

ABSTRACT

BARNES, LOTTIE KENDRA. Exploring How African American Women with Hypertension Learn New Health Knowledge and the Personal, Social and Environmental Experiences that Shape Their Health Behaviors in Durham, NC: A Multi Case Study. (Under the direction of Dr. Tuere Bowles).

Research has indicated that nearly half of U.S. adults may have difficulty acting on health information. These individuals have low health literacy, defined as the capacity to obtain, process, and understand basic health information to make appropriate health decisions. The populations with the lowest levels of health literacy are minorities, persons of low socioeconomic status, and senior adults. Inadequate health literacy levels are considered one of the social determinants for the health disparity of chronic diseases in the minority population. The most prevalent chronic disease in the African American population, hypertension, when left untreated and/or uncontrolled, can lead to the number-one killer of the African American population in the United States and North Carolina, heart disease. Despite this high mortality rate, few African American women believe they are personally at risk for heart disease and are knowledgeable of the signs and symptoms of a heart attack. To increase the knowledge of the risk factors, signs and symptoms of heart disease among African American women, it is necessary to understand how these women construct knowledge that impacts their health behaviors. This study employed a qualitative case study method to explore and understand the experiences of African American woman after diagnosis with hypertension; how these women construct new health knowledge; how personal, social and environmental factors shape their health behaviors; the factors that facilitate their positive health behaviors and the factors that hinder their positive health behaviors.

The findings of the experiences of the African American women diagnosed with hypertension presented stressing at the point of diagnosis and improving health behaviors after receiving their diagnosis. The exploration of how African American women with hypertension acquire new health knowledge exhibited experiential learning, learning from health care professionals and searching the internet. The personal, social and environmental factors that shape the health behaviors of African American women with hypertension unveiled their intersectionality positioning as the greatest factor that resulted in them being subjected to prejudice and racism. African American women with hypertension most important facilitator to positive health behaviors is being part of a family. Finances and self-efficacy as the primary factors that hinder the participants from achieving optimal health after diagnosis with hypertension. The need for health education to be specific to the African American culture when addressing the epidemic of hypertension. The information should be distributed in the African American communities by door-to-door or community centers. The health information must be in plain everyday language; not just focus on what foods to avail but tasty less expensive options; and include stress management skills training.

Keywords: African American women, health knowledge, health literacy, hypertension, learning

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Exploring How African American Women with Hypertension Learn New Health Knowledge
and the Personal, Social and Environmental Experiences that Shape Their
Health Behaviors: A Multi Case Study in Durham, NC

by
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DEDICATION

To GOD for dragging me to this kicking and screaming; for the harvest is plentiful but the laborers are few (Matt 9:37). To my parents Russell and Josephine may this honor your health struggles with hypertension and heart disease that resulted in your early deaths. To my daughters, Kayla and Josie, I am only who I am now for the blessings of both of you in my life. My sister, Sheronda for your encouragement, love and support for all these years. My nephew Quan for always being in protective mode caring for us ladies in his life. To Jawara paying for my GRE and support at the beginning of this journey. My grandmother the first Lottie for spoiling me rotten in my youth for I took my stubborn energy and transformed it into the perseverance that allowed me to carry this cross.

BIOGRAPHY

Lottie K. Barnes is a native of Durham, NC. She graduated from Durham Public Schools and attended North Carolina Agricultural and Technical State University, graduating with a Bachelor of Science degree in Occupational Safety & Health. After starting a career in the healthcare industry, Lottie pursued a Master degree in Public Health at the University of North Carolina at Greensboro and completed it in 2006. Lottie has over 16 years of health research experience with Duke Health System (Health Physics and Medical Physics) and the Veterans Health Administration (Lung Cancer). Lottie has about 10 years of combined experience working and volunteering with non-profit community organizations doing health education in the community focusing on health and racial disparities.

Lottie pursued her doctoral studies from her personal and career experiences with the disparity of health in individuals of color. Too often, she was told by a person of color in regard to their health, “I didn’t know.” This statement made Lottie realize that she needs to take the road less traveled to educate people of color about positive health behaviors to achieve optimal health status. Lottie felt as an African American woman and a health care professional that she must take action to join the movement in creating health equity for persons of color in the United States.

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PROLOGUE

At a Saturday afternoon health fair at a church in Durham, North Carolina, a middle-aged African American woman has her blood pressure taken. The reading is 180/110, well over the healthy average of 120/80. The retired registered nurse who has taken the measurement urges the patient to seek medical attention immediately. "I feel fine," replies the patient. The nurse strongly urges the patient to consider follow-up care with a physician, but the nurse has no way of knowing whether the woman will actually do so. This incident at the health fair, observed by the researcher in 2012, is not at all uncommon. At that one fair, over 100 people had their blood pressure taken, and the majority of the individuals had blood pressure readings that exceeded normal ranges. If that woman at the church health fair were to continue to avoid medical treatment for the chronic disease of hypertension, she would have a high risk of dying of heart disease at an early age. Almost 50% of African American female adults in the United States are diagnosed with hypertension, which, when uncontrolled, can lead to heart disease, the number one killer of African American women. Is the high prevalence of hypertension in the African American female population due to these women's lack of knowledge of the chronic disease, or is it caused by personal, social, and environmental experiences for African American women that shape their health behaviors?

The intersectionality of being an African American woman influences different health behavior experiences than those of African American men and other women of different races and ethnicities. At the 1851 Women's Convention in Akron, Ohio, freed slave Sojourner Truth first introduced the concept of intersectionality. In the speech, Truth challenged the notion that being a woman (i.e., gender) and being Black (i.e., race) are mutually exclusive (Bowleg, 2012).

AIN'T I A WOMAN?

That man over there say
 a woman needs to be helped into carriages
 and lifted over ditches
 and to have the best place everywhere.
 Nobody ever helped me into carriages
 or over mud puddles
 or gives me a best place...

And ain't I a woman?
 Look at me
 Look at my arm!
 I have plowed and planted
 and gathered into barns
 and no man could head me...

And ain't I a woman?
 I could work as much
 and eat as much as a man —
 when I could get to it —
 and bear the lash as well
 and ain't I a woman?

I have born 13 children
 and seen most all sold into slavery
 and when I cried out a mother's grief
 none but Jesus heard me...

And ain't I a woman?
 that little man in black there say
 a woman can't have as much rights as a man
 cause Christ wasn't a woman
 Where did your Christ come from?
 From God and a woman!
 Man had nothing to do with him!
 If the first woman God ever made
 was strong enough to turn the world
 upside down, all alone
 together women ought to be able to turn it
 rightside up again.

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CHAPTER ONE: INTRODUCTION

Hypertension (high blood pressure) is a relatively simple disease in that it that can be effectively managed even with inexpensive behavioral changes. Still, it remains prevalent in the United States. Delineated by race and sex, the prevalence of hypertension is greatest for African American women (47%), followed by African American men (43%), then White men (33%) and White women (31%); in addition, hypertension is lowest among Hispanic men (30%) and women (29%) (Go et al., 2013). Not only is hypertension most prevalent in African American populations, but they also develop high blood pressure earlier than other racial and ethnic groups (NCHS, 1997; Williams & Cashion, 2008). Further, the rate of heart disease deaths in the United States is higher for African Americans (215.5 per 100,000) than for any other racial/ethnic group (HHSOMH, 2016).

In general, minority ethnic groups are at a higher risk for developing several diseases and suffer from more severe illnesses than their majority-culture counterparts (Alcalay et al., 1999; Shaw et al., 2009; Watson et al., 2001). In the United States, between 1990 and 1998, African Americans' rates for six measures (total mortality, heart disease, lung cancer, breast cancer, stroke, and homicide) exceeded other groups' rates by a factor ranging from 2.5 to almost 10 (Isaac, 2013; Keppel, Percy, & Wagener, 2002). The unequal burden of chronic diseases borne by the African American population is an example of what is known as a health disparity." Thomas, Quinn, Butler, Fryer and Garza (2013) pointed out that "one consequence of this persistent discrimination is an unequal burden of illness and premature death experienced by racial and ethnic minority populations." (p. 405).

This means that minorities, who are already subjected to not being treated by society in the same ways as members of majority populations are, also must bear the unequal burden of chronic disease.

The reasons for the health disparity with hypertension are not well understood (Artinian et al., 2006; Williams & Cashion, 2008). One possible explanation, the “slavery hypertension hypothesis,” states that the higher prevalence of hypertension among African Americans could have resulted from slaves’ enhanced ability to conserve salt, an ability that protected them from fatal salt-depletive diseases such as diarrhea and vomiting during the harrowing Atlantic passage (Wilson & Grimm, 1991). This condition would later induce hypertension in them and their descendants when they began consuming diets of American food, which were much higher in sodium than were African foods (Fuchs, 2011).

There are many reasons for the health disparity. African American women are far more likely than members of other racial/ethnic groups to experience hypertension and to be diagnosed at an earlier age than other populations. The early-age diagnosis of high blood pressure is associated with a higher risk for heart disease, thus leading to African American women’s higher rates of death from heart disease (Go et al., 2013). Those women who are left undiagnosed are unable to control their hypertension, and become among the 50,000 African American women who die of heart disease each year. Despite the reality of their high mortality rate from diagnosed and undiagnosed hypertension, “only 1 in 5 African American women believes she is personally at risk for heart disease and just over 50% are *knowledgeable* of the signs and symptoms of a heart attack” (“Go Red for Women,” 2014).

Figure 1 below shows major contributors to the phenomenon of the high prevalence of high blood pressure in the African American adult female population. As indicated in

Figure 1. the vast majority of factors that contribute to African American women high prevalence rate of hypertension are social determinant factors.

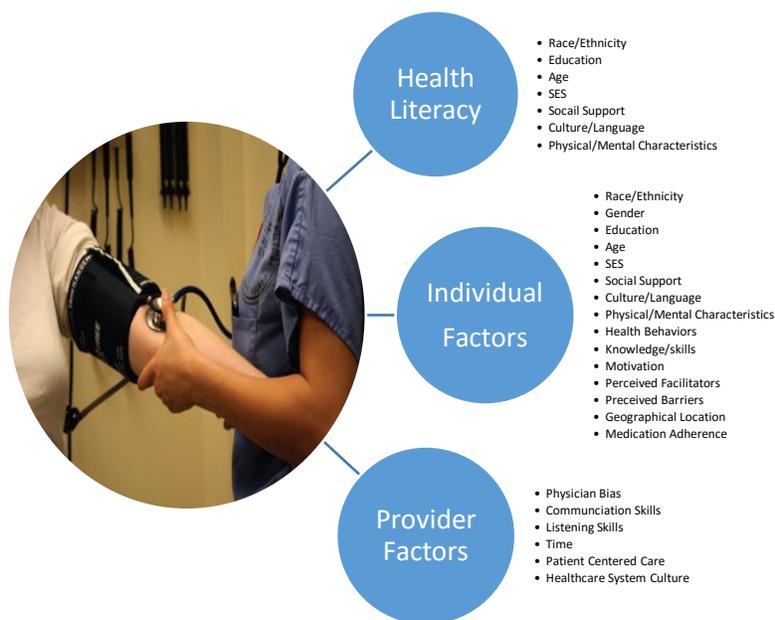


Figure 1. Causes of African American Women's Hypertension

NOTE: Adapted from "Casual Pathway between Health Literacy and African American women with Hypertension," by M. Paasche-Orlow & M. Wolf, 2007, *American Journal of Health Behaviors*; 31(Suppl 1) p. S21.

Health Literacy

Health terminology is the specialized language of the health care industry and is generally not employed by the general population; health literacy levels are measured as the awareness and knowledge of health terminology that individuals possess when interacting with the health care industry.

Not only do minorities possess the highest prevalence of chronic diseases, research shows that they are at the greatest risk of having inadequate health literacy levels. Previous

research studies (Bennett et al., 1998; Powell, Hill, & Clancy, 2007; Williams, Baker, Parker & Nurss, 1998b) have, indeed, concluded that by individuals with low health literacy face the greatest risks of suffering from chronic diseases such as cancer, diabetes, and heart disease. A report by the 1999 Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs specifically stated that poor health status and low understanding of one's medical condition are strongly correlated with individuals' inadequate health literacy. Improving health literacy levels can subsequently improve individuals' understanding of their health condition. Individuals who are able to learn how to understand and discuss their health conditions can increase their health literacy.

