n=1$), West ($n=2$), and Southern ($n=4$) regions of the United States. The average income for participants was \$41,500 per year. Seven of the women interviewed reported an annual income of less than \$20,000, while six reported an annual income of greater than \$80,000. One woman had less than a high school education; four women completed high school; eight women completed some college; and, nine women were college graduates. Twelve women reported federal-state program insurance as their main health care coverage. Sixteen women were employed; five were unemployed; one was a full-

time student. Perinatal losses experienced among the women ranged from one to eight ($M=2.09$, $SD=1.630$). Nine women reported one loss; four women reported two losses; four women reported having three losses; one woman reported four losses; and one woman reported having eight losses. In addition, four women experienced newborn losses within the first 28 days of life.

Data analysis

Interviews conducted were audio-recorded and analyzed using thematic analysis. First, the researcher reviewed the transcripts for accuracy. Then, each transcript was re-read, identifying themes and patterns from the participant's experiences. Nvivo 12 software was used to aid in the coding process. During this process, pertinent text was selected and coded guided by the study's aims and research questions. The coding process was repeated with each transcript, and themes and subthemes were identified. The data for three of these themes will be reported in this manuscript.

Trustworthiness

Several strategies were employed to ensure trustworthiness during the data collection and analysis process of this study. To strengthen confirmability, the researcher dictated in a reflective journal throughout the research process. The journal entries included information surrounding the researcher's personal assumptions and perspectives during the data collection process. This process created transparency and limit researcher bias. To enhance credibility, member checking was utilized after data collection was completed by asking participants to review their transcripts for authenticity and accuracy. Transferability was ensured by using

detailed socio-demographic data of the participants to help contextualize their stories.

Dependability was established using an external audit.

Ethical Considerations

Ethical approval to conduct this study was obtained from the University of Wisconsin-Milwaukee's Institutional Review Board. Prior to conducting this study, the researcher reviewed the study's information sheet with each participant, which outlined the study's procedures, risks and informed the women of their ability to stop the interview process or withdraw from the study at any time. Once the purpose of the study was explained to potential participants, women were given the ability to ask questions, and their written consent was obtained prior to their participation.

Results

This manuscript details findings on African American women's perceptions of the stressors they experienced before, during, and after their perinatal loss experience and during a subsequent pregnancy to the loss. This was captured under the major themes- experiencing stressors, mental health complexities, and coping strategies. The stressors women reported included situational vulnerability, not being heard, and isolation. This resulted in women feeling increasingly anxious and depressed. Consequently, most women turned to religion and their support systems as ways to cope.

Perceived stressors

Women reported experiencing multiple, complex stressors before, during, and after their loss experiences and at the time of a subsequent pregnancy to a loss. Stressors women described can be classified under three subthemes- not in a good place, not being heard, and

feeling alone. Women reported one or more of these stressors present at the time of their perinatal loss and into their subsequent pregnancy to their loss.

Not in a good place

Generally, the women interviewed reported that they felt like they were not in a good place prior to or during their loss. Some women identified not being in a good place during a subsequent pregnancy to the loss. Many women identified major life stressors such as housing instability, neighborhood stress, and intimate partner violence as contributors to their chronic stress. The women interviewed described that these stressors complicated their loss, which made it difficult for them to focus on their healing. Other women reported that their living situations added to their existing stress, which intensified their anxiety and worry of having another loss. Some women reported that they felt one or more of their perceived stressors directly contributed to their perinatal loss. One participant shared her perceptions of her volatile relationship with her ex-husband, stating:

I wasn't in a good relationship. My, um, oldest two children, like, their father was really, really abusive and he beat me. And, I ended up going to the emergency room the day before, bleeding. But they did an ultrasound. They saw the baby was fine. But they said they couldn't tell where the bleeding was coming from so, they sent me home. And, they sent me home with no promises. So, the next morning I woke up and my water bag broke. And, I went in the bathroom and I had him there. Um, when he came out, I thought he was dead 'cause he didn't make no movement or anything.

This participant expressed that she did not attend prenatal care on a regular basis due to her abusive situation, which created additional stress for her. She avoided seeing her healthcare provider at times when there were physical signs of abuse present, including multiple bruises over her body. Another participant expressed how difficult the stress of the emotional abuse was that she experienced before, during, and after her perinatal loss. Several

women believed their partners violent behaviors emerged or worsened during their pregnancy.

One participant experienced violent episodes from her partner for the first time during her pregnancy, stating:

He suffered from bipolar disorder, and I was not aware of that, until I became pregnant, and he became abusive....

Other women reported similar episodes of physical violence from partners, while others indicated that the abuse came in the form of financial control. One participant described the stress she felt when her partner took her money or made her account for spending. Some women reported that their financial spending was controlled, and they were denied opportunity to seek employment. For these women, this stressor proceeded into their subsequent pregnancy to the loss.

Besides intimate partner violence, women reported housing instability as a significant stressor during their perinatal loss experiences. Some women indicated they were homeless at some point during their pregnancy. One participant reported having experienced a house fire, leaving her and her partner to find shelter while in the midst of learning she was pregnant. She stated:

We had house fire and were displaced and homeless like the week before Christmas, we had a fire in our apartment, then I found out I was pregnant like two weeks later. Oh my god, and then we lost it ...just trying to recoup and wrap my mind around the first loss and then boom, pregnant again. You know ...

Some women experienced lack of housing because they were displaced by family members, and the stress of being homeless was compounded by their lack of social networks. One participant expressed the stress she experienced while being pregnant and homeless her junior year in high school. For women who experienced housing instability, many reported

limited resources, while others expressed the resources were difficult to obtain. One participant shared her experience when she was seventeen:

I didn't really have anywhere to go, and the shelters that I reached out to, you know, would accept me, but I would have to find my own way there. So, I ended up getting, um, emancipated and getting my own apartment.

Neighborhood stress was also identified as constant for most women. Some women reported residing in low-income, high-crime neighborhoods where they grew up and felt unsafe. For participants who lived in neighborhoods with high crime, they described feeling hypervigilant about their safety. This hypervigilance was described by a participant who always locked her doors and never went walking in her neighborhood because of possible violence. Other women resided in actively violent communities where they reported constant fear and stress. One participant expressed how neighborhood violence had a direct impact on her home. She reported:

Um, I actually... it- it's going on a year that I've lived here. Um, we lost our home in a storm last summer, so we had to find another house, like, really, really quickly. I actually have bullet holes, like, in my living room and through my kitchen. So, it's pretty... yeah, it's pretty bad.

Women's experiences of neighborhood stress were resulted from a lack of other available resources within their community. Women reported having limited access to healthcare facilities and transportation. One participant shared that the nearest hospital was more than a 30-minute drive from her home, which resulted in her birth at 17-weeks at a local urgent care. Others reported that they did not have access to healthy and affordable foods during their pregnancies. For one participant, her perceptions on the lack of local healthy nutritional options, were as follows:

I live in an area that is, uh, it's not urban, but it is definitely like you know, the hood. Uh, in the sense of you know, it's definitely low income, um, predominantly black, uh, you know, the kind of thing, where there's more liquor stores than there are like fresh food spots, you know.

This participant's situation was common as many women expressed limited access to healthcare, transportation, and healthy foods, which complicated their ability to have a healthy pregnancy and may have contributed to their perinatal loss. One participant expressed her frustrations about living so far away from a hospital where she could receive emergency obstetric care, that she had no other option but to give birth to her extremely preterm fetus at an urgent care facility.

Not being heard

In addition to situational vulnerability, women described their stress and frustration with the care they received during and after their perinatal loss. Women reported disappointment in their relationship with the healthcare provider. Although, most participants reported they established early prenatal care to help ensure a healthy pregnancy, many women felt as if their healthcare provider ignored or dismissed their symptoms prior, during, or after their perinatal loss. They perceived that they were not being heard because healthcare providers did not actively listen to their complaints. One participant shared her perceptions of her interaction with her healthcare provider:

Um, she didn't listen, she, she didn't listen to anything that I said, really. It was like, "Well, how are you feeling? Uh-huh, yeah, okay, sure, yeah." You know what I'm saying? Like, she was just asking me, and not even paying attention to my answer, just going through the motion.

Women expressed ongoing stress over growing concerns they experienced about their pregnancy. Most women sought care or called their healthcare provider with symptoms that

included “bleeding,” “spotting,” “stomach pains,” “cramps,” or “didn’t feel the baby move,” but did not feel heard. One participant reported her concerns to her healthcare provider on multiple occasions, and explained:

I think I was 14 weeks when I went in and they told me that my cervix was six millimeters. Before then, I had already told them I was cramping. I told them that I was spotting. I told them that I had back pain which further in my future I figured out those were kind of signs of incompetent cervix, but they, they just kept telling me that's normal. I told them about everything, and they were telling me, "Oh, those things are normal, they're normal."

Other women who were interviewed reported feeling that their providers avoided them, and even more so after their loss. They felt avoided when they reported symptoms or inquired about test results. One woman, who tried to obtain autopsy results of her daughter reported the after:

So, I felt they were avoiding me. They were avoiding me because of the situation. They were avoiding me because of the autopsy results.

Some women felt that racial biases were the root cause for providers not listening to their concerns or taking their complaints seriously. Other women reported that their health insurance coverage influenced the care received at the time of their perinatal loss. Women who had state and federal insurance coverage did not feel that their healthcare providers put forth the same effort to listen to their concerns that they would have received if they had private insurance. Women felt they were treated differently based on the “color of their skin”, because they were African American. This complicated their loss experiences and resulted as a chronic stressor. One participant perceived the questions she was asked after her perinatal loss, were based on her race. She stated:

So, for that pregnancy I had the worst doctor ever to the point that I had to call and uh,

report. He had told me that, he'd ask me questions that they would only ask African American people I'm pretty sure. He asked, "Well, did you do drugs with this baby?" Um, "Were you... Did you do drugs with this baby?" Um, "Well did you smoke any tobacco with this child?" Just things like that....

Women also reported feelings of racial discrimination when they shared concerns about their healthcare. Perceptions of racism negatively impacted patient-provider communication for women. One participant expressed that her provider failed to evaluate her symptoms of preterm labor as thoroughly as someone from another race. She shared:

You know, the doctors and nurses are more likely to pay attention to Caucasian or different, different races other than people of color. Like, when they tell you, "Oh, my back hurts," or "Oh, my stomach hurts," or something that's hurting, they just kind of tell us, like, "Oh, chalk it off," where, and where as a different person a different person race, they're more like, "Oh, well, let me look into it," you know?

Another concern that women reported was that their pain was overlooked or undertreated during the labor and birth of their perinatal loss, especially, if they requested pain management during their labor. One participant reported that she changed her mind about receiving an epidural after the placement became too painful, but her provider ignored her request to stop. Others reported that their pain was dismissed because they were African American. One participant added:

It's like when you are, like, a pregnant black woman, or person of color, I don't know how it goes for everybody, but I know, like, black and Latino because my sister's Latina. When you're saying that you're hurting, they're thinking that you want medication more than that you actually are in pain, you know?

Most women spoke of their need to advocate for themselves when their healthcare provider did not act on their concerns. Often women changed healthcare providers to advocate for themselves and their fetus. One participant sought care from three different healthcare providers during the pregnancy where she experienced her perinatal loss and moved to a

fourth provider with the pregnancy that occurred after her loss. Women showed assertiveness by becoming their own advocate and pushing for the care they desired.

Feeling Alone

Although, many women felt connected to social networks consisting of close family and friends, they still felt isolated and alone after their loss and at the time of their subsequent pregnancy. Women's isolation was often centered on the fact that they felt alone in their loss experience. Thus, some women made the conscious choice to isolate themselves. One participant stated:

So, it was very bleak and dark for me for some time after that. Probably about a year and a half. Even though, even when I was pregnant again, it was still just really bad. Um, so, the support system, they were there, and I knew I could talk to them if I needed to, but unfortunately, I didn't want to. I didn't want to talk to them.

Women's feelings of isolation stemmed from their perception that others "did not understand" what they were going through. Women internalized feelings of sadness and grief, which added to their loneliness. One participant felt isolated from the physical sense of loss she felt. She explained:

Um, so that it was really, really defeating. And my husband is a phenomenal support, he's there for every other appointment and everything else. But I think I felt very isolated at that point because it wasn't his body that had gone through that.

Having family, friends, and healthcare providers acknowledge a perinatal loss was important for women. When women felt others did not recognize their loss, it increased their loneliness. For some women, having family and friends who did not acknowledge their loss made them feel as though their child did not exist. One participant shared her experience regarding the insignificance she felt from others as:

Nobody acknowledged that I lost a baby. I woke up, I come out from the D&C, and it's like nothing."

Having a limited social network contributed to feelings of isolation. For some women, having no one to confide in after their perinatal loss resulted in feelings of depression and, for one participant, suicidal thoughts. Women expressed how important it was to have someone to talk to, especially during the early days after their perinatal loss.

Mental well-being

Many of the stressors and feelings women reported after their loss negatively impacted their mental well-being. Women were concerned about their mental health, which was negatively impacted by racism, race-based disparities, and living in a hostile environment. This main theme of mental well-being was divided into three subthemes- 1) feeling anxious and depressed, 2) lack of peace, emotional detachment; and, 3) failure as a woman.

Feelings of anxiety and depression

Women reported having feelings of anxiety and depression when confronted with their realities of perinatal loss and subsequent pregnancy to a loss. Some women described feelings of walking on eggshells, while others reported living in a perpetual state of fear as they anticipated the loss of their fetus. Many women were fearful during subsequent pregnancies as they feared another loss. Feelings of isolation and smaller social networks compounded women's depressive symptoms. Over half of the women reported recurrent feelings of anxiety and depression throughout the course of their perinatal loss and subsequent pregnancy to a loss. One participant reported feeling so much stress and worry that it might affect the outcome of her pregnancy. She stated:

Sometimes I don't even understand how this baby made it, how stressed and upset and, worried, you know, that I was.