According to the National Assessment of Adult Literacy standardized test (NAALS) (1993, 2003), approximately 80 million U.S. adults have limited health literacy, meaning they have difficulty with the print literacy and numeracy skills needs to manage their health or that of family members (Kutner, Greenburg, Jin, & Paulsen, 2006; Prins & Mooney, 2014). This finding has been referred to as the "health literacy epidemic" (Parker, Wolf, & Kirsch, 2008). The NAALS results prompted the creation of a transdisciplinary team approach to improve the health literacy of the American adult population. Kolb (1984) defined learning as "a continuous process grounded in experience" (p.161), which suggests that the study of how to increase adults' health literacy must focus on the learners' meaning-making processes as the result of their personal lived experience (Merriam, Caffarella, & Baumgartner, 2007).

The American Medical Association (AMA), responding to the health literacy crisis, has recommended four areas for further research: health literacy screening; improvement of communication with low-literacy patients; assessment of costs and outcomes of poor health

literacy; and discovery of causal pathways of how poor health literacy influences health (Ad Hoc Committee, 1999; McCray, 2004; Sorensen et al., 2012).

The current study is concerned with the AMA's fourth recommended area of research, causal pathways of how poor health literacy influences health, particularly among the African American women population. Specifically, this study focuses on the pathways by which African American women diagnosed with hypertension construct new health knowledge and increase health literacy levels. The study also pays particular attention to the personal, social and environmental experiences that shape African American women's health behavior after being diagnosed with hypertension.

Individuals who are categorized as having inadequate health literacy are considered to possess lower levels of health knowledge and understanding of their diagnosis, of the early symptoms of their diseases, and of health information. An individual is classified as having inadequate health literacy according to their negative response to the following questions:

1. "Do you have someone help you read hospital materials?"
2. "Are you confident with filling out medical forms by yourself?"
3. "Do you have problems learning about your medical condition because of difficulty understanding written information?" (Chew, Bradley, & Boyko, 2004)

Health literacy not only has an impact on the incidence of chronic diseases, but also has a direct impact on short-term health as reflected by people's health behaviors and decisions (Rootman & Ronson, 2005). Research has further shown that health-related knowledge, such as knowledge about the signs and symptoms of heart disease, correlate with patients' levels of health.

Hypertension is known as “the silent killer,” and managing the disease to minimize risk of complications and death requires sufferers to have a higher level of health literacy than they may already possess; it is essential that individuals with high blood pressure understand the risk factors and seriousness of the disease. However, despite advances in health care that have reduced heart disease mortalities in the general population, drastic disparities in the levels in health literacy about hypertension remain. Research on health literacy and women’s health in developing countries highlight the positive impact of education and increasing health literacy on populations’ health, particularly women’s health (Bledsoe et al., 1999; Caldwell, 1986; Kickbusch, 2001; Nussbaum, 2000; Sen, 1999). Researchers have also investigated health literacy among African Americans. Dramoni and colleagues (2008) found that among African Americans, the race, education, sexual orientation, and primary language of the participant had significant associations with levels of health literacy. The National Assessment of Adult Literacy survey (NAAL, 2003) identified African Americans as having the lowest health literacy levels of any demographic group. Specifically, African Americans were found to be about three times more likely to have low health literacy than others (Weekes, 2012).

Similarly, in a study with 63% African American participants, the perceived likelihood of development or progression of chronic disease was positively correlated with low health literacy as measured using the Rapid Estimate of Adult Literacy in Medicine and African Americans as race (Boulware et al., 2009).

Given the correlation between low health literacy and negative health outcomes, improving health literacy is crucial to addressing health disparities (Paasche-Orlow & Wolf, 2010). Scholars agree that health care providers and public health practitioners should work

to increase patients' knowledge and improve self-efficacy for hypertension management within the context of hypertension self-care. In other words, patients can be taught how to gain the ability to make changes to diet, exercise, and following doctors' orders so their health improves. These facts combine to explain the urgent need to investigate how to increase health literacy and thus improve health outcomes for individuals using a perspective that examines knowledge construction as a way to promote good health.

Racial Prejudice in Healthcare Environments

Health literacy is constructed through the circulation of discourse, particularly the dominant discourses of the health care industry. Discourse is the process of creating knowledge or a culturally constructed representation of reality. It involves language, the symbolic means by which we communicate, and other categories of meaning that work with social, material practices to produce "regimes of truth" (p. 60). These regimes of truth tell us what is "appropriate" in any given context (Shaw & Lee, 2015, p. 60). Power produces discourse of difference, normality and truth that shape individuals' mental and physical health status (Shaw & Lee, 2015, p. 60).

At present, most health care professionals are categorized as White, the dominant racial group in the United States (AAMC, 2017), which increases the possibility of African American patients encountering prejudice in their interactions within health care environments. Prejudice is defined in psychology as an unjustified negative attitude toward a person based on the person's group membership (Dovidio et al., 1996; IOM, 2003). Prejudices may be subconsciously manifested in health care providers' interactions with, for example, African American female patients diagnosed with hypertension. While it is reasonable to assume most health care providers find prejudice morally abhorrent and at odds

with their professional values, health care providers, like other members of society, may not recognize manifestations of prejudice in their own environment (IOM, 2003). These manifestations of prejudice, whether overt or not, can create a hostile environment for African American women patients, making it difficult for these patients to believe the health care professional or to be in a positive mental space to learn new health information. Thus, prejudice can negatively affect patients' health literacy, which, in terms, influences their health behaviors and increases negative health outcomes such as early death.

African American Women's Health

Women's health experiences merit particular concern by health advocates because women the world over are the informal health care providers and health care knowledge holders for their families and communities, yet they have less access to health care resources and information than other groups (Chovanec & Johnson, 2012; World Health Organization, 2009). In addition, women are more likely to suffer ill effects of environmental degradation and economic downturns than males (Clover, 2003).

These experiences add to the health disparities of women and highlights the need for practitioners to utilize the assumptions of adult learning to design learning experiences that improve women's health. One disease that affects women of all ages, and African American women most prevalently, is heart disease. According to Dr. Holly Andersen, director of education and outreach at the Ronald O. Perelman Heart Institute, "The number of young women between the ages of 29 and 45 dying of heart disease is actually increasing and has been doing so since the year 2000" (Marshland, 2014, n.p.). The fact that hypertension usually does not display any symptoms makes it harder for anyone to believe it is the greatest risk factor for heart disease and number one killer of African American women.

The process by which African American women attach meaning to their diagnosis of hypertension and understand how social interactions, personal life choices, and their environment all impact their health status, is unique to their perception of their socially-constructed position in the United States. By acknowledging their own role in shaping their health choices, African American women are able to take control of the overcoming the difficulties associated with their diagnoses, thus demonstrating self-efficacy. For African American women, knowledge and self-efficacy are crucial assets as they navigate the dynamics of intersecting oppressions they are subjected to and subjugated by in the United States—the intersection of their gender and their race exacerbate the challenges they face (Hill Collins, 2008). African American women who are diagnosed with health problems not only face the challenges of their intersected identities in acquiring health literacy, they are also assumed to lack sound judgment, especially by those in health care (Hill Collins, 1989).

When African American women appear in the White dominant health care system with hypertension, they are often handed prescriptions for medicine to manage the blood pressure, but they are not offered comprehensive health education information on recommended lifestyle changes. When they fill the prescriptions, the pharmacy distributes printed health information that is expected to take the place of face-to-face knowledge and information. If the prescription fails to improve the hypertension, these women are often labeled as “non-compliant” in their medical charts upon return visit for the same diagnosis. Rather than investigating possible reasons for the recurrent hypertension, medical providers tend to attribute lack of positive results to the women’s gender and race. This negative branding is then viewed for all future health care visits that can create a pre-judgment about the woman’s view of her health as a priority.

Providers need to consider the role of self-care adherence among African Americans with uncontrolled hypertension (Warren-Findlow et al., 2012). In order for people to interpret experiences positively and to learn effectively, they need to have confidence in their abilities, good self-esteem, support from others, and trust in others (Merriam et al., 2007). Rather than projecting a negative assessment of African American female patients' personal choices, the medical community needs to provide positive support that can enhance the patients' self-efficacy and increase their health literacy. Societal discrimination against African American females is evidenced by the medical community's apparent disregard of effective ways to assist Black women in gaining the knowledge and power to improve their health.

Black feminist thought holds that self-definition involves challenging the political knowledge-validation process that has resulted in externally defined, stereotypical images of African American womanhood; what has been said about Black women; and the credibility and intentions of those possessing the power to define (Collins, 1986).

Within Black feminist epistemology, which offers an account of how Black women assess knowledge and why they believe what they believe to be true, experience is the foundation for both types of knowing: knowledge and wisdom. Existing knowledge is constructed from a variety of sources and experiences, and can be incorporated into experiential critical learning (Elwood, 2004). As Kolb (1984) posits, "Knowledge is continuously derived and tested out in the personal, social and environmental experiences of the learner" (p. 27). Experiential learning through the lens of feminist and qualitative geographical research has suggested that the knowledge construction that occurs is socially and politically complex, shaped by the social identity, subject position, and power relations

of the individual (Elwood, 2004; England 1994; Katz 1996; Nast, 1994; Rose, 1997). Health educators who understand and acknowledge the complex factors (including societal, individual, and medical) that enhance and inhibit African American women's health outcomes are most likely to be successful at increasing health literacy.

Hypertension in the Southeastern United States

In a vulnerable population such as African Americans, many factors contribute to uncontrolled blood pressure, including lack of social support and lack of clarity and knowledge about their condition (Dave et al., 2013; Degoulet et al., 1983; Kotchen, 2010; Knight, Bohn, & Wang, 2001).

Individuals' ability to meet blood pressure goals depends on environmental factors and having insights about barriers within the health system for these populations (Lawrence & Soricone, 2005). In North Carolina, heart disease is the number-one killer of African Americans (North Carolina Minority Health Facts, 2010), and the rate of high blood pressure in the African American population is almost 50% higher than the rate in the Caucasian population. The high blood pressure rate among African Americans in North Carolina is associated with decreased life expectancy; the average life expectancy at birth for African Americans in North Carolina is 73.4 years, compared to 78 years for Whites (North Carolina Minority Health Factsheet: African Americans, 2010).

North Carolina is part of the historic Stroke Belt, the string of southeastern states between Virginia and Louisiana that leads the United States in incidence of cardiovascular disease (CVD) mortality rates as caused by strokes and heart disease (Davis et al., 2014). A stroke *belt* is any urban location in that part of the southeastern United States, and a stroke *buckle* is any rural location with high rates of CVD in that region (Davis et al.). By this

definition, the city of Durham, North Carolina, is part of the stroke belt, and Durham County's rural areas are part of the stroke buckle. Indeed, as of 2008, 30% of the adults in Durham County, of any race, had hypertension (DTMI-Duke, 2010). This study is particularly concerned with the high rates of hypertension among African American women in Durham, North Carolina.

Statement of the Problem

The highest prevalence of chronic diseases is found among people with poor health literacy. Among the most serious preventable chronic diseases is hypertension.

When hypertension is left uncontrolled and untreated, it is fatal. The highest prevalence of hypertension is found among African American women, whose rates of adequate health literacy skills are correspondingly low. African Americans are about three times more likely to have low health than any other racial or ethnic group (Weekes, 2012). The lived experiences of African Americans are multilayered, involving issues of race, gender, language, age, history, politics, economics, and class, among others (Flowers, 2010). Yet, although numerous quantitative studies (Hicken et al., 2014; Schwandt et al., 2010; Sims et al., 2012; Williams & Mohammed, 2009) have shown that African American women have the greatest prevalence of high blood pressure of all racial and gender groups, no qualitative studies have yet explored how African American women construct new health knowledge, and the personal, environmental, and social factors that impact their health behaviors after diagnosis with hypertension.

Rationale for the Study

Health educators must understand how African American women construct new health knowledge and the experiences that encourage or deter them from sustaining optimal

health status after a diagnosis of hypertension. Narratives are a representation of people's lived experiences that are shared with other people, are they are constructed by individuals' social identities, life experiences, family histories, and urban, rural, and suburban places of residence (Elwood, 2004). Understanding and sharing personal experiences can contribute to individuals' health knowledge and literacy, including their awareness of hypertension and other risks of heart disease. The social experiences include the effects of the societal ills of racism and sexism experienced by African American women in the United States.

Through multiple consciousness that African American women possess, a better understanding of the phenomenon of research will be revealed. The hope is that if we pay attention to the multiple effects of individuals' social lives and their impact on health literacy, perhaps our institutions will better address the problems that plague us (Delgado & Stefanic, 2001). The current study focuses on African American women's learning and experiences post diagnosis with hypertension.

The stories of women's learning occur in several domains including learning about one's self, about strategies, about services, and about self-advocacy (AADAC, 2016; Chovanec & Johnson, 2012). Brooks (2000) asserts that, specifically in the case of women learners, learning occurs in the course of sharing personal narratives. Personal storytelling is a trust-based, relational process that allows reflective integration of the cognitive, emotional, and spiritual aspects of experiences (Chovanec & Johnson). These experiences provide a lens through which to view the essential knowledge and resources that African American women need to address the high prevalence of hypertension in their population. Discussing experiences is instrumental for women to reclaim their voice and agency (Chovanec & Johnson). The synthesis of the idea that sharing lived experiences is a way to create

knowledge with the idea that increased health literacy has the potential to produce positive health behaviors for women diagnosed with hypertension and increase their quality of life.

Study Method

This study used a qualitative approach to investigating hypertension in African American women because, thus far, only quantitative studies (Hicken et al., 2014; Schwandt et al., 2010; Sims et al., 2012) have investigated the high incidence of hypertension among African American women. A qualitative study is needed that examines African American women's health knowledge construction that guides their health behaviors following the diagnosis of hypertension that are impacted by the personal, environmental and social experiences. Qualitative health research explores health and illness as perceived by the participants themselves, rather than from the researcher's perspective (Morse, 2012). Shields (2007) argued that, for qualitative case studies, "The strength of qualitative approaches is that they account for and include difference—ideologically, epistemologically, methodologically—and most importantly, humanly" (p. 13). Employing a qualitative case study method has enabled the researcher to explore the health knowledge construction of African American women diagnosed with hypertension and the personal, environmental, and social experiences that shape their health behaviors. The outcomes from this study can help create better interventions to reduce hypertension and mortality rates in the highest risk population of the chronic illness, heart disease.

Finally, the rationale for conducting this study in Durham County, North Carolina, is the high incidence of hypertension among the county's African American population. The prevalence of hypertension in Durham and in the southeastern United States more broadly is discussed earlier in this chapter.

Statement of Purpose

Researchers have suggested that future research should focus on groups with the highest risk, including, but not limited to African American women, and consider strategies to further understand the trends and patterns of uncontrolled hypertension in these communities (Dave et al., 2013; Levine, Lewis, & William, 2011).

This qualitative case study addresses the prevalence of hypertension in the African American female population. The purpose of this study is to explore the process of knowledge construction of African American women in Durham, North Carolina, following their diagnosis of hypertension, as well as to understand the personal, social and environmental experiences that impact their health behaviors. Specifically, this study will explore the women's health knowledge and behavior regarding hypertension and its long-term health implications.

The research questions guiding this work are as follows:

- 1) What are the experiences of African American women diagnosed with hypertension?
- 2) How do African American women diagnosed with hypertension construct new health knowledge?
- 3) How do personal, social, and environmental factors shape the health behaviors of African American women diagnosed with hypertension?
- 4) What factors facilitate behaviors of African American women diagnosed with hypertension?
- 5) What factors hinder the health behaviors of African American women diagnosed with hypertension?

Conceptual Framework: Public Health Critical Race Praxis (PHCR)

The conceptual framework is the lens through which the researcher views the problem or phenomenon being studied. In this investigation of African American women's process of new health knowledge construction following the diagnosis of hypertension, and the personal, social and environmental experiences that impact their health behaviors, the conceptual framework is provided by Public Health Critical Race Praxis (PHCR). Of particular relevance to this study are its concepts of intersectionality and knowledge construction. PHCR applies to health research in that it can be used to identify potential sources of health disparities between the majority and marginalized groups.

The baseline for the health status to which all races, ethnicities, and gendered are compared is the set of health indicators for White men. Any difference between an individual and the baseline is labeled a disparity, meaning all non-White males' health statuses are considered as somehow atypical. The major goal of the current study using PHCR as a conceptual framework is to produce knowledge that will assist health care educators in creating health behavior interventions that align best with the preferred learning style of African American women diagnosed with hypertension. To understand the ways experiential learning of African American women diagnosed with hypertension can assist in creating appropriate interventions to improve health outcomes, it is imperative for research to incorporate analysis of how their spatial stories, practices, and learning intersect with and are shaped by their negotiation of race, ethnicity, class, gender, sexuality, and other identities (Elwood, 2004).

PHCR has four focuses. The first focus is contemporary racial relations. Although racism is permanent within racialized societies, the ways in which it operates change over

time (Ford & Airhihenbuwa, 2010). The focus of contemporary racial relations has four affiliated principles. The three principles of contemporary racial relations that are directly related to this body of research are race as a social construct, the ordinariness of racism in society, and structural determinism. The second focus is knowledge production. Culture and power shape knowledge production by establishing the processes by which understandings are generated and disseminated (Ford & Airhihenbuwa). This body of research illuminates how the social construction of knowledge is the foundation by which African Americans start their lives in a deficient position based on their social status. The three principles of knowledge production are the social construction of knowledge, critical approaches, and voice (Ford & Airhihenbuwa). The third focus is conceptualization and measurement, comprised of two principles: intersectionality and race as a social construct, both of which are consistently applied under the focus on knowledge production. The fourth focus is action inspired in the following way: using storytelling that is centered in the margins to describe a problem by the personalized experiences of minorities to promote understandings of controversial topics (Ford & Airhihenbuwa).

Intersectionality

Intersectionality is a theoretical framework for understanding how multiple social identities such as race, gender, sexual orientation, SES, and disability intersect at the micro level of individual experience to reflect interlocking systems of privilege and oppression (i.e., racism, sexism, heterosexism, classism) at the macro social-structured level (Bowleg, 2012; Collins, 1991; Crenshaw, 1991, 1995; Davis, 2008). The personal narrative as viewed through the lens of intersectionality is an imperative part of the knowledge production, conceptualization and measurement, and action focuses of PHCR. For the purpose of this

study, the intersection of two distinctly separate categories of being African American and being female greatly influences how African American women construct knowledge, as well as the personal, social, and environmental experiences that shape their health behavior post-diagnosis. The PHCR concept of intersectionality is of particular relevance to this study because it illuminates health disparities from the perspective of individuals who inhabit dual roles of oppression, both racial (African-American) and gendered (women), thus rendering the population of interest as being subject to the dynamics of intersectionality.

Individuals' experiences, particularly individuals whose identities are situated at the intersections of multiple inequalities, are explored and valued primarily for their unique ability to shed light on broader social systems—the very arena where “health disparities” are defined (Weber, 2006, p. 32). According to Valdes (1995), “The perspectives of people of color are central to understanding their everyday realities. . .and. . .individual experiential knowledge” (Sheared et al., 2010, p. 193). The experiences of individuals are conceptualized by the intersection of their race, gender, and other socially-constructed categories that can be viewed positively or negatively in the classifications of what is deemed “normal” in society. Unique knowledge can be learned from researchers' analyzing intersected, multiple, and stigmatized social identities (Hurtado, 1996, p. 375) that contribute to oppression in the United States. The social locations of groups situated at the intersection of multiple systems of inequality provides not only a unique but also a privileged position from which to understand those systems (Schulz & Mullings, 2006, pg. 33).

The articulation of the experiences of people who hold intersectional positions (such as Black and female) in society provides powerful voice of understanding that counter the status quo of society. The strengths of empowering knowledge through the expression of

voice are twofold: the potential of outsiders within to notice patterns and relations not apparent to member of the dominant group; and creativity and resilience that arise from the experiences of individuals located in marginalization (Ford & Airhihenbuwa, 2010, p. 1396). Voice is the most powerful tool for intersectionality individuals to acknowledge and label their oppressive experiences in society. Voice recognizes that all individuals possess experiential knowledge informed by their social locations.

Women of color, in particular, incorporate an intersection analysis of health, asserting the mutually constitutive nature of race, class and gender, thereby providing an alternative analysis of health illness and health care (Schulz & Mullings, 2006). The result is that African American women often have their health problems analyzed and addressed in ways that are more appropriate for individuals in other racial or gender groups. Fenwick (2003) states, "People's knowing is colonized by being squeezed into...categories and identities" (cited in Merriam, Caffarella, & Baumgartner, 2007, p. 184). Chandra Talpade Mohanty advocates that we think about feminist solidarity around issues of capitalism, anti-racism, and the need to "decolonize" knowledge (May, 2012) which has most typically been colonized as foundational knowledge in dictionaries and encyclopedias. The categorization of African American women post-Jim Crow was the labeling of race as "Black." The most oft-cited source of words' meaning is Merriam-Webster dictionary, which defines "Black" as "having dark skin, hair and eyes; dirty, soiled, sinister or evil, indicative of condemnation or discredit, characterized by hostility or angry discontent" (Merriam-Webster, 2017). Intersectionality necessitates engaging with a multidimensional sense of self (Alarcon, 1990), which requires questioning whose knowledge and whose experiences have been considered authoritative (May, 2012), including those sources that have rarely been questioned.

Knowledge Construction Application

The body of research on intersectionality, particularly on health disparities from the perspective of individuals whose identities cross racial (African-American) and gendered (women) categories of oppression, is completely subjective. Such research is based on the participants' beliefs, opinions and perceptions of facilitators and barriers as they relate to their health, knowledge of heart disease, and health behaviors. In addition, perceptions of the behavior include an individual's perception of the benefits of undertaking preventive health behaviors as well as facilitators and/or barriers to their engaging in the preventive behavior (Tanner-Smith, & Brown, 2010).

Knowledge of heart disease risk factors is essential for a person to make an informed decision about engaging in or continuing certain behaviors that may increase risk of disease, such as smoking, not exercising, and consuming high-fat foods (Winham & Jones, 2011). Knowledge encompasses all that a person knows or believes to be true, whether it is verified as true in some sort of objective or external way (Alexander, Schallert, & Hare, 1991). Marr and Gormley (1982) described *prior* knowledge as “knowledge about events, persons, and the like which provide(s) a conceptual framework for interacting with the world” (p. 90); that is, as conceptual knowledge (Alexander, Schallert, & Hare). In other words, when we know something (be it content, linguistic, or otherwise)—for example, that the terms high blood pressure and hypertension have the same meaning—then we can develop factual information (declarative knowledge)—for example, that hypertension can affect your heart, kidneys and cause blood vessels to burst. We must possess the understanding of how to use such knowledge in certain processes or routines (procedural knowledge) for adherence to medical regimens and lifestyle changes that incorporate a healthy diet and exercise (Alexander,

Schallert, Hare, p. 323). One of the goals of the current research study is to provide a deeper understanding of the phenomenon of African American women with hypertension, and to provide research-based support for the need for more effective interventions for treating and preventing hypertension among African American women. Meeting this goal requires an acknowledgement and understanding of the types of knowledge needed to transform these women's declarative knowledge into procedural knowledge and, ultimately, into healthier women.

Significance of the Study

Exploring the pathways of how African American women with hypertension construct health knowledge, as well as the personal, social, and environmental experiences that shape their behavior post-diagnosis, provide a number of theoretical and practical contributions. First, the study contributes to the literature on hypertension, health behavior, and public health, specifically adding explanations about how African American women's knowledge about hypertension seems to correlate with their health literacy levels and how they construct new knowledge to address the disease, thus allowing health educators to manage the prevalence of hypertension in this specific population.

This study's contribution to the literature on health behavior is the delineation of personal, social, and environmental factors that African American women experience in the U.S. society that strongly impact their health behavior. One way this study contributes to the public health literature is by expanding the research on geographical location being a social determinant of health. In addition, the study contributes to the literature on health literacy, adding a qualitative analysis to a large body of quantitative studies that focus on the impact of health literacy on health outcomes. This qualitative adds to the literature by analyzing the

pathways patients take to constructing knowledge to increase their health literacy related to a chronic disease, specifically about hypertension. Understanding how differences in health literacy and knowledge construction contribute to how hypertension is managed in the population that suffers from it the most—African American women.