One participant described how the daily uncertainty she felt during her twin pregnancy created persistent anxiety. Women also expressed feeling hypervigilant during their pregnancies, and for some, these feelings were present during the pregnancy after their perinatal loss. One participant reported that listening to the heartbeat of her fetus multiple times each day was the only way she could decrease her excessive worry. Most women reported hypervigilant behavior during a subsequent pregnancy to a loss because they felt a sense of impending doom and were fearful of having another loss. Sometimes daily rituals they put in place helped with their pregnancy-related anxiety. One participant stated:

You know, just really, a lot of looking into underwear constantly. Constantly, like, it just reminded me of when you see somebody with super high-level OCD, washing the hands or, you know ...The craziness, you see the manic part of it, like oh my God, like you are compelled to do this thing that is not rational at all. But I still have to do it. I still have to do it. Like literally checking my underwear all the time. All of the time. Walking around with essentially an emergency miscarriage package, if you will. Just yank my teeth out, it would be easier. Just yank them out of my head with no, no anesthesia, I can take it much easier than the panic, the, the worry.

Many women felt traumatized after their perinatal loss. For some the loss itself was traumatizing, but for others, the actual of birth created the trauma. One participant was traumatized from the emergency cesarean section she had to birth her stillborn son. Four women reported either a history of posttraumatic stress disorder (PTSD) or a diagnosis of PTSD after their perinatal loss, which led them to seek medical attention. Other women buried their feelings as it was too painful to remember. One participant reported that she was able to remember and process her feelings regarding the stillbirth of her child after extensive therapy. She shared:

Yeah, that was a still birth and yeah that was ooo...like I said, I PTSD'd the heck out of that cause it took me years to even ... put it in to my brain, that had happened to me. I can remember unpacking that in therapy, you know like, I like literally, just put it out of my brain, and tried to like survive it.

Lack of peace

Constant worry and fear resulted in a lack of peace for the women in this study, as they were fearful of experiencing another perinatal loss during their subsequent pregnancies. One participant's fear took over when she started having complications early in her pregnancy, and she was unable to experience any joy of being pregnant. Some women were able to lessen their fear once they passed the point in their pregnancy where their previous loss occurred, or they were reassured by an event such as an anatomy scan. However, many women continued to experience fear throughout their pregnancy, like one participant described as she underwent treatments to help maintain her pregnancy, adding:

It was terrifying. I had to have shots every week. We had progesterone shots every week. I had to have, um, I did so many ultrasounds I thought that was gonna kill the baby... I just felt overwhelmed.

The constant state of fear did not go away. One participant "kept waiting for the other shoe to drop," while another felt she was "walking on pins and needles" her entire pregnancy. Although women were in a persistent state of fear, most experienced optimism as they hoped for the best outcome.

Failure as a woman

For most women, the inability to successfully carry a pregnancy to viability created a feeling of failure and inadequacy. These feelings of inadequacy interrupted their ideal of womanhood, which led to strained relationships with their partners. One participant expressed

the difficulty she had as she attempted to re-establish intimacy with her partner while trying to move past her feelings from her loss. She explained:

He wasn't pressuring me at all until I was ready and so that was the big moment for me, um, being able to engage and be intimate again and you know, just feeling it, but he made me feel connected back to that, that weird, scary space of like loss makes you feel inadequate and a unwanted, as a woman. Like I just could never hear it be different from the women that I've talked to about it. It just, it's such a blow to like, whatever you're identifying or pinning onto your womanhood.

Women searched to find the reasoning for their perinatal loss. They often blamed themselves; one participant thought she was too old to have children and that was why she could not maintain a pregnancy. Others, who experienced multiple losses, described their bodies as being “broken.” Feelings of inadequacy and “brokenness” depleted their feelings of worthiness as women. One participant reported feeling a lack of self-worth after she experienced her third miscarriage.

Emotional detachment

Generally, women described a delay in establishing a relationship with their fetus during their subsequent pregnancy to a loss, most often because they feared another loss. Women reported that they emotionally detached themselves from their fetus as a way of self-preservation should they experience another loss. One participant shared:

No, not at all did I bond. I don't think I bonded with her literally until she was here. I was too afraid to get attached. I had been attached six times before and I just did not want that to happen again.

Feelings of detachment continued after birth for three of the participants. One participant expressed feelings of guilt because she became pregnant after her perinatal loss. Although, she was not replacing the child she lost, she still felt guilty at times for moving forward after she gave birth. Another participant reported that even with her growing

abdomen, she still felt detached from her son during pregnancy and after birth. For some women, the delay they experienced in establishing a relationship with their fetus or newborn was influenced by the degree of healing after perinatal loss. Women who did not recover both emotionally and physically from their loss experience before conceiving a subsequent pregnancy, reported a decreased urge to bond with their newborns. One participant stated:

I didn't bond with her at all, unfortunately. Not when she was in my womb and not when she came out either. It took at least a month and a half. And I breastfed. But it took a month and a half for me to even be like, "Okay, I do love her. She is my baby and I have to get over it." I mean, we have a great relationship now. She's three... but it did take a long time and it was because so much... I never got a chance for one, for my body to heal. I never got a chance for my emotions to heal. And here we are again.

Conversely, four of the participants reported no delay in developing a relationship with their fetus during a subsequent pregnancy to a loss and described feelings of immediate closeness with their fetus upon learning they were pregnant. For most women, the subsequent pregnancy to their loss was planned and accepted. One participant reported bonding right away with her fetus because she "wanted him so bad." Women who established an early relationship with their fetus were able to announce their pregnancy right away. One participant explained that there is a taboo to announce a pregnancy before 12-weeks' gestation; she realized that something could happen at any point, so she chose to tell family and friends in order to increase her social support.

Coping

Women found ways to cope after their perinatal loss to manage their fear and anxiety during a subsequent pregnancy to the loss. The coping strategies women described most often fell into two categories 1) talking to others and 2) relying on faith.

Talking to others

Most women looked to family and friends for support after they experience a perinatal loss. Social networks were identified as an essential component to help cope. Establishing a strong social circle provided women the ability to confide in others and feel that they were not alone. One participant explained:

Whether they miscarried or, you know, they had a stillbirth, or they had like a child who was born, and the child died. So, um, I think just knowing that I wasn't alone ... made a big difference to cope with my loss.

Women's social networks served as a way for women to share their feelings with others who could relate to their experiences. In addition to family and friends, most women reported finding support through loss support groups or speaking at local and national perinatal loss conferences. Women also expressed that sharing about their loss was one way to honor their child. Sharing their loss and honoring their child became a form of therapy and a way to promote self-healing after their loss:

Any way that I'm able to talk about what happened to me I feel is a way of healing for me, to talk about, um, her, um, in any form, whether it's speaking to another woman who had a loss, or doing a research study, or, um, joining any type of like group online to talk about it. It's therapeutic for me, and it's my way of, my healing process.

Seeking support through professional counseling was another way that women received treatment. For women with small social networks, professional counseling allowed them to work through their pain, and even family or cultural expectations. One participant was encouraged by her mother to seek the help of a therapist to help manage her feelings, and stated:

I also ended up going to a, um, outpatient program for one of, was one of the best decisions that I could say, like, because, um, Black people, or people in color in general and mental health is not something that's discussed often but my mother recommended that I go.

Consequently, for a small number of women, the ability to cope fluctuated. One participant expressed that there were days she could cope with her loss and days she could not “function past it,” despite having a strong support system. Even women who found difficulty coping, identified how important it was to have individuals they could trust to share their perinatal loss experience.

Relying on faith

Faith was central to most women’s experiences of being resilient as they navigated through their complex realities of loss. Women reported managing their loss through comfort found in religious and spiritual practices. Women who were not religious reported seeking solace in a “higher power” to cope. Religion provided comfort for most women, while it gave hope to others. One participant spoke of praying, even though she was not a religious person, hoping for a better outcome to her pregnancy. For some women, faith was a conduit between self-forgiveness and self-blame, as one participant explained:

I thought that I had killed my baby like, I thought that I had stressed myself out to the point where I stopped my baby’s heart beat and shortly after that the doctors told me, no, that’s not possible, that’s not a thing you know, I’m a very spiritual woman so my spirituality played a lot into me thinking that you know even now... I know that it wasn’t my fault but you know sometimes I still think that, what if all that stress did stop the baby’s heartbeat, what if all that stress did make me reject my pregnancy you know.

Faith provided a framework through which women could make meaning of realities, seek comfort, and cope. For women, several strategies were employed to help them cope during their grief process after a perinatal loss. One participant expressed that through her healing process, she realized it was “okay to have Jesus and a counselor.”

Discussion

This qualitative study examined the perceptions of chronic stress of African American women who experienced a perinatal loss and a subsequent pregnancy to their loss. Using an intersectional approach, the application of Black feminist thought alongside a life-course perspective, gives prominence to how women's complex challenges occur within a sociopolitical context that obstructs access to healthcare and quality resources, resulting in increased oppression and marginalization. Through an intersectional lens, black feminist thought alongside a life-course perspective allowed for a deeper understanding of the complexity and situatedness of identity of African American women. In addition, these frameworks acknowledge that the constructs of racism, sexism, classism, and gender inequality are multi-axes and can have lethal effects on maternal and infant health outcomes. Chronic exposure to racism, sexism, classism, and gender inequality may have long-term effects on marginalized groups that extend well past the individual, into families, communities, and beyond (Ferrer, Grenier, Brotman, & Koehn, 2017).

Three themes emerged from the individual interviews that were conducted: perceived stressors, mental well-being, and coping strategies. Our findings revealed that African American women experienced significant stressors during their loss and well into a subsequent pregnancy to the loss, which has important implications for mental well-being. These findings support the need, addressed by other pregnancy outcomes studies, to assess racism and health disparities experienced across multiple life domains and captures coping responses of the women (Alhusen et al., 2016; Dominguez, 2008; Thompson & Suter, 2020). Using Black feminist thought, alongside a life-course perspective, our analysis reveals how women's experiences of

perinatal loss and consequential mental health symptoms occur within a given sociopolitical context of continuous reproductive disadvantage. These disadvantages obstruct access to quality healthcare and essential resources, to result in increased marginalization and oppression. Even with a hostile climate, women were able to advocate for themselves and display resiliency by managing their stress using their faith and social networks for support.

The women in our individual interviews expressed existence of chronic stress prior to and throughout their perinatal loss experience and well into subsequent pregnancies to a loss. Similar to findings by other researchers, psychosocial and environmental stressors have both been identified as contributors to chronic stress patterns (Mayne, Pool, Grobman, & Kershaw, 2018; Yim & Kofman, 2019). Chronic stress exposure may place women at greater risk for developing mental health disorders including anxiety and depression (Braig et al., 2015; Pryce & Fuchs, 2017). For example, a study by Seib et al. (2018) linked life stress to both anxiety and depressive symptoms, and findings suggested that past life events can influence a woman's appraisal and coping abilities.

In addition, psychosocial and environmental stressors may contribute to adverse pregnancy outcomes directly by increasing cortisol levels that may trigger preterm birth or restricting fetal growth (Giurgescu et al., 2013; Shaikh et al., 2013), and indirectly through certain health behaviors. Pregnant women who experience chronic stress may use unhealthy behaviors, such as drinking alcohol and smoking, as coping mechanisms (Krueger & Chang, 2008; Okah, Oshodi, Liu, & Cai, 2014). Conversely, findings by Doktorchik, Premji, Slater, and Williamson (2018) reported that although women with increased anxiety scores were at an increased risk of premature birth, chronic stress did not modify the relationship between

anxiety and preterm birth. Moreover, an increasing amount of research suggests that, women who are placed in highly threatening situations may elicit stress-induced emotional and physiological changes accompanied by mental and physical health consequences (Conway, Rutter, & Brown, 2017; Epel et al., 2018; Tafet & Nemeroff, 2016), including poor pregnancy and birth outcomes (Dadi, Miller, & Mwanri, 2020; Woods, Melville, Guo, Fan, & Gavin, 2010). For the women in this study, highly threatening situations included escalating intimate partner violence during their pregnancies and postpartum periods. Women perceived that this abuse contributed to their elevated levels of anxiety, fear, and depressive symptoms and ultimately played a role in their perinatal loss. There is literature that suggests intimate partner violence increases during pregnancy and into the postpartum period (Alhusen, Ray, Sharps, & Bullock, 2015; Finnbogadottir & Dykes, 2016). An increase in violence can negatively impact maternal health (inconsistent prenatal care, poor nutrition, substance use, poor weight gain, and increased depressive symptoms), as well as adverse pregnancy and birth outcomes (preterm birth and low birth weight) and maternal and perinatal death (Alhusen et al., 2015).

Women placed their mental health concerns at the center of their narratives.

Comparably to previous studies examining the psychological effects of perinatal loss, women in this study reported perceived anxiety and depression after their loss (Hunter, Tussis, & MacBeth, 2017; Farren et al., in press). In addition, women with recurrent perinatal loss experiences expressed significant anxiety and depressive symptoms. For example, a study by He, Wang, Xu, and Chen (2019) reported that women who experience one or more losses had a significantly higher level of anxiety and depression. Many women reported feeling siloed due to cultural constraints after their perinatal loss. Feelings of isolation impeded them from

discussing their loss experience, which increased their anxiety and depressive symptoms, and, ultimately, impacted their mental well-being. Women expressed that perinatal loss was not something that was discussed in African American families, and feelings surrounding loss were kept quiet. For example, a study by Donovan and West (2015) reported that African American women are socialized and reared with the goal of being a strong woman. Part of achieving strength could mean associating human emotions such as depression or anxiety with weakness and failure. Due to the siloed experience surrounding perinatal loss, African American women may be more vulnerable to depressive symptoms associated with stress and anxiety (Donovan & West, 2015).

Similar to current findings, women in this study experienced a lack of healthcare provider contact and/or follow-up care after their perinatal loss. For example, Nanas, Narang, Kolikonda, and Lippman (2015) reported that women who were not offered the opportunity to discuss their feelings during a follow-up visit or telephone call after their loss reported more anxiety. In addition, timing of follow-up care can play an important role in psychiatric symptoms. Women reported the need for follow-up contact from their provider two to three days after their loss due to their increase in depression, anxiety, and guilt. According to Nynas et al. (2015), due to immediate emotional distress after a loss, provider contact and initial counseling should begin within one week after the loss. For many women, lack of contact from their healthcare provider was perceived as an indicator that they should quietly and quickly move forward, leaving some women to develop symptoms of self-harm. Management of anxiety and depressive symptoms after perinatal loss is essential for a woman's future well-being (Nynas et al., 2015).

Similar to current research, many women reported anxiety and depression that continued into subsequent pregnancies to a loss (McCarthy et al., 2015; Robertson-Blackmore et al., 2011; Ustundag-Budak, 2015). For example, Bergner, Beyer, Klapp, and Rauchfuss (2008) reported that women who experienced a perinatal loss identified symptoms of pregnancy-specific anxiety, especially during the first trimester of a subsequent pregnancy to a loss. During a subsequent pregnancy, it is also common for grief and hope to occupy the same space. For example, in a study by Bailey, Boivin, Cheong, Kitson-Reynolds, Bailey, & Macklon (2019), a new pregnancy after loss can be a traumatic time filled with uncertainty and emotional chaos. Women in our study reported feeling cautiously optimistic during a subsequent pregnancy. For example, allowing time to enjoy small milestones such as fetal kicks, ultrasounds, or surpassing the gestational age of a previous loss helped to decrease anxiety and give a sense of optimism. Awaiting confirmation of an on-going pregnancy after a perinatal loss can be a difficult period marked with an intense struggle between optimism and despair, hypervigilance of pregnancy symptoms and bracing for another loss (Bailey et al., 2019).

Women also experienced hypervigilance during subsequent pregnancies because of their prior losses. A subsequent pregnancy can be a time of hypervigilance and constant pregnancy treatment appraisal (Cote-Arsenault, 2007). Women may experience high anxiety (Armstrong, Hutti, & Myers, 2011), depression (Hutti, Armstrong, & Meyers, 2011), and increased healthcare use during a subsequent pregnancy to a loss (Hutti et al, 2011; Robson et al., 2010). Similar to findings by Nowak and Stevens (2011), women in this study did everything possible for the welfare of the fetus despite stress, healthcare inequity, and income. In addition, Robertson-Blackmore et al. (2011) reported that perceived stress, depression, and

anxiety remained constant across both the prenatal and postnatal periods, indicating the impact of previous loss did not diminish significantly after the birth of a healthy newborn.

In the current study, women spoke of a taboo in announcing their pregnancy before 12-weeks' gestation as they feared this to be a time when miscarriage was most likely to occur. Most women chose to delay their pregnancy announcement until they surpassed 12-weeks' gestation. These findings are similar to current research studies. For example, a study by Lou et al. (2017), reported women keeping their pregnancy a secret during the first 12-weeks' gestation due to a higher rate of miscarriage. In the same study, women anticipated reaching certain milestones, such as screenings or ultrasounds, to mark a new and more certain phase of their pregnancy (Lou et al., 2017). Similarly, Ross (2015) reported women withheld announcing their pregnancy until they perceived the risk of a perinatal loss had decreased. Furthermore, women in the same study reported that the delay in announcing their pregnancy was a form of self-preservation in the event an early perinatal loss was to occur (Ross, 2015).

In this study, a delay in establishing a positive maternal-fetal relationship was associated with anxiety and fear of experiencing another loss. In a study by Cote-Arsenault and Donato (2011), women protected their emotions by delaying establishing a maternal-fetal relationship. The delay, for some women, lasted until they reached the gestational age of their previous loss, while others experienced a delay into the postpartum period. The delay was found to be a coping mechanism for anxiety, uncertainty, and the vulnerability experienced in subsequent pregnancies to a loss (Cote-Arsenault & Donato, 2011). The available research suggests that the plausible association exists between maternal-fetal relationship and infant development outcomes. There is evidence to suggest that when women delay establishing a positive

relationship with her fetus, it may result in decreased infant developmental outcomes (Alhusen, Hayat, & Gross, 2013; Branjerdporn, Meredith, Strong, & Garcia, 2017). These infants may experience a difficult infant temperament, increased colic, and delayed developmental milestones (Branjerdporn et al., 2017; McMahon, Camberis, Berry, & Gibson, 2016).

Women in the current study used self-help strategies to cope with their perinatal loss by connecting with their social networks and with religion and spiritual beliefs and practices. A study by Athan et al. (2015) reported that women who practiced religion and spiritual practices had better scores on anxiety, depression, perceived stress and social networks. These same strategies are reflected in the results from a study by Van and Meleis (2003) of African American women, and in other studies where one or more of the strategies were used by women of other races and ethnicities (Fernandez-Basanta, 2019; Marin-Morales, Carmona-Monge, Penacaba-Puente, & Daiz-Sanchez, 2012; Allahdadian, Irajpour, Kazemi, & Kheirabadi, 2015). Women relied on individuals in their small social circles to help them cope through receiving emotional support. Some women went outside of their social networks and looked to support groups for comfort. Most women preferred to participate in online loss support groups due to ease and privacy. For example, a study by Gold et al. (2012) found that women who use online message boards felt less isolated in their loss and grief and appreciated the convenience, access, and anonymity. Some women even reported that participating in the current study was a form of support because they did not have access to other resources for therapeutic listening.

Finally, results from the women's narratives indicate that perceived racism and discrimination may contribute to African American women's race-related stress burden. Women in the study reported feeling discriminated against and treated differently by their

healthcare providers. Women expressed feeling “ignored,” “not taken seriously,” or receiving less than quality care by their healthcare providers during their perinatal loss experience. These findings are similar to a study by Attanasio and Hardeman (2019) which found that women felt they received inadequate treatment due to race, insurance status, or having a difference of opinion with a healthcare provider. The stress of racism, sexism, classism, and gender inequality can have profound effects on African American women. Concepts of weathering explain how increasing stress loads accelerate physiologic deterioration and increase a woman’s risk for poor pregnancy and reproductive health outcomes (Geronimus, 1992; Nuru-Jeter et al., 2009). A broader focus on the exposures of racism must be taken in order to understand the racism-related stress that African American women experience.

Limitations

There were limitations to this study. Many of the women interviewed were from the Midwestern as well as the Eastern part of the United States. Due to the potentially varying sociopolitical climate across other regions of the United States, specifically Southern regions, we may not have captured the more nuanced experiences that characterize the lives of African American women living in southern portions of the U.S. Nevertheless, we do believe that patterns of stress and its relationship to pregnancy would be similar across geographic regions of the United States. Additionally, 13 interviews were conducted via telephone. As a result, the researcher was unable to note non-verbal cues and make observational notes that may have enriched the data of these participants. However, data from in-person interviews corroborated findings when compared to those interviews obtained over the telephone.

Recommendations

Women in this study identified racial discrimination as a point of stress for them at some point during their perinatal loss. We need to further examine the role healthcare providers and healthcare organizations have in implicit bias, institutional racism, and structural racism. A stronger understanding of the constructs of racism, sexism, classism, and gender inequality may ultimately lead to the provision of inclusion-centered, evidence-based health care for marginalized groups. Deconstructing personal biases, educating the public, and developing culturally congruent interventions will create safe spaces where care can take place.

Furthermore, nurses and healthcare providers should incorporate reproductive life planning into the plan of care for all women to improve birth outcomes. According to Malnory and Johnson (2011), by incorporating individualized reproductive life planning, nurses can address specific health, social, cultural, and economic concerns with women and identify needs for those most at risk for poor pregnancy and birth outcomes. By implementing a reproductive life plan, it will allow for a seamless approach to preconception, interconception, or prenatal care of women during their childbearing years (Malnory & Johnson, 2011).

Lastly, the results uncover women's perceptions of their loss experience centered on their emotional needs. Women placed emotions at the center of their narratives as a powerful indicator that frequent prenatal assessment and early follow-up care is needed from healthcare providers at the time of a perinatal loss as well as into subsequent pregnancy to a loss. Initiating early follow-up contact after loss via telephone or through the use of telehealth may prove beneficial to a woman's well-being. Furthermore, healthcare providers and healthcare

institutions should consider developing specialized bereavement support services such as Resolve Through Sharing and employing specifically trained staff (Hutti & Limbo, 2019).

Future Research

Future empirical research would benefit from recruiting a more diverse selection of participants that include adolescents, same-sex couples, and African American fathers. Researchers may benefit from using feminist thought in privileging the voices of African American women who are at the center of pregnancy loss and using their voices to advance nursing science and the development of more effective nursing interventions that are grounded in women's realities. In addition, large scale studies may be necessary to compare the differences and the relationship between levels of psychological distress and maternal-fetal relationships, considering individual meaning of perinatal loss and subsequent pregnancy. Furthermore, additional longitudinal studies may also be necessary to understand how the psychological effects of perinatal loss change throughout the course of pregnancy, into the postpartum period, and beyond (Alhusen, 2008). Larger studies may also be needed to take a more comprehensive and holistic approach to chronic stress in African American women and its role on adverse pregnancy and birth outcomes to improve health outcomes for women and their infants. Lastly, future research directed towards the health consequences of racism and social inequality may provide new insights into the countless factors of linking chronic stress not only to perinatal loss but delay in establishing positive maternal-fetal relationships.

Conclusion

African American women face increased risk of psychological distress due to the climate in which they are situated. Persistently elevated stress levels have the potential to negatively

affect pregnancy and birth outcomes (Alhusen, Bower, Epstein, & Sharps, 2016; Dominguez, 2011; Li, Rosemberg, & Seng, 2018). In addition, stress and pregnancy-related anxiety may negatively influence the development of a positive maternal-fetal relationship in subsequent pregnancies to loss. Much of the chronic stress identified by women was centered on social inequalities and racial discrimination. Emphasizing race as a marker of distinctive access and privilege is essential to concentrate the health disparities discourse on the broader contextual factors regarding the variations on race and health (Dominguez, 2011). Through the women's narratives reported here, healthcare providers, public officials, and other supporters can gain insight into what resources would be most helpful in aiding in the stress reduction African American women experience.

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Table 4.1 Sociodemographic data of study populations

	Participants (n=22)	Mean	SD
Age		34.63	9.17
18-29	5		
30-49	16		
50 +	1		
Marital Status			
Single	5		
Married	9		
Divorced	4		
In a Relationship/Engaged	4		
Income		\$41,500	26580.963
<\$20,000	7		
\$20,000-\$30,000	4		
\$30,000-\$40,000	1		
\$40,000-\$50,000	2		
\$50,000-\$60,000	1		
\$60,000-\$70,000	1		
\$80,000 or >	6		
Healthcare Insurance			
Commercial	10		
Federal/State Program	12		
Employment			
Employed	16		
Unemployed	6		
Housing			
Rent	13		
Own	9		
Education Level			
< High School	1		
High School	4		
Some College	8		
College	9		
Location			
Midwest	11		
Northeast	4		
West	2		
South	4		
Neighborhood Crime/Violence	4		
Intimate Partner Violence	6		
Pregnancy Status			

Currently Pregnant	7		
Subsequent Pregnancy to loss ≤ 5 yrs	14		
Number of Pregnancies		4	2.507
1 to 2	8		
3 to 5	10		
6 or more	4		
Number of Perinatal Losses		2.09	1.63
1 to 3	20		
4 or more	2		
Age of Gestation at time of loss		15.454	9.732
<14 Wks Gestation & ≥14 Wks Gestation	13		
≥14 Wks Gestation & ≥ 28 Days after Birth	9		

Chapter V: Discussion and Synthesis

This qualitative study, using a thematic analysis, describes the nuanced experiences of African American women before, during, and after a perinatal loss and subsequent pregnancies to a loss. It also reported on how women's attempt to navigate through their loss experience was complicated by social constraints of racism, sexism, classism, or gender inequality. Despite these constraints, women demonstrated resilience by finding ways to manage their physical and emotional well-being using social networks and practicing self-advocacy when interacting with healthcare providers.

This chapter analyzes and synthesizes the findings reported in all three manuscripts. It also discusses their implications for future research, clinical practice, and healthcare policy. In alignment with Black feminist thought, alongside a life-course perspective, emphasis will be placed on the social constructs of racism, sexism, classism, and gender inequality during analysis and recommendations will be aimed at pushing for social awareness and change.

Synthesis of Findings

The aim of this dissertation was to center the voices of African American women who experienced a perinatal loss and subsequent pregnancies to a loss and thus, create knowledge that increases awareness of how the constructs of racism, sexism, classism, and gender inequality contribute to the health disparities of women over their life course, and ultimately influence societal change. Using Black feminist thought and intersectionality, alongside a life-course perspective, our analysis reveals limited literature that surrounds African American women's lived experiences of perinatal loss and subsequent pregnancies to a loss that specifically focuses on social and cultural differences. In addition, the use of Black feminist

thought and intersectionality, alongside a life-course perspective are imperative epistemological frameworks that aid to address the complex issues of inequalities and social injustice that African American women experience. Finally, our analysis reveals how African American women's experiences of institutional and structural racism, health inequities, healthcare provider discrimination, and concerns for mental well-being are positioned within the social constraints of racism, sexism, classism, and gender inequality.