The traditional delivery of hypertension health information by written material is not optimal for how African American women best construct new knowledge through experiential learning. On a theoretical level, this study contributes to Critical Race Theory (CRT) by developing data on the concept of intersectionality within the context of health. Intersectionality recognizes that individuals that are situated in different social categories, and that their lived experiences are different, acknowledging that those experiences speak to their health behavior and their overall health status. This research strengthens the importance of honoring and respecting those lived experiences of individuals categorized at intersectional social positions as valid and presents a different epistemology lens in understanding their health behaviors. The data gained from this research can provide more insight into designing effective health interventions to improve health outcomes based on the population's intersected identities.

Finally, the findings of this study may enable community health organizations and healthcare providers to better understand why African American women are disproportionately affected by hypertension.

The goal of this research is to use the findings to guide the decisions of health policymakers on the macro level to fund interventions based on experiential learning techniques that focus on ways of improving self-care of hypertension and ultimately saving lives.

Definitions of Terms

Various terms are used in this research that should be defined and their context in this study clarified. The individual terms are as follows, in alphabetical order.

Black/African American. A person having origins in any of the Black racial groups of Africa (U.S. Census Bureau Data, 2013).

Chronic disease. A disease lasting three months or more and generally cannot be prevented by vaccines or cured by medication, nor do they just disappear (National Center for Health Statistics, 2015).

Health Behavior. Refers to the actions of individuals, groups, and organizations and to those actions' determinants, correlates, and consequences, including social change, policy development and implementation, improved coping skills, and enhanced quality of life (Glanz et al., 1997; Parkerson et al., 1993).

Health disparity. "A health disparity population has a significant disparity in the overall rate of disease incidence and prevalence as compared to the health status of the general population" (Minority Health and Health Disparities Research and Education Act, 2000).

Health literacy. The degree to which individuals have the capacity to obtain, process, and understand basic health information and make appropriate health decisions (Institute of Medicine, 2004).

High blood pressure/Hypertension (medical terminology). Systolic pressure exceeding 130mmHg and/or diastolic pressure exceeding 80 mmHg (American Heart Association, 2018).

Intersectionality. The examination of race, sex, class, national origin, and sexual orientation, and how the combination of these factors plays out in various settings (Delgado & Stefanic, 2012).

Public Health Critical Race Praxis (PHCR). A semi-structured process for conducting research that remains attentive to issues of both racial and methodologic rigor. As praxis (i.e., an iterative methodology), it combines theory, experiential knowledge, science, and action to actively counter inequities (Ford & Airhihenbuwa, 2010).

Racialization. Describes how socially constructed racial and ethnic categories are used to order groups in society (Ford & Airhihenbuwa, 2010).

Racial Microaggression. Subtle insults (verbal, non-verbal, and/or visual) directed toward people of color, often automatically or unconsciously (Solorzano et al, 2000).

Voice. The privileging of marginalized persons' contributions to discourses. It recognizes that all individuals possess experiential knowledge informed by their social locations (Ford & Airhihenbuwa, 2010).

CHAPTER TWO: LITERATURE REVIEW

The purpose of this qualitative multi-case study is to explore the ways African American women who reside in Durham, North Carolina, and are diagnosed with hypertension construct new health knowledge and to explore the personal, social, and environmental factors that shape their health behavior. This chapter demonstrates that a gap exists in the research on health literacy levels of African American women with hypertension, particularly regarding how they learn about their condition and make subsequent decisions regarding their health. Additionally, this chapter uses Public Health Critical Race praxis (PHCR) to frame the conversation about African American women's health, health literacy, and preferred ways of increasing their health knowledge are related to the effects of having intersectional racial and gender identities. To provide context for this qualitative multi-case study, this chapter reviews several themes from the relevant literature:

1. Intersectionality, a constant theme in three of the four focuses of PHCR, is the existence of dual socially-constructed positions of oppression that shape the daily experiences of African American women diagnosed with hypertension in the United States society.
2. Health literacy, an important factor in the health, knowledge and learning of individuals, is low among African American women, a fact that correlates with this population's high prevalence of chronic diseases.
3. Knowledge construction, which is a process that has great significance in explaining how African American acquire new information to apply to their everyday lives.
4. Hypertension is a chronic disease that strikes African American women at a higher rate than any other demographic group in the United States. Health disparities are

observed along racial lines, with mortality rates and with a variety of chronic diseases more prevalent among African American women than other groups.

5. Place, or geographical location, has been shown to correlate with residents' poor health.

As this study makes evident, there is a need for qualitative research on the experiences of African American women with hypertension and how they construct new health knowledge post-diagnosis, with attention to the experiences that shape their health behaviors.

Search for Relevant Literature

A review of scholarly databases focusing on literature published in the last decade (between 2007 and 2017) was conducted to locate existing empirical and conceptual studies on the topics of knowledge of health disease, health literacy, and hypertension among African American/Black women. The literature searched started with PubMed, the national database for the U.S. National Library of Medicine, which contains over 27 million articles. According to the PubMed database, the number of articles published between January 2007 and December 2017 that included the search words *Black women* and *hypertension* in the title or the text of the articles was 1124. The PubMed search that included the search terms *African American women* and *hypertension* resulted in 706 articles that contained the terms in the title or text. The major themes of the 706 articles were behavioral change, commodities, racial differences, and social determinants. When PubMed was searched for articles that had been published from January 2007 to December 2017 and included the search terms *Black women* and *health literacy*, one 2008 article was found, which was entitled, "Health literacy and online health discussions of North American Black women" (Donelle & Hoffman-Goetz, 2008). The PubMed search for articles that included the search

words *African American women* and *health literacy* in the title or the text of the articles resulted in four articles which discussed diabetes risk (Ivanov et al., 2015); medication adherence (Rust & Davis, 2011); online help-seeking (James et al., 2016); and weight management (James et al., 2015).

Google Scholar, a web-based search engine containing books, conference papers, scholarly articles, and other academic information, was also searched using the words *African American women* and *health literacy*. This search resulted in over 21,100 articles; however, when funneling down to the relevant words *African American women* and *health literacy*, the search results were limited to eight articles. Google Scholar also returned eight additional articles that did not appear in the PubMed search. The seven additional articles concerned breast cancer disparities (Coughlin, 2014); chronic disease screening (Shaw et al., 2009); diabetes (McCleary-Jones, 2011 & Powell, Hill, & Clancey, 2007); genomic risk information (Kaphingst et al., 2015); maternal health literacy (Mobley et al., 2014); menstrual bleeding (Marsh et al., 2014); obesity literacy (Lopez et al., 2014); stroke education (Beal, 2014); and the book *Health and Wellness Concerns for Racial, Ethnic and Sexual Minorities* (Collins et al., 2014). A Google Scholar search using the words *African American women* and *knowledge construction* and *health literacy* resulted in over 17,600 articles; one article was directly related to the relevant constructs searched which focused on cervical cancer (Shaw et al., 2009). A Google Scholar search using the words *Black women* and *knowledge construction* and *health literacy* resulted in over 21,000 articles; however, none of the articles were directly related to the relevant constructs searched.

Several other databases were also searched for this study, including JSTOR, which contains over 2,000 books, current issues of journals, and primary sources with none directly

related to the relevant constructs of African American women, health literacy and knowledge construction. The ProQuest dissertation database contained two very recent dissertations related to the current study. One was Beal's (2014) study of stroke education needs among African American women, which used an exploratory descriptive qualitative design. The results of the Beal study suggested that culturally-sensitive stroke education for African American women should include stories of women with stroke and should provide experiential and visual depictions of stroke warning signs. The second relevant dissertation found in ProQuest was the work of Points (2011), which found that minority groups are classified as having the lowest health literacy levels.

Overall, the literature search revealed no recently published research that exclusively evaluated the health literacy of African American women diagnosed with the chronic disease of hypertension. In the following sections, the relevant research is discussed in terms of four themes: health literacy, hypertension, intersectionality the relationship between race and health, and the impact of place on health.

Race and Health

Race consciousness is particularly important in the early 21st century, even though racial inequities generally are attributed to non-racial (e.g., socio-economic) factors while potentially relevant racial factors (e.g., discrimination) remain largely unexamined (Ford & Airhihenbuwa, 2010). Haney Lopez (1994) explains that "Race may be America's single most confounding problem, but the confounding problem of race is that few people seem to know what race is" (p. 5). In part, what makes race such a complex problem is the view that the problems of race are the problems of the racial minority. Instead, the problems of race belong to all of us, no matter where our ancestors come from, no matter what the color of our

skin (Haney Lopez). Accounting for non-racial factors is certainly important, but doing so should not preclude consideration of the integral, often antecedent ways that racialization may condition disease distribution (Brown et al., 2003). Racial classifications are based on the physical characteristics of human beings, with the historical notion that superior characteristics belong to those with European heritage (i.e., White skin), and all other ethnic characteristics are inferior, which empowers the practice of “othering.” Race is a concept that signifies and symbolizes social conflict and interests by referring to different types and features of human bodies (Omi & Winant, 2015). Racial categories are customarily defined by the original continent of a group’s ancestors and/or the cultures of the specific racial group. Race as a category denoting skin color was first used to classify human bodies by Francois Bernier, a French physician.

The notion of racial groupings was introduced on Carolus Linnaeu’s *Natural History* in 1735 and subsequently advanced by many others (Ford & Airhihenbuwa, 2010; Harawa & Ford, 2009). Both Linnaeu’s concept of race and the subsequent racial groupings devalued and degraded those classified as non-European (West, 1993). In the United States, the U.S. Census Bureau has gathered information on race since its inception in 1790. Criteria utilized over the years regarding the U.S. Census have included nationality, tribal affiliation, as well as indicators of percentages of non-White “blood” (i.e., mulatto, quadroon, octoroon) (Darder & Torres, 2009). Defining groups of people as “other” is obviously not restricted to distinctions based on race. Gender, class, sexuality, religion, culture, language, nationality, and age, among other perceived distinctions, are frequently evoked to justify structures of inequality, subordinate status, and differential treatment (Omi & Winant, 2015). Over a century ago, W.E.B. Dubois (1897) stated that “the history of the world is the history, not of

individuals, but of groups, not of nations, but of races, and he who ignores or seeks to override the race idea in human history ignores and overrides the central thought of all history” (cited in Sheared, et. al, 2010, p. 3). Unfortunately, modern history has not changed this fact.

Medical Mistreatment Based on Race

Race-based medical mistreatment has a long history in the U.S. The medical abuse of African Americans has been documented as far back as the slavery era. Slavery was based on persons of color being viewed and sold as property for free labor. The slave trade of Africans and their descents African Americans is the original economic impetus of what the United States was founded. The majority ruling population of the United States viewed African Americans as property, giving the authority of the “property owners” to do as they felt with their property regardless of conviction or remorse to the results of their action.

Historically, African Americans have been subjected to exploitative, abusive involuntary experimentation at a rate far higher than other ethnic groups (Washington, H.A., 2006). Published journal articles and doctors’ records on various types of medical experimentation include: un-anaesthetized gynecological experiments on slave women; eugenic-inspired involuntary sterilizations of welfare mothers with multiple children; unconsented high dose radiation experiments and hazardous dermatological research on prison subjects (Abel & Efirid, 2013; Washington, 2006). The most highly publicized medical mistreatment of African Americans by medical professionals was the Tuskegee syphilis study. McGary (1999) described the study as follows:

In the 40-year Tuskegee Study, there were 399 African American men with syphilis and 201 controls. The unwitting participants were not exposed to syphilis by the

researchers, but they were not treated for it either. Even after the discovery of penicillin, the syphilitic men in the study were not informed about their conditions, nor were they treated. In order to keep the participants ignorant, there was an extensive collaboration among a variety of government agencies, private institutions, and community-based organizations. (McGary, 1999, p. 238)

African Americans' justified historical mistrust of the health care system and individual providers causes their need for health care to be met with caution and fear. These negative emotions induce stress and can lead to increased blood pressure. These negative emotions are described in the IOM (2003) Unequal Treatment report, which described research showing that minority/ethnic groups were less likely than Whites to receive needed services, procedures, and routine treatments for common health problems and for disease such as cancer, cardiovascular disease (Abel & Efirid, 2013; IOM, 2003; Smedley & Smedley, 2005).