A Black feminist framework was used as the analytical lens for us to enhance our understanding of African American women's experiences and challenges they face as a result of social and political undertakings during and after a perinatal loss and subsequent pregnancy. With an intersectional approach, Black feminist thought is able to provide an analysis that integrates how the complicating effects of social forces including racism, sexism, classism, and gender inequality limit the lives of marginalized individuals, particularly African American women at the time of perinatal loss and subsequent pregnancy to loss (Harris & Leonardo, 2018). For example, women in this study reported feeling that their health concerns leading up to their loss was not taken seriously due to the color of their skin. Many women felt if they would have been white, they would have received the kind of care they felt they needed from their health care providers. Intersectionality also enhances our study finding when it is applied to a life-course perspective. Applying an intersectional lens to a life-course perspective highlights the intersections of structural oppression that impinge on the everyday experiences of African American women as well as over their life course. For example, women in this study reported living in deprived neighborhoods with inadequate resources. For some women, this experience is shared among family over past generations. Using an intersectional approach

when applying Black feminist thought alongside a life-course perspective, provides clarity surrounding the experiences of African American women and the analysis in their socially and historically specific contexts (Moore, 1988). Women's narratives provide insight into their lived experiences surrounding the hostile climate in which they reside. African American women exist in a context where they experienced racism, sexism, classism, and gender inequality, before, during, and after their perinatal loss and into a subsequent pregnancy to their loss. In this study, the experiences of racism, sexism, classism, and gender inequality were identified by women as chronic stressors. Racial discrimination extended to their encounters with healthcare providers and healthcare systems. Women in this study reported experiences with racism or unfair treatment by their healthcare provider that were consistent with previous research on patient-provider relationship (Malat & van Ryn, 2005; Nowak & Stevens, 2011; Prather et al., 2018). In addition, women reported feeling as if their concerns about their health and the health of their fetus were overlooked. Women's experiences of racism, sexism, classism, and gender inequality can also have implications for mental health status within a racialized context for minority populations. Additionally, the constraints of racism, sexism, classism, and gender inequality have the potential to negatively impact reproductive health, pregnancy, birth, and infant outcomes.

Black feminist thought and intersectionality, alongside a life-course perspective, also allows for the analysis of women's negative and positive experiences of perinatal loss. Furthermore, it allows for the exploration into a subsequent pregnancy after loss by centering the voices, experiences, and lives of African American women. It provides a self-defined lens through which African American women can be seen and their experiences understood (Collins,

2000). Black feminist thought and intersectionality, alongside a life-course perspective, allows us to acquire a deeper understanding through African American women's various experiences of living, surviving, and thriving within multiple forms of intersecting oppression (Patterson, Kinloch, Burkhard, Randall, & Howard, 2016). Although, the women in our study lived within a hostile climate where they experienced racism and discrimination during their perinatal loss, they were able to show resilience as they survived the devastation of losing a child, and continued to thrive as they optimistically planned and prepared for another pregnancy. Furthermore, women continued to remain cautiously optimistic during a subsequent pregnancy. For example, allowing time to enjoy small milestones such as fetal kicks, ultrasounds, or surpassing the gestational age of a previous loss helped to decrease anxiety and provide women with a sense of optimism. Awaiting confirmation of an on-going pregnancy after a perinatal loss can be a difficult period marked with an intense struggle between optimism and despair, hypervigilance of pregnancy symptoms and bracing for another loss (Bailey et al., 2019; Nowak & Stevens, 2011). According to Collins (2000), for individual women, the particular experiences that accrue to living as an African American woman in the United States can stimulate a distinctive consciousness concerning their own experiences and society overall. It is important to include information from African American women from multiple sites and/or states throughout the U.S in order to understand their diverse experiences. The diverse experiences of individual African American women contribute to an aggregate understanding larger than any single woman herself, and a feminist approach to theorizing Black womanhood offer productive insight into women's lives (Patterson, et al., 2016).

Provider bias, discrimination and institutional and structural racism also impact women's access to and quality of healthcare. Racism and discrimination are deeply ingrained in society's social, political, and economical structures. For minority populations, racism and discrimination result in unequal access to high quality and safe healthcare, healthy foods, affordable housing, livable wages, and quality education. In this study, women reported neighborhood violence, and housing instability at the center of their narratives.

The complex realities of women and their stressors directly influence their mental, emotional, and physical well-being. Coping with situational vulnerabilities, discrimination, isolation, and loneliness resulted in increased feeling of anxiety and depression for women who participated in this study. These findings are similar to previous data that has shown that racism, sexism, classism, and gender inequality are predictors of mental health symptoms for African American women (Stevens-Watkins, 2014; Perry, Harp, & Oser, 2013). For women in this study, anxiety and depression continued on into subsequent pregnancies to their loss. Some women's experiences of depression and anxiety negatively impacted the early development of a positive maternal-fetal relationship, as they feared another loss. This is similar to other studies where women distanced themselves from their fetus in subsequent pregnancies after loss (Cote-Arsenault & Donato, 2011). A subsequent pregnancy can also be a time of hypervigilance and constant pregnancy threat appraisal (Cote-Arsenault, 2007; Nowak & Stevens, 2011). Women may experience high anxiety (Armstrong, Hutti & Myers, 2009), depression (Hutti, Armstrong, & Meyers, 2011), and increased healthcare utilization during a subsequent pregnancy to a loss (Hutti et al, 2011; Robson, Leader, Bennett, & Dear, 2010). Similar to findings by Nowak and Stevens (2011), women in this study did everything possible

for the welfare of the fetus despite stress, healthcare inequity, job responsibilities, and income. Factors associated with higher levels of maternal-fetal relationship included social networks, greater psychological well-being, and any or more frequent visits to their healthcare provider (Delavari et al., 2018; McNamara, Townsend, & Herbert, 2019).

Policy and Practice Recommendations

In addition to the policy and practice recommendations outline in each manuscript, I will offer broader changes based on the research findings. Findings from this study have implications for informing healthcare policy, practice, and change for marginalized women experiencing perinatal loss and subsequent pregnancies to a loss. The contextual factors including racism, sexism, classism, and gender inequality which lead to the marginalization and may negatively impact the lives of African American women, their mental well-being, and ultimately their pregnancy and birth outcomes were reviewed above. It is necessary for healthcare providers and researchers to advocate for the use of restorative and reproductive justice through policy and practice to make social change.

A critical analysis of current policies reveals the need for comprehensive reform to provide African American women, during the antepartum, intrapartum, and postpartum periods with continuous access to emotional and physical support. This type of support is even more critical when a woman experiences a perinatal loss or subsequent pregnancies to a loss. Women in this study experienced a lack of contact and follow-up care from their healthcare provider after their perinatal loss. They placed emotions at the center of their narratives as a powerful indicator that frequent prenatal assessment and early follow-up care is needed from healthcare providers at the time of a perinatal loss as well as into subsequent pregnancy.

Nanas, Narang Kolikonda, and Lippman (2015) reported that women who were not offered the opportunity to discuss their feelings with their healthcare provider after their perinatal loss reported more anxiety. In addition, timing of follow-up care can play an important role in psychiatric symptoms. Women reported the need for early follow-up contact from their provider in the days after their loss due to their increase feelings of isolation, depression, anxiety, and guilt. According to Nynas et al. (2015), due to immediate emotional distress after a loss, provider contact and initial counseling should begin within one week after the loss. For many women, lack of contact from their healthcare provider was perceived as an indicator that they should not acknowledge their loss or grief, and quietly and quickly move forward, leaving some women to develop symptoms of self-harm. Management of anxiety and depressive symptoms after perinatal loss is essential for a woman's future well-being (Nynas et al., 2015). Initiating early follow-up contact after perinatal loss by telephone call or through the use of telehealth may prove beneficial to a woman's well-being. Furthermore, healthcare providers and healthcare institutions should consider developing specialized bereavement support services with specifically trained staff for programs such as Resolve Through Sharing® (Hutti & Limbo, 2019).

Additional support may also be provided for women who experience a perinatal loss through certified doula services, specifically African American doula services, which offer emotional, physical, and educational support to women during the antepartum, intrapartum, and postpartum periods. Currently, certified doula's charge a fee for their services, which is not covered by state or federal insurance in most states throughout the U.S. However, doula services are covered by private and commercial insurances. For women who cannot afford the

services of a certified doula, they may need to look to social media or community resources such as the Birthing Project, USA for free birth support. The benefits of doula care reveal shorter labors, fewer cesarean births, more satisfaction with the birth experiences, and a decrease in postpartum depression rates (Gruber, Cupito, & Dobson, 2013; Hans, Edwards, & Zhang, 2018). Moreover, bereavement doula care provides the same physical, emotional, and informational support to families but with a more focused approach surrounding perinatal loss. For most low-income women, the expense of doula care is unobtainable, if not covered by a grant or community agency. In order to provide underserved and marginalized women this support option, a policy change at both the state and federal levels, nationwide, is needed to reimburse certified doulas through Medicaid programs which would improve the access for those who cannot afford doula services. Furthermore, a change in policy must be made to reflect the birthing rights of incarcerated women. To have doula care available for women prisoners will allow them the ability to birth, unshackled, with dignity. Healthcare providers and researchers need to advocate for policies so that all states mandate state prisons and jails to accommodate pregnant incarcerated women and make midwives and doulas available for all pregnant women. Having doula support during the antepartum, intrapartum, and postpartum periods can help assist women in their emotional recovery from birth and to parent their newborn. A doula can help empower and encourage the women during pregnancy, birth, and beyond to increase her self-efficacy about her own ability to impact her pregnancy outcomes (Gruber et al., 2013).

The women in this study all identified racial discrimination as a point of stress for them at some point during their perinatal loss. Healthcare providers and organizations need to

further examine the role they have in implicit bias and institutional and structural racism. Once researchers, healthcare providers, and policy makers can direct an effective integration of the constructs of racism, sexism, classism, and gender inequality, this may ultimately lead to inclusion-centered, patient led, and evidence-based healthcare for marginalized groups. Helping healthcare workers to deconstruct personal biases, educate the public, and develop culturally congruent interventions that will create safe spaces where care can take place. Once individuals, organizations, and systems develop culturally congruent and innovative assessment tools and interventions that address the intersection of social determinates of health and reproductive and sexual health inequalities may be informed by an understanding of the history and legacy of racism. Once healthcare professionals address reproductive and sexual health of marginalized groups through a historical lens, they can begin to help systems move towards achieving health equity for African American women (Prather et al., 2018).

Limitations

The limitations of this study relate to sample size, sociodemographic characteristics of participants, geographic location, and the setting in which the interviews were conducted. The study set out to recruit a large group of African American women, recruitment strategies were increased, and ultimately a smaller sample was identified. Although the study was open to all income levels, most participants identified as low-income. It is unknown whether experiences of low-income women are similar or different to those in higher income brackets. For example, experiences related to health disparities, racial biases and discrimination, and access and quality to healthcare by be different among the two groups. In addition, most of participants

were in their 30's ($M= 34.63, SD= 9.178$), which did not capture the experiences of younger or older women.

Most participants in this study were from the Midwestern and Eastern parts of the United States. Due to the potentially varying sociopolitical climate across particular regions of the United States, specifically Southern regions, we may not have captured the more nuanced experiences that characterize the lives of African American women living in the U.S. Nevertheless, we do believe that patterns of stress and its relationship to pregnancy would be similar across geographic regions of the United States. However, perceived racial discrimination may be intensified based on geographic location. For example, a study by Kim et al (2016) report the interaction of region by perceived racial discrimination was significant in African Americans. Also, women living in a rural setting may have different experiences than those living in an urban area.

The manner in which the individual interviews were conducted also created a limitation to this study. Thirteen interviews were conducted via telephone. As a result, the researcher was unable to note non-verbal cues and make observational notes that may have enriched the data of these participants. However, data from in-person individual interviews validated findings when compared to those interviews conducted over the telephone.

Future Research

This study provides a closer look at the perceptions of chronic stress experienced by African American women who have had a perinatal loss and subsequent pregnancies to a loss, in a small sample of women throughout the United States. This study provides the basis for many areas of future perinatal loss research with African American women, including

development of culturally specific pre- and postnatal assessment tools, the examination of how African American culture influences the grief process after perinatal loss, and comparisons between geographic locations and the relation between perceived racial discrimination and chronic stress among pregnant African American women.

Providing care to all women requires a great deal of knowledge and skill (Williams & Jackson, 2019). Racial, ethnic, sociocultural, and political factors can influence societal and family dynamics which ultimately affect the health and well-being of African Americans. The lack of understanding of these dynamics can lead to ineffective interventions that are not tailored to the actual needs and realities of African American women (Williams & Jackson, 2019). Scales such as the Hospital Anxiety Scale (Gaudet, Sejourne, Camborieus, Rogers, & Chabrol, 2010), Pregnancy Anxiety Scale (Cote-Arsenault & Donato, 2011), and Perceived Stress Scale (Cohen, Kamarck, Mermelstein, 1983; McCarthy et al., 2015) have been used to assess anxiety and stress in pregnant women but do not have the means to assess the unique healthcare needs of African American women. Although these tools have been shown to be reliable and valid in assessing anxiety and stress, many lack the culturally specific component to screen for both stressors related to racial, ethnic, sociocultural, political factors, and pregnancy-related stress. In contrast, the Jackson, Hogue, and Phillips Contextualized Stress Measure (2005) was developed to assess both anticipated and experienced stress that is linked to racialized and gendered identities of African American women and to offer a measure that, when used in conjunction with other psychosocial instruments, may provide a context for interpreting the results (Jackson, 2007). Therefore, to accurately assess the physical and

emotional well-being of African American women, the use of multiple assessment tools may need to be employed.

Health disparities in African American women, including poor pregnancy and birth outcomes, can be explained by stress and coping (Grobman et al., 2018; Masho, Price, Kinser, & Jallo, 2015). Research has noted that culture can influence the way individuals experience and report stress. As reported in this study, women who identified African American culture as one reason for being silenced during their loss experience. Future research may provide a more in-depth examination of how African American culture influences the grieving process after perinatal loss. This research may also identify additional stressors that may impact subsequent pregnancies to a loss.

Future research on geographic disparities, including urban-rural comparisons for the relation between perceived racism and chronic stress with African American women should be considered. Social stressors, that include racism, sexism, classism, and gender inequality may function as uncontrollable threats to African American women's physical and emotional well-being. By analyzing the geographic disparities between perceived racism and mental health concerns of women living in urban regions to those living in rural regions will help identify geographic regional differences as well as possible reasons for the differences.

Conclusion

The purpose of this dissertation was to gain a deeper understanding of the perceptions of perceived stress experienced by African American women, and its role in perinatal loss, subsequent pregnancies to a loss, and the establishment of positive maternal-fetal relationships. Through the women's narratives, experiences of oppression and marginalization

were identified as stressful factors having the potential to further complicate their pregnancies. Approaching African American women's perceived experiences of chronic stress from a biopsychosocial perspective may lead to a better understanding in healthcare of how perinatal loss and subsequent pregnancies to a loss may affect African American women both physically and mentally. Having a greater understanding of the realities and lived experiences of African American women may assist in how healthcare providers and researchers are able to improve practices, develop resources, and promote social change for marginalized women.

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APPENDIX A

Protocol for Participant Distress

<p>The interview will be terminated if:</p>	<ul style="list-style-type: none"> • The participant decides to terminate the interview • The SPI may stop the interview if the participant displays severe distress or shows risk or verbalizes intent to self-harm or harm others.
<p>The SPI will intervene if the participant is:</p>	<ul style="list-style-type: none"> • Experiencing distress during the interview. The participant should be asked if they would like to take a break from the interview. • If the participant continues to show signs of emotional distress, the participant will be asked if they would like to end the interview. If signs of upset persist, the SPI will end the interview with the participant. • In the event of distress, the SPI, who is a master's prepared registered nurse, would stop the interview, assess the severity of distress, and provide emotional support. The SPI will assess whether the participant wants to proceed with the interview process, needs to take a break, or would like to withdraw from the study. In addition, the SPI may choose to end the interview based on the severity of the distress, even if the participant wishes to continue the interview. • Resources for local and national perinatal loss support groups, online support groups and pregnancy loss organizations will be given to all participant before the start of the interview in the event they require additional support.
<p>The SPI will, with the participants consent:</p>	<ul style="list-style-type: none"> • Gain permission to call a family member or friend to offer support if they are distressed.
<p>The SPI will, without the participants consent:</p>	<ul style="list-style-type: none"> • In the event the participant experiences severe distress or shows risk or verbalizes intent to self-harm or harm others, the SPI may need to break confidentiality and call 911 without the participants consent. The participant will be informed of this in the consent form.

Distressed Protocol (Dempsy et al., 2016)

APPENDIX B

INTERVIEW GUIDE

This is a guide for semi-structured interviews to be conducted with African American women.

Exploring the perceptions of African American women who have experienced a perinatal loss and its impact on maternal-fetal relationships in subsequent pregnancies

Semi-structured interviews, each estimated to last 120-180 minutes, will be conducted with women to explore their perceptions of African American women who have experienced a perinatal loss and its impact on maternal-fetal relationships in subsequent pregnancies. The interviews will involve women who:

- Have experienced a perinatal loss between the 14 weeks of gestation or infant through the first 28 days of life.
- Are currently pregnant or have had a live birth in the last five years at the start of the study.

Interviews will focus on the everyday life stressors of African American women, perinatal loss, and on the subsequent pregnancy that follows the loss, with specific attention on racism induced chronic stress.

The aims of the study are:

- 1) Explore the perceptions of how racism contributes to women's chronic stress and ultimately impacts their pregnancy and birth experiences.
- 2) Explore women's perceptions about relationships between chronic stress and poor birth outcomes.

The research questions for the study are:

- 5) What are stressors experienced by women in their day-to-day life?
- 6) What way does perceived stress affect a pregnancy?
- 7) What perceived stressors are experienced during pregnancy?
- 8) What role do social networks play in stress reduction and do they contribute to a positive mental wellbeing?

Interviews will be coded and analyzed for recurring themes/concepts upon completion of the interview process.

I will meet with the dissertation committee to exchange opinions on the interview guide after I have conducted the first interview, and to discuss the criteria to be followed for the analysis.

TABLE 1:

This part of the interview is to ease the participant into the interview process. The focus should be on why participation in the study is important to the participant.

QUESTIONS	PROBE FOR	RATIONALE	Aim/Theory
Why did you choose to participate in this study?	Main reasons (i.e. to tell their story, help other women, closure?)	Understanding the key reasons why participating in the study is important to them	
What can you tell me about your mother's own birth experience?	Intergenerational birth experiences (i.e. what do you know of your own birth, historical trauma/birth trauma, number of pregnancies/losses, mother's/grandmother's experiences transmitted into own perceptions and attitudes)	Understanding any intergenerational stress or trauma that may add to chronic stress.	Aim #4/ BFT & LCA

TABLE 2:

This part of the interview will focus on the previous perinatal loss.

QUESTIONS	PROBE FOR	RATIONALE	Aim/Theory
Tell me about the pregnancy of your son/daughter that you lost.	Name/sex of baby, weeks of gestation, expected vs. unexpected loss, complications during pregnancy	Understanding the pregnancy and loss experience as well as to allow the woman to tell the story of her child.	LCA
What type of prenatal care did you received during this pregnancy?	Early vs. late, appropriate screenings, relationship with providers, etc.	Understanding to the access of care and the perceived patient/provider relationship of African American women	Aim #1, #4/ BFT & LCA
What was the follow-up care received after your loss?	Telephone contact, postpartum visit prior to six weeks after delivery, etc.	Perceptions of the woman regarding her follow-up care after her loss experience	Aim #4/ BFT

What has affected your loss experience?	Specific examples	Understanding oppression and its impact on the loss process	Aim #1, #4/ BFT & LCA
What things do you think might have contributed to your loss?	Specific examples		Aim #1, #4/ BFT & LCA
We spoke of stressor earlier. Can you tell me some of the stressors that compounded (increased or intensified) your grief process after the loss of your baby?	Environment, violence, financial distress, etc. Examples	Understanding key stressors that increased the grief process in African American women	Aim #1, #4/ BFT
What did you find helpful in coping with the loss of your baby?	Support system, faith/spirituality/support groups?	Understanding the coping strategies for African American women	Aim #4/ BFT

TABLE 3:

This part of the interview will focus on the current pregnancy and maternal-fetal relationship. The focus will be on stressors that can negatively impact the maternal-fetal relationship during subsequent pregnancies to a loss.

QUESTIONS	PROBE FOR	RATIONALE	Aim/Theory
Please tell me about your current/recent pregnancy.	Name/sex of baby, weeks of gestation, complications during pregnancy	Exploring the current/recent pregnancy and as well as to allow the woman to tell the story of her pregnancy and birth.	
What kinds of emotions did you feel when you learned you were pregnant with this baby?	Emotions, etc.	Exploring the different emotions experienced with a new pregnancy after a perinatal loss.	Aim #3/ BFT
What did you find most challenging with	Emotions, forming a relationship with fetus, support system	Understanding the key challenges that African American women	Aim #2/ BFT

<p>this current/recent pregnancy?</p>		<p>experience during subsequent pregnancies to a loss.</p>	
<p>Describe the relationship you had with your baby while you were pregnant</p>	<p>Immediate or delayed relationship, at what point in the pregnancy did it develop</p>	<p>Understand the maternal-fetal relationship process of subsequent pregnancies experienced by African American women</p>	<p>Aim #2, #3/ BFT</p>
<p>How do you think your experience with losing a child has affected your ability to form a relationship with your baby during this pregnancy?</p>	<p>Early bonding with the baby vs. unattached feeling. Apprehension, fear, anxiety, replacement for baby that died, etc.</p>	<p>Explore how a previous perinatal loss can negatively impact the maternal-fetal relationship of the present pregnancy.</p>	<p>Aim #2/ BFT</p>
<p>What are some stressors that you have experienced during this current/recent pregnancy as an African American woman?</p>	<p>Environment, violence, financial distress, etc. Specific examples</p>	<p>Understanding constructs of racism, sexism, classism, and gender inequality in African American women who are pregnant subsequent to a loss</p>	<p>Aim #2, #3/ BFT & LCA</p>
<p>What type of prenatal care did you receive during this pregnancy?</p>	<p>Specific examples, i.e. earlier ultrasound, more frequent appointments, etc.</p>	<p>Perceptions of woman regarding her care and provider experience during subsequent pregnancies to a loss.</p>	<p>Aim #4/ LCA</p>
<p>What kinds of emotions did you experienced during this current/recent pregnancy?</p>	<p>Anxiety, depression, fear, numbness, etc.</p>	<p>Understanding the different types and impact of emotions that African American women experience during subsequent pregnancies to a loss.</p>	<p>Aim #3/ BFT & LCA</p>
<p>What would you like to share with other mothers to help empower them as</p>	<p>Advice, encouragement, etc.</p>	<p>Encouraging the woman to feel empowered and</p>	<p>BFT</p>

they experience a pregnancy after the loss of their child?		ending the interview with a positive feeling.	
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TABLE 4:

This part of the interview will focus on the everyday life stressors of African American women. The focus should be on chronic stress of being an African American woman.

QUESTIONS	PROBE FOR	RATIONALE	Aim/Theory
What are some of the stressors that you experience in your day-to-day life as an African American woman?	Specific stressors (i.e. racism, sexism, classism, gender inequality, health disparities)	Exploring specific constructs that add to chronic stress of African American women	Aim #4/ BFT
In what ways have these stressors affected your current pregnancy?	Psychological impact, biological impact, pregnancy complications, etc.	Exploring the effects stressors experienced by African American women can have on pregnancy and pregnancy outcomes	Aim #4/ BFT
What type of support system do you have in which you can express your feelings regarding these stressors?	Specific examples of individuals or groups. Kind of support.	Understanding the role of a support system plays in the lives of African American women.	Aim #1/ BFT & LCA

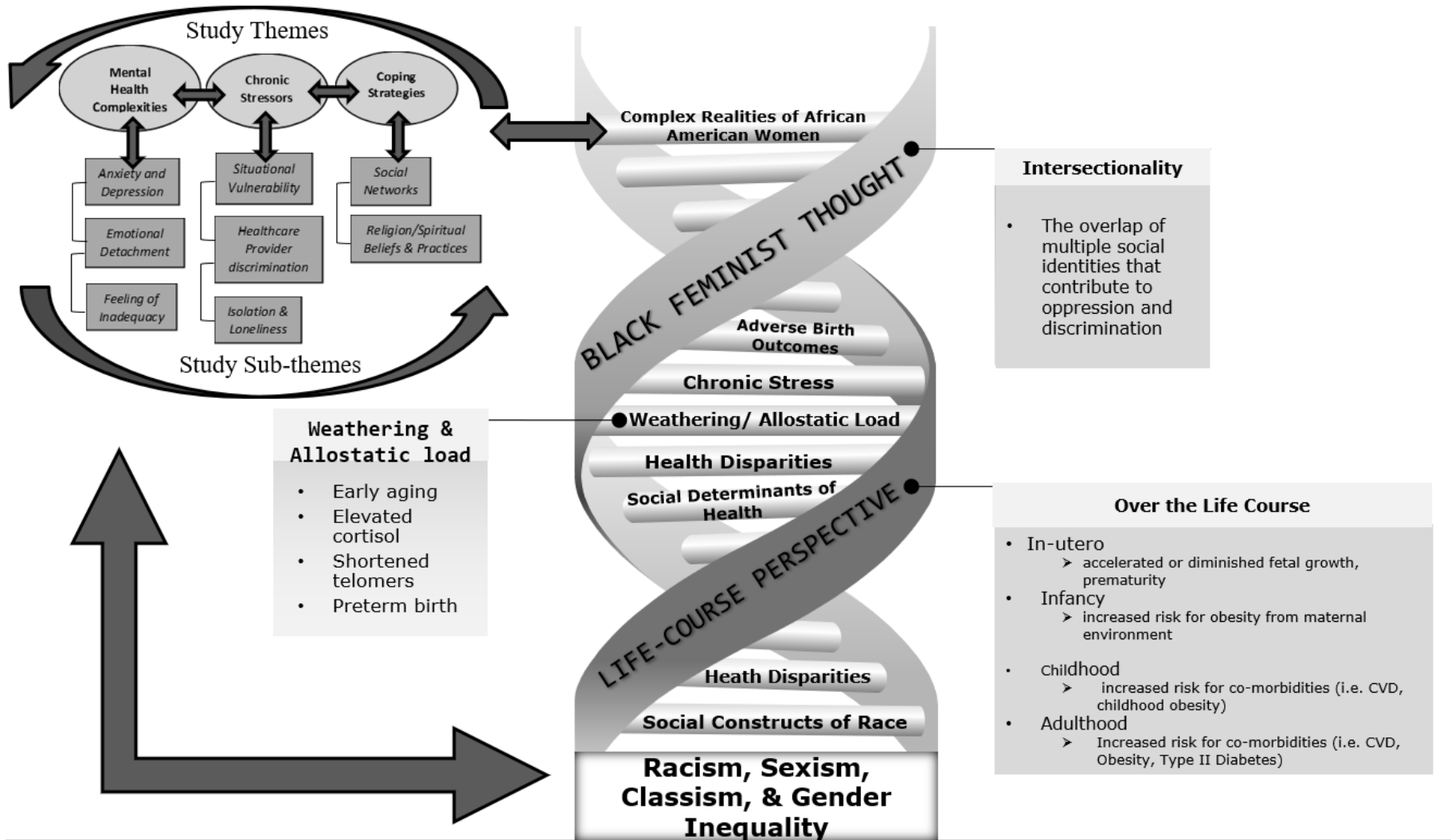
At the beginning of the interview, the after template will be completed:

Socio-demographic characteristics

Age	
Marital Status	
Insurance	
Zip Code	
Neighborhood violence/crime	
Gravida/Para (tell about each pregnancy)	
Number of perinatal losses	
Gestational age at the time of loss/losses	
Education Level (last grade completed)	

Relationship status (in couple/married, single, etc.)	
Housing (rent or own)	
Co-habitation (living in couples, with friends, with parents/family, homeless, etc.)	
Occupation (working or quit)	
Income level	
Grandparents (Where were they from, were they married, # of children, # losses) (LCA)	
Parents (mother & father live in the same house, married, # of children, # losses) (LCA)	

APPENDIX C



APPENDIX D

Overview of Participants

PARTICIPANT NUMBER	AGE	MARITAL STATUS	EDUCATION/ EMPLOYMENT/ ANNUAL INCOME	TYPE OF MEDICAL INSURANCE	ABUSIVE RELATIONSHIP/ HOUSING STABILITY/ NEIGHBORHOOD SAFETY & RESOURCES	KNOWLEDGE OF MOTHER/GRAND-MOTHERS BIRTH NARRATIVE	EXPERIENCE WITH HEALTHCARE PROVIDER	PERINATAL LOSS EXPERIENCE/ # OF LOSSES/ SUBSEQUENT PREGNANCIES	COPING STRATEGIES/WELL-BEING
Participant 1	33	Single	Some College/ Employed/ \$60,000- \$70,000	Commercial	Rents home. Reported living in a safe neighborhood with access to quality resources, healthcare, and nutritional foods. No history of IPV.	Participant does not know the birth narrative of her mother or maternal grandmother.	Participant reported changing healthcare providers 3 times during 2 nd pregnancy loss. She felt her concerns were not addressed. She also reported feeling pressured into holding her 19-week fetus after birth. She felt traumatized by seeing and holding fetus.	Participant 2 perinatal losses at 6- and 19-week gestation. She reported depression, anxiety, and stress after loss and into her subsequent pregnancy. After loss, the only thing she could think about was the need to become pregnant again. She reported she was able to develop a positive relationship with her fetus	Patient reported a support system of family and friends but chose not to reach out to them. Her father is a pastor and she used religious practices for comfort.

								early on in her pregnancy.	
Participant 2	35	Engaged	College Graduate/ Unemployed/ >\$80,000	Medicaid or Subsidiary	Owens home. Reported living in a safe neighborhood with access to quality resources, healthcare, and nutritional foods. No history of IPV.	Participant does not know the birth narrative of her mother or maternal grandmother.	Participant reported initial healthcare provider was insensitive to her concerns with her female twin. She was told to focus her attention on the male twin, who was healthy. Changed providers to one who was thorough and listened to concerns. Due to job loss and insurance change to Medicaid changed providers again. Reported did not feel safe with new provider and had to advocate for herself and her pregnancy. Reported after she had given birth, a provider in the	Participant reported preterm birth and newborn death of her twin daughter at 30 weeks. Neonate died 2 days after birth. Her twin son was healthy. She found it hard to establish a positive relationship with 6-month-old son as he is a constant reminder of her daughter. Reported not bonding with current pregnancy as fetus is female and she is worried that she will experience another loss. She reported feeling anxiety, worry, and depression	Participant reported using faith as the cornerstone for support during pregnancy and after loss. Reported being from a religious family and father is a minister. She reported not being close to her family and did not have any one to talk to after her loss.