Race-based Discrimination

Over 150 years after the abolition of slavery, African Americans are still often treated disrespectfully because of negative race-based views, or racism. The term *racism* refers to an organized system that categorizes population groups into races, and uses this ranking to preferentially allocate societal goods and resources to groups regarded as superior (Bonilla-Silva, 1996; Williams & Mohammed, 2009). Mays et al. (2007) explored the idea that African Americans' continuing experiences with racism, discrimination, and possibly social exclusion may account for some proportion of these health disparities (Clark & Adams, 2004; Everson-Rose & Lewis, 2005; Gyll et al., 2001; Harrell et al., 2003; Massey, 2004; Walker et al., 2004; Williams et al., 1998). For example, individuals who report experiences

of racism are more likely to have elevated blood pressure (Crawford, Jones, & Richardson, 2010).

To a large extent, research utilizes race as a demographic variable without fully grappling with race and racism in contemporary society (Thomas et al., 2013). Critical Race Theory recognizes that the social construct of race impacts all aspects of existence in the United States, especially health. The health disadvantage of US blacks in comparison to the majority population extends across the entire spectrum of common conditions, and the combined effects of economic and racial discrimination are widely recognized as the overriding cause (Ordunez et al., 2013; Williams & Sternthal, 2010). Previous research studies strongly suggest that discrimination, prejudice, and racism based on an individual's perceived race are important determinants of health disparities and quality of life for the African American population.

Clark and Anderson (1999) stated that African Americans are disproportionately exposed to environmental factors that may be sources of chronic and acute stress and the basis of these stressors is frequently perceived as involving racism (Brown et al., 2006). Racism is one of the strongest negative determinants of health for African Americans.

Race-based Health Determinants

Previous research studies have confirmed that negative determinants of health have a strong correlation of health disparities for chronic diseases, inadequate health literacy levels, and shorter life spans especially in minority populations. Nutbeam (1998) explains, "Determinants of health are the range of personal, social, economic, and environmental factors that determine the health status of individuals or populations" (p. 354). Negative determinants of health range from education level and socioeconomic status to racism.

Williams and Jackson (2005) suggested that racial differences in mortality were best understood in the context of four factors: socioeconomic status (income) as measured by education; health practices (self-management); psychosocial stressors (stress); and residential segregation (place). These four health determinants have a drastic negative effect on individuals with low socioeconomic status, of which minorities are the majority in that category. Low socioeconomic status individuals have a greater exposure to violence and poor health care (low levels of coverage and little access to care). It is widely known that level of education correlates directly with socioeconomic status. Individuals classified in lower social economic status have poorer health outcomes. Socioeconomic status is among those factors most frequently implicated as a contributor to the disparities in health observed among U.S. population (Andresen & Miller, 2005; Shavers, 2007).

Shavers explains:

SES has been defined as “a broad concept that refers to the placement of persons, families, households and census tracts or consumes goods that respect to the capacity to create or consume goods that are valued in our society. SES as relates to health status is an attempt to capture an individual’s or group’s access to the basic resources required to achieve and maintain good health. (Shavers, 2007, p. 1013)

SES is the greatest contributing factor of health and correlates with and individual’s self-management of their health status. Self-management is now the accepted term used to describe the actions and daily decisions individuals complete or do not complete that have an impact on their health.

Individuals with chronic diseases need to possess an adequate level of understanding in order to comply with their diagnosis and engage in the required medical regiment. There

are key factors that contribute to the self-management of hypertension: attitudes, beliefs, experiences, and knowledge. Schoenberg and Drew (2002) suggest that African Americans make daily decisions about chronic disease management based on culturally-informed experiences of disease including symptoms such as headaches, nosebleeds, and hallucinations (Shaw et al., 2008). Health care that fails to acknowledge and accommodate for the impact of cultural differences on the ability to manage their disease is associated with more severe disease outcomes (Ortega & Calderon, 2000; Shaw et al., 2009).

A fuller understanding of a person's health literacy must incorporate such cultural differences into research, interventions, and recommendations (Shaw et al., 2009). Practical implications from the Pandit et al. (2009) study is that health literacy responses must be comprehensive, addressing barriers to knowledge acquisition, and also including other psychosocial factors that impact motivation and one's ability to manage disease. Further exploration of such attitudes, feelings and beliefs is important, as they may positively or negatively affect disease management (McBane & Halstater, 2011). The lack of specific racial and ethnic health resources is a contributor to health disparities.

Race-based Health Disparities

Racial and ethnic disparities in health care occur among several populations and subpopulations: African Americans, American Indians, Alaska Natives, Asian Americans/Pacific Islanders, Hispanic Americans, rural populations, and urban populations (Copeland, 2005). African Americans lead all racial and ethnic groups in highest mortality from preventable chronic diseases. In an examination of the social sources of racial differences in mortality rates, Williams and Jackson (2005) found persistent racial disparities between

African American and White Americans, as evidenced in national trends for homicide, heart disease, and cancer (Copeland, 2005).

Many African Americans, especially those who are poor and those working without health care benefits, are less likely than White Americans to have a usual source of health care (Copeland, 2005; HHS, 2003; Smedley & Smedley, 2005). Efforts to eliminate health inequities must address some of society's toughest problems, including racism, the effects of chronic stress, and the systematic and institutionalized disadvantages experienced by these groups (Gerald, 2012). To date, a barrier to health care that has not been extensively studied is the perception that African Americans have about concepts of health and illness, services received, and treatment outcomes (Copeland, 2005). Additional research data indicate that almost 100,000 African American persons die prematurely each year in the United States who would not die if there were no racial disparities in health (Levine et al., 2011; Williams & Mohammed, 2008).

By contrast, representative samples of populations in the Caribbean have revealed rates of hypertension and diabetes that are two to five times lower than those of African Americans or Black Britons (Cruickshank, 2001; Kawachi et al., 2005). Results of the Ordunez et al. (2013) study of Cubans' health supports the claim that unmeasured social-structural factors account for higher blood pressure in the U.S. African American population. Health is an individual capacity that is also related to individuals' interactions and day-to-day living practices within their social, cultural, and environmental settings (Daley, 2006; Kasworm, Rose & Ross-Gordon, 2010).

Public Health Critical Race Praxis and Health Disparities

The existence of hypertension in the African American community is a drastic health

disparity from the health concerns of the majority Caucasian population in the United States. This health disparity is rooted in the oppressive experiences perceived by African Americans due to their racial classification. The impact of being racially categorized as African American most often creates an automatic health disparity. Ford & Airhihenbuwa (2010) explain, “Public health critical race praxis offers a semi-structured process for conducting research that remains attentive to issues of both racial equity and methodologic rigor. Praxis (i.e. iterative methodology), combines theory, experiential knowledge, science and action to actively counter inequities.” Researchers who focus on health equity can utilize PHCR to understand how race, ethnicity and gender as social constructs accounts for how an individual’s location in society informs the experiences and perspectives of those in the non-dominant groups from which one views a problem. “To understand the causes of racial health inequities requires solid understandings of the salience of racialization in society and in one’s personal life” (Ford & Airhihenbuwa, 2010, p. 1392). Critical methodologies enable researchers to “dig beneath the surface of social life to uncover the assumptions and masks that keep us from a full and true understanding of how the world works” (Johnson, 2000, p. 67).

Intersectionality

PHCR encompasses four focuses (race relations, knowledge production, conceptualization & measurement and action). The three focuses knowledge production, conceptualization & measurement and action both contain the principle of intersectionality. Intersectionality is of most relevancy to this study because the target population is African American women. Intersectionality, the fluid processes inherent in holding two or more social identities that are situated within a historical context (Collins, 1991; Crenshaw, 1995;

Schulz & Mullings, 2006). Intersectionality highlights societal positions that are associated with health disparity. Acknowledging this concept has several benefits for the public health discipline; by recognizing the effects of intersectionality on those who hold dual minority statuses, it provides a unifying language and theoretical framework for public health scholars to locate the source, thereby reducing and eliminating health disparities (Bowleg, 2012). In addition, intersectionality prompts public health scholars to conceptualize and analyze disparities and social inequalities in health in the complex and multidimensional ways that mirror the experiences of the populations for whom adverse health outcomes are most disproportionate. Intersectionality focuses on the importance of uncovering the social factors imposed on individual health that produce experiences of historically oppressed or marginalized populations; this vantage point “embraces rather than avoids the complexities that are essential to understanding social inequities” (Hankivsky & Christoffersen, 2008, p. 279). Intersectionality is absolutely critical for studying African American women with hypertension to provide understanding of the social inequities that arise from their possessing the gender (female) and racial (African American) categorizations that contribute directly to their health inequalities.

Intersectional scholarship emerged from the voice of African American and other women of color whose social location at the intersections of multiple systems of oppression made any politic, practice or scholarship that treats them as separate seem absurd (Schulz & Mullings, 2006, p. 40). Voice is the privileging of marginalized persons’ contributions to discourse (Ford & Airhihenbuwa, 2010, p. 1396). The articulation of the experiences by individuals belonging to marginalized groups in U.S. society bring recognition and truth to the privilege received by the majority group.

Intersectional analyses challenge both the medical and public health models that place primary emphasis on individual attributes and self-responsibility as determinants of health; instead, they “include a focus on the economic and social position of groups within the society and the associations among institutional practices, socioeconomic status, and health outcomes” (Schulz & Mullings, 2006, p. 194). Intersectionality has much to offer to the study of specific populations’ health “in providing more precise identification of inequalities, in developing intervention strategies, and ensuring results are relevant within specific communities” (Bauer, 2014, p. 11). Intersectionality theorists argue that our identities based on race, gender, class, and sexuality accompany us in every social interaction (Veenstra, 2011). These social interactions are the experiences that can have a negative impact on individuals that are situated in the intersectionality of oppressive socially constructed positions. Complex social locations comprised of disadvantaged identities held in tandem are thought to lead to multiplicative disadvantage; that is, combinations of these identities are thought to have an aggravating effect (Veenstra). This aggravated effect on the individual materializes in mental and physical stress that can result in hypertension and other chronic diseases.

Social identities such as race, gender, and class are defined as attributes that societies use to stratify or place individuals in a social hierarchy that can lead to the creation of different meanings for life experiences (Harding, 2004; Schulz & Mullings). Those social identities carry ingrained exposures to oppression and the negative impact of disadvantaged positions of privilege on daily experiences. African American women, the target population of this research, possess with their race and gender at least two oppressive social identities. Crenshaw (1989) elucidates the nature of discrimination experienced by these women:

Black women can experience discrimination in ways that are both similar to and different from those experienced by white women and Black men. Often Black women experience double-discrimination- the combined effects of practices which discriminate on the basis of race, and on the basis of sex; also experience discrimination as Black women-not the sum of race and sex discrimination, but as Black women. (p. 149)

The reality of the Black woman as the breadwinner of a household may cause negative impacts of their relationship with Black men in that the women's power position threatens their masculinity. The very fact that Black women must work to provide for their families conflicts with societal norms that women should stay at home, often creating personal, emotional, and relationship problems in their lives (Crenshaw, 1989). Black women, like Black men, live in a community that has been defined and subordinated by color and culture (Crenshaw). A fuller appreciation of the problems of the Black community reveals that gender subordination does, indeed, contribute significantly to the destitute conditions of so many African Americans and that it must, therefore, be addressed (Crenshaw).

Knowledge as Source of Power in Health Care

White males are located at the top of the U.S. social hierarchical pyramid in almost all social contexts (Johnson-Bailey, 2002; Sheared et al., 2010). In the U.S., the hegemony of "White men hold the power of the organizations that control knowledge validation and their best interests pervade the themes, paradigms, and epistemologies of how our society learns" (Hill Collins, 2000, p. 251). It is often said that there is power in words. Therefore, White men are the founders of the language that is utilized and viewed as "acceptable" in all

dimensions of the U.S. society, which includes health terminology: “Language is used covertly to structure social problems in the population that are then categorized into various disciplines” (Sheared et al., 2010, p. 275) that include healthcare to avoid addressing root social issues. The disciplines like health care then “scatter and diffuse the issues” (Sheared et al., p. 275) with advanced vocabulary in health terminology that disguise salient areas that need the greatest attention regarding minority populations’ health.

The language of health consists of words to communicate about health and wellness—words whose meanings exceed the understanding of a high school graduate. It is important to recognize that the *meanings* associated with differences are socially constructed, and those meanings greatly impact minority populations (Shaw & Lee, 2015).