							NICU was insensitive as he continuously interrupted her and her fiancé as they were taking daughter off of life support and saying goodbye. She did attend her 6-week follow-up appointment.	after her loss and subsequent pregnancy.	
Participant 3	21	Single	Some High School/ Unemployed/ <\$20,000	Medicaid or Subsidiary	Rents apartment. Homeless during second loss. Lives in violent neighborhood that lacks quality resources, access to healthcare, and nutritional foods. No history of IPV.	Participant has limited knowledge about her mother's birth narrative. She reported that her mother had multiple miscarriages and elective termination. Her mother was a drug-addict and alcoholic, who lost custody of her when she was eight years old and passed away of a drug overdose when she was eleven. She was raised by her paternal grandmother. Her maternal	Participant felt neutral about the care she received at the corner clinic. She reported that her healthcare provider did not ask about her previous losses or her experience surrounding them. She did not receive any contact from her healthcare provider after her 20-week loss. She did not attend a 6-week follow-up appointment.	Participant reported experiencing 4 perinatal loss, 3 at 6-week, and 1 at 20-week gestation. She reported becoming pregnancy with a subsequent pregnancy two years after her 20-week loss. She reported being excited about the pregnancy but admits she was very worried and anxious	Participant reported limited support system with her 20-week loss, leaving her very depressed. She was admitted for psychiatric inpatient care.

						grandmother is deceased, and she does not have any knowledge of her birth narrative. The participant did share her paternal grandmother's birth narrative. She had 4 live births and 2 newborn deaths, which was a set of twins.		through most of her pregnancy. She reported she was able to develop a positive relationship with her fetus early on in her pregnancy.	
Participant 4	24	Married	High School Graduate/ Unemployed/ <20,0000	Medicaid or Subsidiary	Rents apartment. Lives in violent neighborhood that lacks quality resources, access to healthcare, and nutritional foods. No history of IPV.	Participant does not know the birth narrative of her mother or maternal grandmother.	Participant reported having a good experience with her healthcare provider, saying she had a "great doctor."	Participant reported experiencing a perinatal loss 20-week gestation and the loss of a 4-month-old infant. She reported feeling excited during her subsequent pregnancy and was able to develop a positive relationship with her fetus early on in her pregnancy.	Participant reported limited support system consisting of her mother and husband. She reported joining an online support group. She reported feeling overwhelmed at times after her loss as she had to care for her ailing husband who has been in and out of the hospital, which has

									increased her stress.
Participant 5	46	Divorced	Some College/ Employed/ \$20,000- \$30,000	Medicaid or Subsidiary	Owns home. Lives in childhood home. Reported safe neighborhood. History of IPV with escalation during pregnancy and after perinatal loss. Has access to quality resources, healthcare, and nutritional foods.	Participant reported limited knowledge about her mother's birth narrative. Her mother had a precipitous birth in the hallway of a hospital in Washington D.C. Her parents were young and not prepared to care for a child, so when she was 6-months old she went to live with her grandmother, who raised her. The participant reported limited knowledge of her grandmother's birth narrative. She had 4 live births, with one resulting in a newborn loss.	Participant reported seeing the same healthcare provider as she did with her first born. She reported that her provider did not listen to her concerns and made light of her signs and symptoms. Participant reported she sat in the waiting room of her healthcare provider's office for several hours with decreased fetal movement before being diagnosed with an intrauterine fetal death. She reported forced administration of an epidural during her labor after telling the anesthesiologist to stop. The participant	Participant reported experiencing a perinatal loss at 39-week gestation. She reported feeling traumatized and depressed. During her subsequent pregnancy, she reported feeling anxious and worried as she feared another loss. She reported a delay in the early establishment of a relationship with her fetus.	Participant reported having a small social network consisting of family and friends. She reported relying on perinatal loss support groups, professional counseling, speaking at various local and national conferences, and participating in research studies as forms of therapy.

							reported that the nursing staff failed to take her fetus to the morgue and misplaced it, taking more than 10 hours to locate. Due to the lack of preservation and discoloration, she was unable to share viewing her baby with others. Her healthcare provider did not reach out to her after her loss and she changed providers for her 6-week after appointment.		
Participant 6	35	In a Relationship	College Graduate/ Employed/ <\$20,000	Medicaid or Subsidiary	Rents apartment. Homeless during third loss. Lives in violent neighborhood that lacks access to quality resources, healthcare, and nutritional foods. No history of IPV.	Participant reported that her mother has shared her birth narrative with her. Her mother gave birth to her sister at the age of 15. Her mother and father had been married	Participant reported negative experiences with her previous healthcare providers. She reported changing	Participant reported experiencing 3 perinatal losses at 22-, 12-, and 13-week gestation. She reported feeling	Participant reported having a supportive social network comprised of close family and friends. She reported leaning on her

					<p>several years before she was born. The participant was born in Alaska in negative 30-degree weather. Her mother had a precipitous labor and birth, which required a call for an ambulance. She reported that her mother always spoke lovingly about her pregnancies. Her mother did not have any losses. The participant has no knowledge of her maternal grandmother's birth narrative, other than she gave birth to 10 children with her mother being the youngest.</p>	<p>providers with her first and second loss. She reported that her symptoms were not taken seriously and at times she felt her care was mismanaged. She reported that her prior healthcare providers did not reach out to her after her losses. She reported that she attended a follow-up appointment from her first loss but not her second. She changed healthcare providers for third pregnancy to one in her community where her provider and most of the women cared for were African</p>	<p>worried, stressed and anxious during subsequent pregnancies. She reported feeling deep depression and failure after her losses. She reported a delay in the early establishment of a relationship with her fetus in all of her pregnancies after her 22-week loss.</p>	<p>partner, mother, and best friend after her losses. She reported reaching out to a therapist to help her through her grieving. She also reported seeking support through online support groups.</p>
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							American. She reported her third pregnancy ended in loss, but her care was "amazing." She reported remaining with this provider during her current subsequent pregnancy.		
Participant 7	33	Divorced	College Graduate/ Employed/ \$40,000- \$50,000	Commercial	Rents home. Reported living in a safe neighborhood. No history of IPV. Reported access to and quality of healthcare and resources.	Participant reported she is a second-generation Haitian. She reported knowing very little about her mother's birth narrative. She did report that her mother had a very difficult pregnancy with her and was always "sick." Her mother also told her that she needed to be resuscitated after birth. The participant reported that her grandmother had 4 live births and 1 newborn loss, which was her	Participant reported that her healthcare provider did not take her concerns seriously. She reported that after her loss she called the hospital with questions about increased vaginal bleeding and was refused answers by the doctor on-call and told to call back later. She reported that her provider did not reach out to her after her loss. She did	Participant reported experiencing a loss at 26-week gestation. She reported feeling increased stress and anxiety during her loss pregnancy. After her loss, she experienced a period of depression and isolation. She reported feeling anxiety and hypervigilance during her	Participant reported isolating herself after her loss. She reported that her culture does not talk about loss. She reported that she eventually joined an online support group.

						grandmothers first child.	not attend a follow-up appointment. Participant reported changing healthcare providers with her subsequent pregnancy.	subsequent pregnancy.	
Participant 8	25	Married	High School Graduate/ Employed/ \$20,000- \$30,000	Commercial	Rents apartment. Reported living in a safe neighborhood. No history of IPV. Reported access to and quality of healthcare and resources.	Participant reported having limited knowledge of her mother's birth narrative. She reported that her mother did not have any losses but did experience complications, which resulted in a cesarean section. Her mother gave birth to three live children. The participant has no knowledge of her maternal grandmother's birth narrative.	Participant reported that her healthcare provider ignored her concerns during her loss pregnancy. She reported during the labor of her 21-week loss, her pain was undertreated. She reported feeling this was due to her being an African American woman and the stereotypes associated with African Americans and pain. She reported that her healthcare provider did	Participant reported experiencing 3 perinatal losses at 7- and twins at 21-week gestation. Participant reported feeling depression and sadness after her loss. She reported experiencing anxiety, stress, and worry during her subsequent pregnancy. She reported a delay in the early establishment of a relationship with her fetus.	Participant reported having the support of family and friends after her loss. In addition, she reported joining online perinatal loss support groups.

							not reach out to her after her loss nor did she attend any follow-up appointment. She reported changing providers at the start of her subsequent pregnancy.		
Participant 9	35	Divorced	Some College/ Unemployed/ <\$20,000	Medicaid or Subsidiary	Rents home. Lives in violent neighborhood, history of IPV with escalation during pregnancy and at the time of 17-week loss. Reported lack of access to quality resources, healthcare, and nutritional foods.	Participant reported that she was her mother's first child and there were a lot of complication with her including the cord being wrapped around her neck and multiple bruises over her body. Her mother was told that she would not make it through the night. She reported that her had four children, her mother had a history of loss as the participant was a twin pregnancy. Her twin sister died at birth. The participant has limited knowledge	Participant reported not being satisfied with the relationship she has with her healthcare provider at the time of her loss. She reported feeling her provider did not listen to her and would not return her calls. She reported her healthcare provider did not reach out to her after her 17-week loss. She did not attend a follow-up appointment. The participant	Participant reported experiencing 2 perinatal losses at 17- and 11-week gestation. Her 17-week fetus was delivered at an urgent care because she lived more than 30 minutes from a hospital. She reported experiencing episodes of bleeding which increased her anxiety and stress. She reported experiencing symptoms of	Participant reported her support system consisting of her half-brother who lives out-of-state. She reported she joined a Facebook support group after her loss.

						of her maternal grandmother's birth narrative. She reported that she lost 3 boys but does not know the circumstances or the gestational ages of each pregnancy.	reported change providers with subsequent pregnancy. She reported she became pregnant after the live birth of her son, which resulted in an 11-week loss. She reported her provider did reach out to her to check on her well-being within days after her loss.	anxiety and depression after her loss, which were exacerbated by IPV and caring for two autistic children. She reported a delay in the early establishment of a positive relationship with her fetus during her last successful subsequent pregnancy.	
Participant 10	46	Single	Some College/ Employed/ \$20,000- \$30,000	Medicaid or Subsidiary	Rents apartment. Reported living in a safe neighborhood. No history of IPV. Reported access to and quality of healthcare and resources.	Participant has little knowledge of her mother's birth narrative. Her mother and father had 3 live births. The participant has no knowledge of her maternal grandmother's birth narratives.	Participant reported that her providers were very "cold" to her. She reported having to be her own advocate and the voice for herself and her baby. She reported her healthcare provider did not reach out to her after her loss. She	Participant reported experiencing 3 perinatal losses between 6- and 10-week gestation and 1 full-term newborn loss due to Trisomy 18 at 24 days of life. She reported increased stress and anxiety throughout	Participant reported that her church and pastor were her primary support.

							reported that the social worker in the NICU checked on her numerous times. She reported she did attend her 6-week follow-up appointment. The participant reported changing healthcare providers at the start of her subsequent pregnancy.	her pregnancy. She reported feeling sad and depressed after the death of her daughter. She reported feeling anxious and “scared” during her subsequent pregnancy. She reported a delay in the early establishment of a relationship with her fetus.	
Participant 11	32	Single	Some College/ Unemployed/ <\$20,000	Medicaid or Subsidiary	Rents apartment. Lives in violent neighborhood. Reported lack of access to quality resources, healthcare, and nutritional foods. History of IPV during pregnancy.	Participant reported having limited knowledge of her mother’s birth narrative. She does know that her mother experienced a precipitous labor and birth. She was also told that she acquired a blood infection due to the unsterile delivery instruments and was kept in the hospital for several	Participant reported that her care was mismanaged, and her healthcare provider overlooked her concerns. She reported feeling “avoided” by her provider, especially when trying to obtain autopsy result of her daughter. She	Participant reported experiencing a perinatal loss at 32- and 9-week gestation. She reported feelings of depression after her loss and feelings of anxiety, stress, and being overly cautious during	Patient reported experiencing PTSD, depression, and suicidal thoughts. She found comfort in support groups and seeing a psychologist.

						months. She did not know if her mother had any losses but did report her have many elective terminations. The participant has no knowledge of her maternal grandmother's birth narrative.	reported her healthcare provider would not return her calls regarding the autopsy results. No follow-up calls from healthcare provider after loss. Participant did attend her 6-week follow-up appointment. She reported changing healthcare providers during her subsequent pregnancy.	subsequent pregnancy.	
Participant 12	18	Single	Some College/ Student/ <\$20,000	Medicaid or Subsidiary	Rents apartment. Homeless, at the age of 17, during pregnancy. Filed for emancipation so she could obtain housing on her own. Reported living in a safe neighborhood with access to quality resources, healthcare, and nutritional foods.	Participant has limited knowledge surrounding her mother's pregnancy and birth of her. She did report that her mother had an unmedicated birth with each pregnancy. She also reported that her mother mentioned having blood pressure issues when she	Participant reported that her healthcare provider did not listen to her concerns. She reported that her provider would has her questions but would not listen to her answers. She reported her provider did not reach out	Participant reported experiencing a perinatal loss at 14-week gestation. She reported feelings of sadness, depression, and loneliness. She reported that during her subsequent pregnancy she	Participant reported no support after her perinatal loss. She reported that due to no support she experienced an increase in her depressive symptoms.

						was pregnant with her younger sister. The participant has no knowledge of her maternal grandmother's birth narrative.	to her after her loss. She did attend her follow-up appointment. The participant did not change providers with subsequent pregnancy due to her health insurance coverage.	experienced increased stress and anxiety. She reported not being able to bond with her fetus during the first trimester.	
Participant 13	48	Married	College Graduate/ Employed/ >\$80,000	Commercial	Owns home. Reported living in a safe neighborhood. No history of IPV. Reported access to and quality of healthcare and resources.	Participant's mother and grandmother are deceased. She has limited knowledge of her mother's birth narrative. Her mother had 4 live births and 1 loss, which the family does not talk about. The participant has limited knowledge of her maternal grandmother's birth narrative. She was only able to share that her grandmother had 3 full-term live births.	Participant reported seeing the same healthcare provider she had with past pregnancies. She reported feeling neutral about her relationship. Participant did not receive a follow-up call after either loss. She did receive a call from the Operating Room team after her D&C and D&E. She did not attend a 6-week follow-up	Participant reported experiencing a perinatal loss at 8- and 24-week gestation. She reported feeling frustrated, scared, stressed, and angry. Tried not to bond with the 2 nd fetus. Felt ashamed that she did not want the baby. When she found out that the baby was not going live, she felt guilty	Participant reported having support of family and friends but did not reach out to them as she wanted to keep her losses private. She reported her husband sought comfort through perinatal loss support groups but she did not.

							appointment with her healthcare provider.	for not bonding.	
Participant 14	42	Married	Some College/ Employed/ >\$80,000	Commercial	Rents apartment. Reported living in a safe neighborhood. No history of IPV. Reported access to quality resources, healthcare, and nutritional foods.	Participant does not know the birth narrative of her mother or maternal grandmother.	Participant reported feeling that her healthcare provider did not establish an authentic relationship with her and was going through the motions at each prenatal visit. She reported that her provider overlooked her concerns. She reported that her healthcare provider did not reach out to check on her after her loss. She reported that she did not attend her 6-week follow-up appointment because she needed help days after being discharged home from the	Participant experienced a perinatal loss at 8- and 14-week gestation. She delivered her 14-week fetus at home. She reported feeling empty inside. She reported delayed bonding with her subsequent fetus, fearing another loss.	Participant reported that she did not have any family or friends that she could rely on for support. Sought out support groups. She reported being very religious and reached out to her pastor. No one acknowledged her loss. She reported feeling depressed and being diagnosed with PTSD.

							hospital, not 6-weeks later. She states she changed healthcare providers at the time of her subsequent pregnancy.		
Participant 15	31	Married	College Graduate/ Employed/ \$40,000- \$50,000	Commercial	Owns home. Reported living in a safe neighborhood. No history of IPV. Reported access to quality resources, healthcare, and nutritional foods.	Participant reported that her mother has shared her entire pregnancy and birth experience with her. She did not experience any complications. The pregnancy was planned and went to term. She reported that her mother experienced 4 losses after her birth. The participant has no knowledge of her maternal grandmother's birth narrative.	Participant reported having a positive relationship with her healthcare provider during her pregnancy. She reported after her loss, she felt that her provider was insensitive and treated her loss like a "typical" miscarriage. She reported she did not receive a call from provider after loss nor did not attend 6-week follow-up appointment.	Participant reported experiencing a perinatal loss at 16-week gestation. She reported being under a lot of stress as she was separated from her husband and was pregnant by another man. She reported feeling she had "killed" her baby due to the stress she was under, which led to feelings of extreme guilt. She reported feeling anxious and worried during	Participant reported she did not have a support system due to the circumstances of her pregnancy and the shame that she felt after the loss.

								subsequent pregnancy. She reported being able to develop a positive relationship with her fetus early on in her pregnancy.	
Participant 16	30	Married	College Graduate/ Employed/ >\$80,000	Commercial	Owns home. Reported living in a safe neighborhood. No history of IPV. Reported access to quality resources, healthcare, and nutritional foods.	Participant reported that her mother and father married young and was only 20 years old when she was born. She reported that her mother's pregnancy was uncomplicated, however, she was a breech resulting in an emergency cesarean birth. She reported the only newborn complication was mild jaundice. The participant has little knowledge of her maternal grandmother's birth narrative. She reported her grandmother had 2 live births. She is unsure if she	Participant reported having a positive relationship with her healthcare provider. Her infertility provider contacted her to check on her well-being after her loss. She attended her 6-week checkup.	Participant reported experiencing a 14-week loss after years of trying to conceive and fertility treatments. She reported feeling "alone," "isolated," "responsible," and, "traumatized." She reported feeling stressed, anxious and depressed after her loss and into her subsequent pregnancy. She reported she was not able to	Participant reported having a strong support system, which includes family and friends. Her husband was her main support. She also reported that her spirituality gave her strength and helped to comfort her.

						experienced any losses.		develop a positive relationship with her subsequent fetus right away.	
Participant 17	35	Married	College Graduate/ Employed/ >\$80,000	Commercial	Owns home. Reported living in a safe neighborhood. No history of IPV. Reported access to quality resources, healthcare, and nutritional foods.	Participant reported little knowledge regarding her mother's birth narrative. She reported that she is an only child. Her mother experienced a precipitous labor and birth with her, and she was born prematurely, but she is not sure how prematurely. She reported that her mother had other pregnancies, which she terminated. The participant has limited knowledge of her maternal grandmother's birth narrative. She reported that her grandmother had 3 live births and 1 loss.	Participant reported having a negative experience with her healthcare provider during her second pregnancy and after her loss. She felt her provider overlooked her symptoms of preterm labor. She asked to be seen by a different provider.	Participant reported experiencing a perinatal loss at 21-week gestation and a preterm birth at 24 weeks with an infant death 4 months later. Reported feelings of guilt during both pregnancies. Became more assertive in second pregnancy. Felt happy, excited, scared, and nervous that she was going to lose her second fetus. She reported feeling that she had bonded more	Reported having a strong support system. Attended grief counseling.

								with her second fetus than her first. She reported hesitancy of becoming pregnant for the third time as she does not want to experience another loss.	
Participant 18	27	In a Relationship	College Graduate/ Employed/ \$30,000- \$40,000	Medicaid or Subsidiary	Owns home. Reported living in a safe neighborhood. No history of IPV. Reported access to quality resources, healthcare, and nutritional foods.	Participant reported that her mother had a very complicated pregnancy and birth. She was diagnosed with preeclampsia and was monitored weekly. She also reported that her mother experienced one miscarriage. The participant has limited knowledge of her maternal grandmother's birth narrative. She reported that she had 5 live births and 1 loss.	Participant reported feeling as if her healthcare provider did not listen to her complaints and concerns during her loss pregnancy. She reported feeling pushback regarding her plan of care/birth plan. Her provider did not reach out to her after her loss and she did not attend her 6-week follow-up visit. She changed healthcare providers with	Participant reported experiencing a perinatal loss at 25-week gestation. Reported feeling all alone and to blame for her loss. She reported having anxiety and high levels of stress during her pregnancy. Participant reported feeling shocked when she found out she was pregnant after her loss. She reported	No support system. College student living out-of-state from family and friends. Pre-existing mental health issues including PTSD from childhood trauma, anxiety, and depression. Sought counseling 2-3 months after her perinatal loss.

							her subsequent pregnancy and sought midwifery care.	feeling detached and did not bond with subsequent fetus until infant was around a year of age.	
Participant 19	40	Married	College Graduate/ Employed/ >\$80,000	Commercial	Owns home. Reported living in a safe neighborhood. No history of IPV. Reported access to quality resources, healthcare, and nutritional foods.	Participant reported that her mother shared her birth narrative with her. She was the first child for her parents and as born 2 years after they married and was a planned pregnancy. She was told that her mother had an easy pregnancy and only experienced back labor. She had three living children and one loss. The participant learned of this loss from her father, although her mother has never spoke of it. The participant has no knowledge of her maternal	Participant reported not feeling comfortable with her healthcare provider. She reported that he asked questions that would not have typically been asked to Caucasian patients. She reported his bedside manner was "terrible" and "very cold." After her 18-week loss, she went for her 6-week follow-up where the clinic nurse tried to auscultate fetal heart tones. She reported	Participant reported experiencing 8 perinatal losses at 6- (x2), 8-, 10-, 11-, 13-, 16-, and 18-week gestation. She reported being too terrified to enjoy her subsequent pregnancies. She reported having 2 live births after 7 losses and one loss after her last live birth. With each pregnancy she received progesterone injections. She reported not being able to establish an early	Participant reported having a very supportive partner. Despite her support system, she reported that she felt alone. She also reported experiencing postpartum depression and sought help through counseling and support groups.

						grandmother's birth narrative as she passed away when her mother was 7 years old.	being devastated that the staff did not take time to review her chart. Participant changed healthcare providers for her subsequent pregnancy and reported that her "maternal fetal medicine doctor was the best she could ever ask for."	maternal-fetal relationship with her subsequent pregnancies, which lasted until after birth. She reported being "afraid to enjoy the moment."	
Participant 20	56	Divorced	High School Graduate/ Employed/ \$20,000- \$30,000	Medicaid or Subsidiary	Rents apartment. Reported living in a safe neighborhood. History of IPV before, during, and after newborn loss. Reported access to quality resources, healthcare, and nutritional foods.	Participant is an African immigrant. Although she does not know the specifics of her own birth, she did report that her mother had lost 3 pregnancies and had given birth to 6 living children. The participant has limited knowledge of her maternal grandmother's birth narrative. She reported that she had 2 live children and several losses.	Participant reported that she was treated poorly by her healthcare provider after her newborn loss. She reported giving birth in Africa where midwives were very "rough" with her when performing cesarean section dressing changes and insensitive to	Participant reported experiencing a newborn loss at 3 days of age due to neonatal sepsis. She reported a successful subsequent pregnancy which she was able to bond immediately with her fetus. She reported having periods of stress during her	Participant reported having no support system as it was something that wasn't talked about in the African culture.

							her feelings once her newborn son passed away. She did not have a follow-up visit after her loss.	pregnancy which resulted in loss.	
Participant 21	38	Married	High School Graduate/ Employed/ >\$80,000	Commercial	Owns home. Reported living in a safe neighborhood. History of IPV with first perinatal loss. Reported emotional abuse during first pregnancy from parents. Reported access to quality resources, healthcare, and nutritional foods.	Participant reported that her mother had three living children and one perinatal loss. She has limited knowledge regarding her birth, but she does report that she was born two months premature and had several life-threatening complications. The participant has no knowledge of her maternal grandmother's birth narrative.	Participant reported that she does not remember her experience with her healthcare provider during and after her first loss. She reported due to the traumatic event, it was difficult for her to recall much of the pregnancy. She reported a neutral experience with her provider after her second loss. She reported only seeing her provider once before she experienced her loss. She reported her provider did	Participant reported experiencing a perinatal loss at 24-, 11-, and 5-week gestation. She reported feeling numb after her first loss when she was 16 years old. She reported this loss caused her trauma. She reported feeling anxiety and stress during her subsequent pregnancies. She reported that after her second loss, she had feelings of guilt and loneliness. She reported	Participant reported that she did not have any support after her 24-week loss. She reported needing extensive therapy later in life to deal with the trauma. She reported that after her second loss she was in an abusive relationship and she did not have a support system. She reported after her third loss she had the support of her husband. She reported

							<p>not reach out to her nor did she attend a follow-up appointment. She reported a negative experience with her healthcare provider after her third loss. She reported that she learned of her loss when the clinic receptionist call to cancel her future appointment since her labs revealed a miscarriage. She reported call her provider and leaving several messages, but her provider never called back. She reported not attending a follow-up appointment after her loss. She reported that she</p>	<p>during her third pregnancy she was worried and anxious. She reported after that loss she felt very depressed, "devastated," and "like a failure." She reported a delay in the early establishment of a positive relationship with her fetus during each subsequent pregnancy. She reported not bonding with her fetus at all during her first pregnancy.</p>	<p>seeking therapy to help manage her emotions. She reported she started a non-profit 501c3 organization for women experiencing loss which has been a form of therapy for her.</p>
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							changed healthcare providers and felt connected with current provider.		
Participant 22	32	Single	High School Graduate/ Employed/ \$20,000- \$30,000	Medicaid or Subsidiary	Rents home. Reported living in an unsafe neighborhood. Reported history of IPV during pregnancy and at the time of perinatal loss. Reported lack of access to quality resources, healthcare, and nutritional foods.	Patient reported no knowledge of mother or maternal grandmother's birth narrative.	Participant reported that her healthcare provider did not take her concerns seriously. Felt her care was mismanaged with late diagnosis of incompetent cervix, despite She reported that her healthcare provider did not reach out to her after her loss nor did she attend her follow-up appointment. She reported changing healthcare providers at the time of her subsequent pregnancy.	Participant reported experiencing a perinatal loss at 16-week gestation. She reported having feelings of anxiety and depression during her subsequent pregnancy. She reported that she felt detached from her fetus during the early part of pregnancy as she feared another loss.	Participant reported having a support system of family and friend. She reported finding comfort in religious beliefs and practices.