Communication about health and wellness also offers its own set of complicated barriers and meanings for minorities (Collins et al., 2014, p. 9). The categorization of the label “minority” implies a “less than” *meaning* of status in the U.S. population. Within the subcategories of minorities, African Americans have one of the worst medical and social histories in our society. The terms *deficient*, *deviant*, and *disparate* are words commonly used to describe African Americans in various academic disciplines and in relationship to the disciplines’ categorization of *normal*. The resource of knowledge is controlled by the dominant group that may not be distributed equally to the other socially constructed groups. When the socially constructed subgroups knowledge level is measured by instruments created by the dominant group, the subgroups most often are categorized as inadequate.

The unequal allocation of resources is dependent on racial and gender social categorizations that “determine what access individuals have to knowledge, what is considered knowledge, and ultimately how it is that one comes to perceive oneself as

knowledgeable in spite of one's group memberships" (Hurtado, 1992, p. 374). According to Taifel (1981), social identities have real consequences, especially for knowledge production and reception, only when those social identities are stigmatized—that is, when they are used to allocate differential amounts of social and economic power (Hurtado, p. 375). African American women are part of those marginalized in that the allocation of quality education for them is not equal to that of the majority group.

African American Women and Knowledge Construction

The deficiency of quality education that is tailored to how African American women construct knowledge contributes to their marginalization. The inequalities of society have positioned African American women to develop a unique standpoint on knowledge acquisition based on their marginalization, meaning that they learn differently and value different knowledge than other groups do. Marginalized groups are vast holders of knowledge that does not fit the tradition paradigms, and these individuals have a right to be an integral part of how they want to use knowledge, even if it does not reflect the mainstream ("normal") approaches (Gutierrez, 1990; Hurtado, 1990). Hill Collins (2000) explains the consequences of ignoring marginalized groups' unique ways of knowing and learning: "As a result, African American women's experiences have been routinely distorted within or excluded from what counts as knowledge" (p. 251). Hill Collins further explains, "African American women not only have developed a distinctive Black women's standpoint, but have done so by using alternative ways of producing and validating knowledge" (p. 252).

Knowledge construction is greatly influenced by the social and environmental factors that create everyday lives. Even when cultural knowledge is not the direct focus, ways of

talking, ways of thinking, and ways of conceptualizing the world reflect the cultural milieu of the individual (Alexander, Schallert & Hare, 1991). Nobles (1999) defines *culture*:

Culture is a vast structure of behaviors, attitudes, values, habits, beliefs, customs, rituals, language, customs and ceremonies peculiar to a particular group of people which gives them a general design for living and patterns for interpreting reality. . . . A people's indigenous culture anchors them to reality and must be the starting point for all learning. (cited in Ford, 2010, p. 288)

Minority groups' base of knowledge and learning construction are formed from sociocultural knowledge created from their interactions with the world. Sociocultural knowledge represents a filter through which all experiences and understandings must pass. An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes their environment (Dewey, 1938; Merriam et al., 2007). Theorists such as Matsudo et al. (1993) suggest that the experiential knowledge of people of color can lead to "a better understanding of the impact of race on marginalized groups and the overt and covert benefits that members of the dominant society derive from this oppression" (Sheared et al., 2010, p. 280).

The ways in which humans view the world and interact with it reflect a largely tacit understanding they have of basic beliefs shared with members of their family, community, intellectual discipline, ethnic group, national culture, and other groups with which they associate (Alexander, Schallert, & Hare, 1991; Cole & D' Andrade, 1982; Gee & Payne-Sturges, 2013; Heath, 1983; Labov, 1987; Ogbu, 1987). According to Sheared (2010), "In order to gain an understanding about one's lived experiences, one must be willing to introduce varying perspectives, histories and cultural aspects into the traditional paradigm of

what is considered knowledge, so that there is general and common language and information” (p. 352). For African American women, new knowledge claims are rarely worked out in isolation from other individuals and are usually developed through dialogues with other members of the community that share the same experiences. Hill Collins (2000) explains, “For African American women those individuals who have lived through the experiences about which they claim to be experts have more credibility than those who have just read or thought about the experience” (p. 259). Learning from other women who share their social and medical histories can assist women in gaining and applying the knowledge they need to improve their health as well as their families’ health.

Health Literacy

The term “health literacy,” introduced in the 1970s (Simonds, 1974), has in recent years become increasingly important in the fields of public health and health care (Sorensen et al., 2012). The two disciplines are concerned with increasing people’s health literacy, and both have recognized that their target populations may struggle to understand health information and its importance to their personal health. The World Health Organization (WHO, 1998) definition of health literacy is “the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health.” To attain a health goal, an individual must possess health knowledge and ways to learn and construct the deficiency in their health knowledge base. The base of knowledge construction is created and disseminated by the dominant group with those that belong to the dominant group having access, exposure and understanding of what is constituted the discipline “norm”. The social construction of the discipline of knowledge is not recognized in regard to health or its impact on health status.

Literacy is measured by an individual's possession and understanding of what is knowledge by the dominant group. Low literacy has been linked to poor health status (Baker et al., 1997) lack of knowledge about health, and difficulty in following recommendations of health care providers (Lindau et al., 2002; Weiss et al., 1992). An important distinction must be made between the availability and the accessibility of health information (Hemming & Langille, 2006).

In female populations, the effect of low literacy extends beyond the women's own health because maternal literacy levels also correlate with her children's health care practices (Lindau et al.; Weiss et al.). Brown's (1996) study of cervical cancer and the unscreened population and the barriers included lack of knowledge and other cultural factors. The fact that individuals in minority status are categorized as having low literacy should be understood from the perspective that they do not have the opportunity (i.e. access, ability, and resources) of the dominant group knowledge base to improve their health status. Lindau et al. (2002) conducted a study that supported the association between low literacy and poor cancer screening knowledge and practices.

At the time of this research, at least fifteen different definitions of health literacy were in use (Sorensen et al.). Initially, health literacy was conceptualized as a person's ability to articulate medical jargon, a definition that was modeled on that of conventional literacy. For some time, most applications of the term literacy related to a person's ability to handle understanding and using words and numbers in a medical context. In recent years, the concept has broadened to include the understanding that health literacy involves an individual's simultaneous use of a more complex and interconnected set of abilities, such as reading and acting upon written health information, communicating needs to health

professionals, and understanding health instructions (Peerson & Saunders, 2009; Sorensen et al.). Today, the most widely used definition of health literacy from the National Library of Medicine is “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions” (Ratzan & Parker, 2000, quoted in Nielsen-Bohlman et al., 2004). In short, health literacy refers to the ability to understand, judge, sift, and use information provided in the context of one’s own life (Nutbeam, 2001).

Health Literacy and Health Outcomes

According to standardized tests, approximately 80 million U.S. adults have limited health literacy, meaning they have difficulty with the print literacy and numeracy skills needed to manage their health or that of family members (Kutner, Greenburg, Jin & Paulsen, 2006; Prins & Mooney, 2014). This finding has been referred to as the “health literacy epidemic” (Parker, Wolf & Kirsch, 2008). The current research study examines health literacy levels as the foundation of understanding health information and investigates how it may impact African American women’s knowledge related to their hypertension diagnosis. Health literacy is more than just understanding and using health information.

A person’s adherence to health care recommendations is independently related to both their understanding of disease and their health literacy (Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs, 1999; Lindau et al.; Weiss et al., 1992; Williams et al.). Critical health literacy (Nutbeam, 2000) entails the individual’s ability to evaluate information, make meaning of the social determinants of health (e.g., how education, income, race, and environmental and community conditions contribute to health disparities), and collectively advocate for one’s own health needs as well as improve health

outcomes for oneself and one's community (Chinn, 2011; Prins & Mooney, 2014). African Americans, Latinos, and Native Americans are significantly more likely to have marginal or low print and health literacy skills and worse health outcomes than White and Asian Americans (Henrich, 2012; Kutner et al., 2006; Prins & Mooney, 2014; Rothman et al., 2006).

Previous research studies have confirmed that low health literacy has a strong correlation with chronic disease and shorter life spans, especially in minority populations. Powell, Hill, and Clancy (2007) found that low health literacy was associated with worse glycemic control and poorer disease knowledge in patients with diabetes, although it did not appear to be related to their readiness to take action in managing their disease. Dramoni et al. (2008) found that race, education, sexual orientation, and the primary language of the participant had significant associations with lower levels of low health literacy ($p=.01$), which put individuals at a higher risk of being unable to adhere to an HIV treatment plan, including taking medication (Weekes, 2012). In short, a person's health literacy level has been found to be an important predictor of overall health, and certain populations with relatively poor health have been shown to have levels of health literacy that are correspondingly low.

Measuring Health Literacy

The most widely used measures of health literacy are the short version of the Rapid Estimate of Adult Literacy in Medicine (S-REALM) and the short version of the Test of Functional Health Literacy in Adults (S-TOFHLA). The REALM literacy assessment is a reading recognition test that measures the patient's ability to pronounce common medical words and lay terms for body parts and illnesses (Murphy et al., 1993). The short version of

the REALM test contains 66 words arranged in three columns in ascending order of number of syllables and increasing difficulty (Murphy et al., 1993). In a study that included 63% African American participants, the perceived likelihood of having chronic kidney disease develop or progress was positively correlated with health literacy ($p < .01$) as measured using the REALM instrument and African American race ($p < .01$) (Boulware et al., 2009; Weekes, 2012). The S-TOFHLA consists of a 50-item reading comprehension and 17-item numerical ability test, taking up to 20 minutes to administer (Parker et al., 1995). These two instruments are considered the gold standard in health literacy assessments and are the most widely-used assessment instruments. Literacy assessments can cause psychological harm to individuals because the act of being tested can itself heighten anxiety. In a study of the negative effects of literacy assessment, Parikh, Parker, and Nurss (1996) found that 40% of patients with poor reading skills felt shame; almost 75% of these patients never told their spouses, and 50% never told their children they had reading difficulties (Arozullah et al., 2007).

In 2008, Chew et al. created a three-question health literacy screener that has strong validity and reliability to the REALM and minimized participants' anxiety about being assessed. Chew's set of three health literacy screening questions is the quickest and shortest health literacy assessment tool to date and produces results in about one minute. The participant's answer to each question, on a five-point Likert scale, indicates whether the participant possesses an adequate, marginal, or inadequate literacy level. This three-question health literacy screener can be administered by having a short conversation with participants and asking them the questions in an informal way; this approach greatly reduces the participants' perception that they are being tested.

At the time of the current study, there is no gold standard for the measurement of health literacy; however, the current study employs Chew's (2008) three-question health literacy assessment tool to assess adequate levels of health literacy. Given that successful management of chronic diseases such as high blood pressure requires the ability to read, understand, and construct new knowledge requires individuals to possess an adequate level of health literacy, which is vital for adequate management of the disease (Kim et al., 2011). An increasing body of evidence shows that health literacy is linked to health status (Cho. et al., 2008; Paasche-Orlow & Wolf, 2007; Schillinger et al., 2002): the more health literate an individual is, the healthier is the individual (Zarcadoolas et al., 2006).

Increasing African American Women's Health Literacy

Formal (and non-formal) education can cultivate health literacy and improve health outcomes by increasing people's knowledge and trust of "information on health risks as well as how to avoid them" (Prins & Mooney, 2014, p. 29). Several current discussions on health literacy hold that its purpose is to enable the individual to use knowledge as an independent agent, thus "empowering" him/her to make choices that preserve, improve or manage health (Abel 2007; Rubinelli et al., 2009). Rubinelli et al. explain their perspective: "In our view, 'critical' health literacy reflects the individual's capacity to contextualize health knowledge for his or her own good health, to decide on a certain action and what that specific action means for them "in their own world" (Rubinelli et al., 2009, p. 309).