APPENDIX E

Statement of Reflexivity

Reflexivity statements are researchers attempts to be as open as possible about the sources of their thinking as they conduct their research studies. I have cared for many women who have experienced a perinatal loss, both African American and white, throughout my career as a nurse. I have had the opportunity to see women in their most vulnerable state. Although, I have provided nursing care for them, I have never conducted research on this topic. In this statement, I will reflect upon my perspectives as a nurse, as a white woman, and as a mother.

I have been a nurse for 21 years, working specifically in the field of obstetrics. I have spent my bedside career employed at high acuity institutions, caring for high-risk patients. Working in such an institution, caring for loss patients a somewhat frequent assignment. I have seen mothers and fathers, of all races, experience the heart retching loss of a child. As the nurse caring for them throughout the course of labor and then delivery, I too, felt a sense of loss and grief. These are the patients that have etched themselves in my memory and they will journey with me for years to come. Although, I do not remember all of their names, I do remember all of the pain, anger, and disbelief that they expressed. I remember the babies that I've held as they took their last breath, the ones I've dressed, and the ones I've photographed.

I spent the first eight years of my life living in the inner city of Detroit. As a little white girl in the big city, live was hard. I lived with my mother and grandmother in a predominately African American neighborhood. Although, I knew several neighbors on our block, there were not any children my age to befriend. I attended a private school which was exclusively white, so my interaction with African American children was even more limited. When I was eight years

old, we moved to the suburbs, where again my interaction with African Americans was limited. As an adult, I have had the ability to work with African American women both as a nurse and as an educator. Even though I have a diverse network of friends and colleagues, I acknowledge that I will be an outsider to a group of African American women when I begin my research.

Finally, I am a divorced mother of five children. My children were all born healthy and my pregnancies were uncomplicated. Unlike the participants that will be in my study, I have never had a perinatal or infant loss. I have never known the kind of immense pain and sorrow that a parent felt when they lose a child, and to that I am very grateful.

This research is very significant to me as well as to the women it will represent. This study is a way for each one of their stories to be told and for each child to be remembered. It is a way for me to give back to those patients who have touched me in such a profound way.

Jeri M. Antilla, MSN-Ed., RNC-OB

EDUCATION

University of Wisconsin-Milwaukee *May 2015- August 2020*
Ph.D. in Nursing
Ph.D. Candidate (ABD)
Overall GPA: 3.7

Dissertation Focus: *Through the lens of Black feminist thought, alongside a life-course perspective, exploring the perceptions of African American women who have experienced a perinatal loss, and its association on maternal-fetal relationships in subsequent pregnancies.*

Walden University *June 2014*
Master of Science in Nursing- Education
Overall GPA: 4.0

Schoolcraft College *May 1999*
Associates in Applied Science- Nursing
Overall GPA: 3.8

ACADEMIC AND CLINICAL APPOINTMENTS

Lansing Community College *Jan. 2020- Present*
Assistant Professor *Lansing, MI*

I am the lead faculty and Faculty of Record for *Care of the Childbearing Family* nursing course. I am responsible for directing, managing, and evaluating student learning for second level nursing students in the ADN program while they are in their obstetrical rotation. I assist students in integrating theory and practice, specific to OB learning activities and level of the learner. I am also responsible for evaluating student development of clinical reasoning and leadership skills and guiding students in learning activities with the maternal-newborn population. I also oversee all OB labs and simulations. All OB adjunct clinical faculty provide timely and ongoing feedback to me regarding individual student and group performance in accomplishments of the course outcomes.

University of Michigan
LEO Lecturer

Jan. 2020- Present
Ann Arbor, MI

Although, I had a title change, my responsibilities remained the same. I am responsible for directing, managing, and evaluating student learning for both junior and senior students in the traditional BSN program while they are in the OB clinical setting. I assist students in integrating theory and practice, specific to OB learning activities and level of the learner. I am also responsible for evaluating student development of clinical reasoning and leadership skills and guiding students in learning activities with the maternal-newborn population. In addition, I am the Faculty of Record for the OB course *Care of the Childbearing Family*. All OB faculty provide timely and ongoing feedback to me as well as the Clinical Lead regarding individual student and group performance in accomplishments of the course outcomes.

University of Michigan
Clinical Instructor

Sept. 2018- Dec. 2019
Ann Arbor, MI

I am responsible for directing, managing, and evaluating student learning for both junior and senior students in the traditional BSN program while they are in the OB clinical setting. I assist students in integrating theory and practice, specific to OB learning activities and level of the learner. I am also responsible for evaluating student development of clinical reasoning and leadership skills and guiding students in learning activities with the maternal-newborn population. In addition, I am the Faculty of Record for the OB course *Care of the Childbearing Family*. All OB faculty provide timely and ongoing feedback to me as well as the Clinical Lead regarding individual student and group performance in accomplishments of the course outcomes.

Oakland University
Lecturer

Jan. 2017- Present
Rochester Hills, MI

I am responsible for directing, managing, and evaluating student learning in the clinical OB clinical setting for students in the traditional BSN program. I assist students in integrating theory and practice, specific to OB learning activities and level of the learner. I am also responsible for evaluating student development of clinical reasoning skills, strengthen medication knowledge, and guiding students in learning activities with clients. I provide timely and ongoing feedback to the Faculty of Record regarding individual student and group performance in accomplishments of the course outcomes.

Madonna University*Adjunct Clinical Instructor**May 2019- Present**Livonia, MI*

I am responsible for directing, managing, and evaluating student learning in the clinical Medical/Surgical clinical setting for students in the ABSN accelerated BSN program. I assist students in integrating theory and practice, specific to Medical/Surgical learning activities and level of the learner. I am also responsible for evaluating student development of clinical reasoning skills, medication knowledge and guiding students in learning activities with clients. I provide timely and ongoing feedback to the Faculty of Record regarding individual student and group performance in accomplishments of the course outcomes.

Concordia University*Adjunct Clinical Instructor**June 2019- Present**Ann Arbor, MI*

I am responsible for directing, managing, and evaluating student learning in the clinical OB clinical setting for students in the traditional BSN program. I assist students in integrating theory and practice, specific to OB learning activities and level of the learner. I am also responsible for evaluating student development of clinical reasoning skills, strengthen medication knowledge, and guiding students in learning activities with clients. I provide timely and ongoing feedback to the Faculty of Record regarding individual student and group performance in accomplishments of the course outcomes.

University of Michigan*Clinical Simulation Specialist**Oct. 2016- Aug. 2018**Ann Arbor, MI*

I was responsible for providing nursing experience and expertise in the development and operation of clinical situation simulations to nursing students in the School of Nursing (UMSN). I also participated in the development, analysis, implementation, and evaluation of healthcare simulations, skills lab, assessment lab activities and other clinical learning center activities. My duties also entailed managing the simulation data base, support of the instructors and faculty in using simulation and case-based learning, and create, review, and revise policies and guidelines for simulation. In addition, I also taught simulation and lab courses for Obstetrics and Health Assessment for undergraduate BSN students.

Baker College
Nursing Specialty Coordinator

Dec. 2014-Dec. 2016
Allen Park, MI

I was responsible for the oversight of core nursing content and the associated clinical practicum experience associated with *Fundamentals of Nursing, Legal Issues in Nursing, Medical Surgical Nursing I & II, Leadership, Maternal/Newborn* courses as well as *Simulation Lab*. I also focused on promoting achievement of student learning outcomes for these courses and work closely with adjunct clinical faculty in regard to their orientation and preparation for the clinical experience. My role also included evaluating adjunct faculty assigned to the courses, as well as recruitment and hiring of clinical faculty for the assigned specialty course. Experience with curriculum restructuring, CCNE accreditation process and self-study compilation at the ADN level.

Henry Ford Health System
Registered Nurse

July 2013- Feb.2015
West Bloomfield, MI

I performed duties as a labor and delivery nurse while working as part of the interdisciplinary team. My role included, but was not limited to, triaging low-risk patients, fetal monitoring, a strong background in high-risk perinatal population, and postpartum and newborn care. I worked proficiently as a breastfeeding advocate in a baby friendly hospital. I performed discharge teaching and newborn care classes for postpartum families. I also served as an active member of the perinatal loss/bereavement committee. I functioned as a Preceptor to new nursing staff within the labor and delivery setting, as well as a super user for the implementation of electronic medical records throughout the Henry Ford Health System. I have experience in circulating in the operating room for Cesarean sections, as well as performing nurse duties in pre-operative and post-operative care areas.

Beaumont Health System
Registered Nurse

Oct. 2006- Nov. 2012
Royal Oak, MI

I performed duties as a labor and delivery nurse, triaging low- risk and high-risk patients, fetal monitoring, strong background in high-risk antepartum, intrapartum, and postpartum clientele, postpartum and newborn care. I also displayed experience in circulating in the operating room setting for Cesarean sections, emergency hysterectomy, and D & C patients. I have experience in pre-operative and post-operative surgeries and procedures. I have performed successfully in the role of a Charge Nurse and Preceptor to new staff nurses within the labor & delivery setting. I have also served as a super user for the implementation of electronic medical records throughout the Beaumont Health System.

Associates in Gynecology and Obstetrics

Registered Nurse

May 2004- Oct. 2006

Ypsilanti, MI

I performed duties such as telephone triage for obstetrics and gynecology clientele, pregnancy education visits for patients in their 1st and 3rd trimester of pregnancy and conducted breastfeeding classes within a medical office setting. Responsible for establishing breastfeeding services within the office and holding bi-weekly breastfeeding classes for pregnant and postpartum clients. Also, I displayed experience working as an Internationally Board-Certified Lactation Consultant (IBCLC) in the office setting, as well as out in the community.

**University of Michigan Health System-
Michigan Visiting Nurses**

Jan.2002- Dec.2005

Ann Arbor, MI

Perinatal RN Specialist

I worked autonomously, providing home visits to new mothers and their newborns. During the home visit, I performed postpartum assessments, as well as head-to-toe newborn assessments. I provided education on the care of the newborn and breastfeeding support. In addition, I assisted postpartum wound care patients with dressing changes, as well as non-stress tests (NST) for homebound antepartum clientele.

University of Michigan Health System

Registered Nurse

Jan. 2001- Jan.2002

Ann Arbor, MI

I performed duties as a labor and delivery nurse including fetal monitoring, caring for high-risk and low-risk patients, postpartum and newborn care, breastfeeding assistance, and circulating in the operating room setting for Cesarean, D & E, and D & C patients. Also, I performed duties that pertain to pre-operative and post-operative surgeries and procedures.

St. Joseph Mercy Hospital- Oakland

Registered Nurse

Sept. 1999- June 2000

Pontiac, MI

I performed duties as a postpartum nurse including newborn assessment and general care of the newborn, as well as assessment, care, and education of postpartum women. In addition, I provided breastfeeding support to all breastfeeding clientele. Also, acquired experience in NICU with non-vented newborns.

TEACHING

- Care of the Childbearing Family- Didactic; Faculty Lead, Faculty of Record (Lansing Community College)
- Care of the Childbearing Family- Didactic; Faculty of Record (University of Michigan)
- Care of the Childbearing Family- Clinical Instructor (University of Michigan)
- Care of the Childbearing Family- Simulation Coordinator (University of Michigan)
- Care of the Childbearing Family - Clinical Instructor (Concordia University)
- Care of the Childbearing Family- Clinical Instructor (Oakland University)
- Care of the Childbearing Family- Didactic; Faculty of Record (Baker College)
- Care of the Childbearing Family- Clinical Instructor (Baker College)
- Leadership- Didactic; Faculty of Record (Baker College)
- Legal Issues in Nursing- Didactic; Faculty of Record (Baker College)
- Health Assessment- Course Coordinator (University of Michigan)
- Health Assessment- Lab & Simulation Instructor (University of Michigan)
- Medical/Surgical Nursing II- Didactic; Faculty of Record (Baker College)
- Medical/Surgical Nursing I- Clinical Instructor (Baker College)
- Medical/Surgical Nursing I- Clinical Instructor (Madonna University)
- Fundamentals of Nursing- Lab Instructor (Baker College)
- Fundamentals of Nursing- Clinical Instructor (Baker College)
- Nursing Synthesis- Clinical Instructor (Oakland University)
- Nursing Care of Patients with Complex Needs I & II- Clinical Instructor (University of Michigan)

COMMITTEES

- Baccalaureate Curriculum Committee (Baker College)
- Student Affairs Committee (Baker College)
- Knowledge Foundation Committee (University of Michigan)
- Emerging Scholars Network (ESN)
- Perinatal, Infant, & Reproductive Loss (PIRL) Committee (Michigan Medical)

HONOR SOCIETIES

- Sigma Theta Tau, Phi Nu Chapter *2013*
- Golden Key International Honour Society *2014*

CERTIFICATIONS AND LICENSURE

- Registered Nurse, State of Michigan License # 4704221773 *2020*
- NCC Inpatient Obstetric Nursing Certification (RNC-OB) *2020*
- International Board-Certified Lactation Consultant (IBCLC) *2010*
- Basic Life Support (BLS) *2020*
- Neonatal Resuscitation Program (NRP) *2015*

AFFILIATIONS

- American Nurses Association (ANA)

- National League for Nursing (NLN)
- Association of Women’s Health, Obstetric and Neonatal Nursing (AWHONN)
- Pregnancy Loss and Infant Death Alliance (PLIDA)
- Michigan Nurses Association (MNA)
- Midwest Nursing Research Society (MNRS)

PUBLICATIONS

- Mkandawire-Valhmu, L., Lathen, L., Baisch, M., Cotton, Q., Dressel, A., Antilla, J., Olukotun, O., Washington, R., Jordan, L., & Hess, A. (2018). Enhancing healthier birth outcomes by creating supportive spaces for pregnant African American women living in Milwaukee. *Maternal Child Health Journal*.