A primary epistemological assumption underlying experience in the use of dialogue in assessing knowledge claims is that "connectedness is an essential component of the knowledge validation process" (Belenky et al., 1986, p.18). The connectedness of African American women living with hypertension is a crucial support system for each other. The

connectedness is vital for learning, creating and sustaining lifestyle changes needed to live a life of optimal health with the disease. Belensky et al. (2008) explain that “connected knowers begin with an interest in the facts of other people’s lives, but they gradually shift the focus to other people’s ways of thinking” (p. 241). In a study of women’s cognitive development in 135 women by Hill Collins (2000), it was found that “a substantial number were ‘connected knowers’ and were drawn to the sort of knowledge that emerges from firsthand observation” (p. 250). Unique knowledge can be learned from individuals that are stigmatized for belonging to multiple historically oppressed social categories because of their lived experiences. Hill Collins (2000) explains that “African-American women may find it easier than others to recognize connectedness as a primary way of knowing, simply because they have more opportunities to do so and must rely upon it more heavily than others” (p. 251). The impact of connectedness with other group members is discussed by Hurtado (1992):

The nuanced social evaluation of multiple group memberships make many women of Color “relative knowers”—they understand how knowledge is not fixed and is largely socially and politically constructed. The challenge for women of color is to “know what you know” and be able to circumvent the consequences of the knowledge while being true to themselves. (p. 378)

African American women’s knowledge is the foundation of the sustainability of the African American culture because the women have sustained the Black family since historical slavery, mass incarceration and public assassination of Black men in society. Feminists of Color view knowledge as firmly rooted in the material conditions of life (Davis, 1981; hooks, 1984; Hurtado, 1992). Bell hooks (1994) reminds us that the transmission of

knowledge can be revolutionary. Living life as Black women requires wisdom because knowledge about the dynamics of intersecting oppression has been essential to U.S. Black women's survival (Hill Collins, 2000, p. 257).

Hypertension

This section discusses recent literature on high blood pressure, also known by the medical term hypertension. The diagnosis of hypertension is documented when a patient's blood pressure reading exceeds 140mmHg when the heart is pumping blood (diastolic) and when the heart is at rest between beats (systolic) reading exceeds 90mmHg. Hypertension is the highest risk factor for heart disease. Poor hypertension control is strongly linked with a person's increased risk for cardiovascular disease, heart failure, and stroke (et al., 1996; Lewington et al., 2002; Pandit et al., 2009; Staessen et. al., 1997). Cardiovascular disease (CVD) is the leading cause of death among women in the United States, with nearly half a million women dying of the disease each year (AHA, 2006; Christian et al., 2007). Every minute in the United States, someone's wife, mother, daughter, or sister dies from heart disease, stroke, or another form of CVD, with more than one in three women living with CVD, including nearly half of all African American women and 34% of White women (AHA, 2012). However, because hypertension is asymptomatic in most cases, it is not surprising that many of those affected do not know they have the condition. From 2011 to 2012, non-Hispanic Black adults (40.5%) were more likely to be diagnosed with high blood pressure than non-Hispanic White adults (30.3%) (National Healthcare Disparities Report, 2013). The high prevalence of hypertension in the African American population, with African American women having the highest prevalence, requires special attention to the phenomenon of hypertension among African American women.

Hypertension Among African American Women

Center for Disease Control (2017) published the prevalence rate of hypertension among African Americans to be almost twice the rate of Caucasians (AHA, 2018). The age-specific rates for Black women are similar to those of the next age decade of Caucasian women (Cozier et al., 2006). African American women have a higher average blood pressure compared to Caucasian women (Williams & Cashion, 2008, p. 66). The prevalence of high blood pressure in the African American women population by the new standard (greater than 130/80) is 56% of their total population compared to 42% and 41% of the Hispanic and Caucasian population respectively (American Heart Association, 2018).

African American women's hypertension rates exceed those of African-American men and other ethnic groups, although the reasons for these disparities are not understood (Artinian, 2006; Williams & Cashion, 2008). Current research indicates that the reason for African American women's increased risk of hypertension may be exposure to a variety of environmental and/or stressful social experiences (Artinian et al., 2006, Williams & Cashion, 2008). Research has suggested that African American females' health literacy level is a vital factor in predicting their ability to understand the health information that impacts their risk of having hypertension and of its progressing into heart disease. Several emerging hypotheses to explain the excess burden of hypertension in African American women concern psychosocial and environmental factors (Cozier et al., 2006). One of those factors is stress, which can lead individuals to engage in particular health behaviors that can have negative health consequences (Cohen et al., 2007; Williams et al., 2008).

The psychological health of an individual and the psychological problems they face are best predicted through negative and positive day-to-day experiences (Denollet, 2006;

Williams & Cashion, 2008). The process of negative thinking, due to either internal or external stressors, can contribute to a person's increased blood pressure. Chronic exposure to the microaggressions of everyday racism (e.g., being followed while shopping or targeted by police based on race) may be a source of unrelenting stress for minorities (Clark & Anderson, 1999; Ford & Airhihenbuwa, 2010; James, 1994). Physiological reactions to mental phenomena, such as hostile cognitions, may be more pronounced in African American or minority individuals than in Whites, thus leading to greater negative physiologic response, which over time facilitates greater disease burden (Tindle, Davis, & Kuller, 2010). Studies have also noted that African American women, in particular, are more at risk than other groups due to their exposure to various environmental stressors or stressful social experiences (Williams & Cashion, 2008). African American women's high rate of hypertension can be understood when acknowledging how the negative social experiences inherent in their socially constructed position of being African American and a woman impact their physical health.

Place and Health

Research has explored the associations between physical places and the health of those who inhabit those places. In comparison to the majority population, the health disadvantages that African Americans experience, extending across the entire spectrum of chronic diseases, has been associated with the combined effects of socio-economic status and racial discrimination (Williams & Sternthal, 2010). The North Carolina Center for Health Statistics study examined adults who reported having emotional upset and/or physical symptoms due to treatment based on their race, and found that African Americans reported experiences worse than other races when seeking health care (North Carolina Health

Statistics and Office of Minority, 2010). Current research indicates that the health of African American women may be at increased risk due to exposure to a variety of environmental and/or stressful social experiences (Artinian, 2006; Williams & Cushion, 2008).

Both SES and racial discrimination are closely tied to place-based community and societal forces. The extent to which this disadvantage results from limited resources at the individual as well as a lack of neighborhood and community wide resources (Andreson & Miller, 2005). Thus, the root causes of health disparities cannot be understood without examining the social environment in which these chronic conditions persist (Airhihenbuwa & Liburd, 2006). For African Americans, the social environment includes discrimination and racism. Self-reported discrimination or racism in research on health outcomes, so its potential influence, alone or in combination with SES, is poorly examined and understood (Andresen & Miller, 2005).

The belief that zip code may be more important than genetic code in determining health is gaining ground and may shed light on the possibility that social determinants contribute to disparities (Slade-Sawyer, 2014). The construct of place is very important when discussing disparities because where a person lives may be the strongest contributing factor of health status. In a 2013 study conducted by Ordunez et al., it was found that the Cuban experience presented support to the claim and prior data showing that unmeasured socio-structural factors account for higher blood pressures in U.S. Blacks; the study denounces the theory that genetic risk increases likelihood of presentation of the chronic disease. National samples may be biased because they fail to consider the differing opportunity and risk profiles of communities where racial and ethnic groups live (LaVeist et al., 2011).

Health status and its consequences appear to be directly tied to geographical and socioeconomic boundaries (Slade-Sawyer, 2014). Despite the importance of place as a construct that impacts health, research on the relations among race/ethnic status, health, and the social environment is sorely lacking (Lillie-Blanton & LaVeist, 2013). Although more than 50% of African Americans live in the southern United States, one cannot assume these individuals' characteristics are representative of African Americans living in other regions where the political, economic, and social environments are different (Lancaster, Watts & Dixon, 2006; Winham & Jones, 2011).

When racial groups are concentrated within a geographic area, however, focusing on racial contribution to disparities can obscure the contribution of place factors (Ford & Harawa, 2010). An individual makes choices about what spaces to occupy or to avoid which may reinforce or transgress larger societal designations of certain places to avoid or seek (Elwood, 2004). The links between residence, racial/ethnic minority status, and the social and economic correlates of health are highly correlated in the present and have had mutually reinforcing effects over the past century (Probst et al., 2004, p. 10.) These experiences must be captured to create experiential knowledge that other African Americans and all other races can learn as experiences that occurred in that location. Ford & Airhihenbuwa (2010) explain how to capture this experience: "Voice recognizes that all individuals possess experiential knowledge informed by their social locations; racialization divides groups according to their socially assigned race, their experiences of and responses to marginalization are not uniform" (p. 1396).

Martin (2003) argues that place is central to experiential learning in urban geography, and that an individual's experiential learning is affected by their preconceived

ideas about particular places in a city and by the meanings they attach to those places (p. 40). Place is a critical construct in the study of people's well-being because it enables researchers to focus their attention on how economic and political decisions impact the experiences of people who live in particular places (Berry, 1992; Gruenewald, 2003; Haas & Nachtigal, 1998; Orr, 1992; Theobald, 1997). Place, in the context of this research, is the exact geographical location that participants live their daily lives, as well as the resources available to them and the barriers that are governed by economics (individually and locally) that impact the health outcomes of African American women diagnosed with hypertension.

Hypertension in Durham County, North Carolina

Durham County has one of the highest populations of African Americans in North Carolina. The county is also home to one of the largest healthcare systems in the state, ranking in the top 10 for health care in the U.S. In 2010, Dr. Victor Dzau, Chancellor of the Duke Health Care System, stated at the Durham Health Summit, "Durham County self-proclaims to be the City of Medicine, yet it is not the city of health." In that year, the Duke Health Care System and Durham Community formed a collaboration called the Durham Health Innovations to create interventions to address the top 10 health issues of the county. The cardiovascular team, whose focus covered hypertension and heart disease, uncovered a deficiency in patient education about disease and availability of community resources, presenting significant challenges to individual-level empowerment for disease management (DTMI-Duke, 2010).

In a 2011 discussion of health disparities, the Durham County Community Health Assessment omitted from the discussion the population of African Americans, who comprise 21% of the population and are the largest minority population in Durham County (Durham

County Health Assessment, 2011). The discussion of health disparities focused on the new immigrant population, but the exchange of prioritizing the needs of one minority population for another's can be viewed as a discriminatory practice. It is important to bear in mind that research on culture and health must take care to specify salient differences among populations, while avoiding the construction of ethnic groups as "monolithic entities" (Lambert et al., 1996; Shaw et al., 2009).

In African American communities, there are more fast-food restaurants and vendors of alcoholic beverages per capita than in White communities, and the consumption of the same is arguably higher among African Americans as well (Williams, 1998). The large representation of fast food restaurants in African American communities has led to a greater consumption rate of the high fat and high sodium fast food meals by members of this population. Most fast food single meals exceed the recommended daily allowable intake for all meals consumed in a given day. Johnson et al. (2010) found that sodium content of major fast food chains that specialized in hamburger meals averaged 1751 mg of sodium, with 20% of the hamburger meals having greater than 2300mg of sodium; at fried chicken chains, over 50% of the meals had more than 2300mg of sodium. High sodium consumption is the greatest risk factor for increased blood pressure levels or hypertension. The geographical location of unhealthy fast food restaurants may be a strong contributor to prevalence rates of hypertension in the African American community in many urban communities.

Chapter Summary

This literature review has provided context for the case study exploring how African American women diagnosed with hypertension construct knowledge and the personal, social and environmental experiences that shape their health behaviors post diagnosis in Durham,

North Carolina. The chapter first discussed the role of race in creating health disparities and then presented an overview of Public Health Critical Race Praxis and intersectionality as frames through which to view the causes of these disparities. The chapter then defined health literacy and explained how the level of health literacy is associated with health outcomes.

Next, the chapter explained that the ways African American women construct new knowledge is dependent on their unique social positions, and public health educators must acknowledge and incorporate these women's voices when they seek to increase this population's knowledge for better health outcomes. Hypertension was also defined to provide context for the discussion of how hypertension has affected African American women's need to increase their health literacy. Finally, the chapter discussed the understudied concept of geographical place as an influence on African American women's health outcomes. This literature review demonstrates the need for the present study and provides insight on the complex multi-faceted nature of the research problem. This study will unveil the best strategy that African American women with hypertension prefer to learn health information specific to hypertension needed in generating interventions in reducing their high prevalence rate and provide them optimal quality life. Chapter Three describes the qualitative methods of data collection and analysis. Chapter Four presents the findings of the investigation. Chapter Five presents conclusions, importance, and recommendations.

CHAPTER THREE: METHODOLOGY

The purpose of this qualitative health case study was to explore and understand the learning and knowledge construction that guides the health literacy and health behaviors of African American women diagnosed with hypertension who reside in Durham, North Carolina. Employing a qualitative multi-case study methodology, the following research questions are addressed:

- 1) What are the experiences of African American women diagnosed with hypertension?
- 2) How do African American women diagnosed with hypertension construct knowledge to improve their health status?
- 3) How do personal, social, and environmental factors shape the health behaviors of African American women diagnosed with hypertension?
- 4) What facilitates health behaviors of African American women diagnosed with hypertension?
- 5) What hinders the health behaviors of African American women diagnosed with hypertension?

Design of the Study

Individually constructed realities can be assessed only through qualitative methods of data collection (Merriam, 2009). The overall purpose of qualitative research is to understand how people make sense of their lives and their experiences. This perspective holds that human behavior can best be understood *within the context* of how and where such behavior takes place. Patton (2002) details how to find out what something means to the participants, including how it affects them, how they think about it, and what they do about it: “You need to ask them questions, find out their experiences, and hear their stories” (p. 13). This

approach emphasizes how the problems and perspectives are defined by those being studied, and it employs methods such as participant observation, unstructured interviewing, and case studies (Bogdan & Biklen, 1992; Merriam, 1988; Merriam & Brockett, 2007). Therefore, the desire for consistency does not apply to qualitative research because the ability to replicate an ever-changing reality is impossible.

The phenomenon being studied has many complex variables that impact the pathways from health literacy to heart disease outcomes of the African American women diagnosed with hypertension that cannot be standardized; in these cases, only direct information from the populations themselves can provide insight. Classic public health doctrine—that the major determinants of population health status, and the primary explanations of disparities among population groups—lie in the social, physical, biological, economic, and political environments, which are determined by the larger society's norms, values, social stratification systems (King, 1996; Schulz & Mullings, 2006). PHCR highlights the intersectionality of the participants being African American and women in the U. S. that increases the risk of them being victim to negative interactions in society that can cause mental and physical stress resulting in high blood pressure. The power of voice in knowledge production in the PHCR framework provides the true understanding of the phenomenon of high blood pressure in the population of African American women by their telling their own personal stories. The fact that there are no simple answers to the research questions or explanations of the phenomenon is why a multi-case study approach is the most suitable methodology for exploring the phenomenon. By recording and analyzing the voices of multiple participants, the researcher is able to explore the complex answers and multi-

faceted influences on these women whose intersectional identity provides a much-needed understanding of how they learn to have a positive impact on their own health.

Case Study Design

The essence of a case study, or the central tendency among all case studies, is that they try to illuminate a decision or set of decisions: why they were made, how they were implemented, and with what result (Schramm, 1971; Yin, 2014). According to Yin (2003), a case study design should be considered when any of the following conditions are met: (a) the focus of the study is to answer “how” and “why” questions; (b) the behavior of those involved in the study cannot be manipulated; (c) the researcher wants to cover contextual conditions because these are believed to be relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and the context. All of these conditions apply to the current study.

This study utilizes a qualitative multi-case study design, with “case study” defined as an empirical inquiry that “investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Merriam, 2009, p. 40). As Stake (2005) suggests, case study is less of a methodological choice than “a choice of what is to be studied.” Stake further cites other researchers who explain the choice of a case study design: “The ‘what’ is a *bounded system* (Smith, 1978), a single entity or a unit around which there are boundaries. Patton (1990) differentiated *critical* cases as ‘those that can make a point quite dramatically or are, for some reason, particularly important in the scheme of things’” (p. 174).

Site selection. In case study research, unlike survey research, the number and representativeness of the sample or respondents are not major considerations. Rather, the

crucial factor is the potential of each participant to contribute to the development of insight and understanding of the phenomenon (Merriam, 2009). The knowledge produced from the insight of the participants is shaped by the culture of their socially-constructed position in the U.S. society.

Durham County, North Carolina, was selected for the site of the research study because it is part of the Stroke Belt, which includes all states located in the southeastern region of the U.S. and leads the country with the highest prevalence of strokes for the entire population. Durham is also home to the Duke Health System, a world-renowned health care system that leads health care in many specialty areas. In addition, Durham County residents are more than 30% population African American women. Durham County provides a greater feasibility of fulfilling participant recruitment goals by utilizing established relationships with trusted community organizations that are located within the county.

Sampling strategy. Patton (2002) gives guidelines for purposeful sampling and suggests that its usefulness is to ensure that the sample is information rich. The ultimate outcome of purposeful sampling is selecting information-rich cases that fit the phenomenon that is driving the inquiry for this body of research. Sandelowski (1995) suggests that maximum variation is one of the most frequently employed kinds of purposeful sampling, explaining that a “researcher wanting maximum variation in their sample must decide what kind(s) of variation they want to maximize and when to maximize each kind” (p. 181). This method increases the likelihood of achieving maximum variation sampling.

To achieve sample-rich information, this research study employs maximum variation using a significant range of individuals, groups or settings (Onwuegbuzie & Leech, 2007). Maximum variation sampling involves looking for outlier cases to see whether the main

patterns still hold (Miles, Huberman and Saldana, 2014). A knowledge claim that meets the criteria of adequacy for one group and thus is judged to be acceptable may not be translatable into the terms of a different group although worldviews share a common vocabulary, the ideas themselves defy direct translation (Hill Collins, 2000, p. 255).

As Stake (2006) explains, “In multi-case study research, the single case is of interest because it belongs to a particular collection of cases. Individual cases share a common characteristic or condition. The cases in the collection are categorically bound together by a specific phenomenon” (p. 5). My cases are bounded together by the common conditions of the participants being African American women residing in the county of Durham, North Carolina. I selected eighteen participants that reside in Durham County, NC. Goetz and LeCompte (1984) recommended comparable case selection, which involves selecting individuals, sites, and groups on the same relevant characteristics over time (a replication strategy) (cited in Miles, Huberman & Saldana, 2014).

The multiple cases represent the different residential locations that comprise the county. Residential zip codes were used to confirm participant inclusion criteria of participants residing within geographical location of Durham County, NC. My maximum variation will occur from representation of my target population in selecting a complete range of zip codes within Durham County for comparability. Maximum variation is desired in the research study for comparison and contrast of varying issues that may be related to neighborhood geographical location, which are focuses of qualitative research on the influence geography on health and illness (Curtis et al., 2000).

The variation in participants’ locations within Durham county were determined by residential classification. Durham county has 18 residential zip codes within its county limits.

Table 1
Estimated 2011 Populations in Durham Zip Codes

Zip code	Population estimate	Female residents	African-American residents
27503	6,335	1,560	399
27572	7,164	3,550	851
27701	22,919	11,545	10,389
27703	48,060	25,249	21,464
27704	36,407	19,573	18,090
27705	50,188	25,932	8,690
27707	50,754	26,370	18,744
27709	1,165	593	Unknown
27712	21,119	11,246	3,952
27713	52,917	29,087	16,730

NOTE: Retrieved from <http://www.city-data.com/zips>

Participant selection. The unit of analysis for this study is African American women who have been diagnosed with hypertension and the boundaries for the unit of analysis for this phenomenon of research is their residential geographical location of Durham, NC. Purposeful sampling was used to generate saturation within the data a sample of approximately eighteen African American women diagnosed with hypertension.

Participants for this study were selected by five essential inclusion criteria defined by the study phenomenon:

- Race: Participant is African American/Black
- Gender: Participant is an adult female
- Age: 21-80 years of age
- Chronic Disease: Diagnosed with Hypertension/ High Blood Pressure
- Location: Resides in Durham County, North Carolina

The first criterion for the study is applicable because the focus of the study is the racial group, African American, that presents with the highest proportion of individuals diagnosed with hypertension. The second criterion for the study is applicable because the intersecting focus of being African American and female, who have the highest prevalence rates of hypertension by gender and race. The third criterion is the diagnosis of the chronic disease hypertension that created the phenomenon to study. The fourth criterion for inclusion is residing in the research location site of Durham County, NC, pre-selected for prevalence of the phenomenon to study.

In reaching participant recruitment goals this research study utilized established relationships with trusted community organizations that are located within the county of

Durham. An introductory letter was mailed to the American Heart Association, Director of Community & Multicultural Affairs for the Triangle area of North Carolina and the Community Health Coalition requesting the organizations to forward my recruitment letter (Appendix A) to their constituents in Durham County, North Carolina. The introductory letter provided a brief background of myself, the researcher, an overview of the proposed research study and request their assistance with my recruitment efforts (Appendix A). Recruited participants were provided an Informed Consent form (Appendix B) explaining the study and their role should they choose to become involved in the study. Participants understood that their involvement in the study was strictly voluntary and they had the option to withdraw at any point in the study. Participants that completed all requirements of the study received a \$25 gift card for their participation.

Data Collection

Qualitative research involves simultaneous data collection and data analysis. In such cases, data collection and analysis are so intertwined that they should be integrated in a single person who is the “choreographer,” so the researcher is the instrument (Janesick, 2003) of his/her own “dance” (Bradley et. al., 2007). Qualitative case study research methods were used to answer the research questions and explore the phenomenon. Case study methodology recognizes the importance of collecting different forms of data collection that provide rich, thick information to better understand the phenomenon of study. Data collection for this study occurred through interviews and observations.

Qualitative data from interviews consists of “direct quotations from people about their experiences, opinions, feelings, and knowledge” (Patton, 2002) that are obtained through conversations with participants; detailed descriptions of people’s activities,

behaviors, and actions as recorded in observations; and “excerpts, quotations, or entire passages extracted from various types of documents” (Merriam, 2009). Any and all methods of gathering data, from testing to interviewing, can be used in a case study (Merriam, 2009). The data in a case study consists of observations’ research notes, surveys, and interviews for each research participant; all of these materials are considered to comprise one individual case record. Each individual case study constitutes a “whole” study, in which convergent evidence is sought regarding the facts and conclusions for the case; each case’s conclusions are then considered to be the information that needs replication by other individual cases (Yin, 2014).

The two primary sources of data in the current study are as follows:

- Semi-structured interviews that consist of open-ended questions regarding their knowledge, facilitators, and barriers related to heart disease outcomes.
- Real world observation recorded as raw field notes before, during and after in person interviews are conducted of the neighborhood that the participant resides in Durham, NC.

Interviews. One of the most important sources of case study evidence is the interview (Yin, 2014), while the most common form of interview is the person-to-person encounter, in which one person elicits information from another (Merriam, 2009). The interviews were conducted to elicit the in-depth thoughts and ideas from African American women diagnosed with hypertension about their specific experiences, including how they learn and construct knowledge and their perceptions of activities and life events that impact their health behavior. In speaking of grave matters such as the diagnosis of hypertension, personal experience is considered very good evidence. As Gwaltney (1980) explains about

qualitative researchers, “With us, distant statistics are certainly not as important as the actual experience of a sober person” (p. 7). As part of this qualitative case study research, I engaged African American women in semi-structured one-on-one interviews to provide opportunities for them to describe their experiences and the factors that shape their health decisions following their hypertension diagnoses. In-person interviews create an atmosphere for exploring what is “in and on someone else’s mind” (Merriam, 2009; Patton, 2002). Hill Collins (2000) explains, “Feminist scholars claim that women as a group are more likely than men to use lived experiences in assessing knowledge” (p. 259).

All interviews took place in Durham, North Carolina. The interviews took place at locations chosen by the participants. The interview locations included a private room at the Durham County Main library, participants’ homes, and the breakroom at the new Durham County courthouse. Eleven interviews were conducted in residential locations, three interviews were conducted at the Durham County courthouse, and one interview was completed in a private room at the Durham County Main library. All the interviews were conducted during afternoon time periods within a thirteen-day time period.

The data collection process for this research study began with the researcher introducing herself and thanking the potential participants or agreeing to participate in the research study. Next, the research distributed the inform consent document to the potential participant for them to read or have the researcher read to them. The researcher strongly informs the potential researcher to please feel free to ask any questions that arise from the information on the inform consent form. The researcher verbally states that participation in this research study is voluntary as stated on the informed consent form. Anytime during the interview process the potential participant can verbally state they do not wish to continue

their participation and the interview process will end. The research verbally states that if the potential participant chose to continue in the interview process that at completion they will receive a \$25 gift card of their choice from either BP, Target or Wal-Mart. Upon written consent from the participant for participation in the research study, the researcher ask the participant can the interview session be recorded by laptop and handheld recorder? The participants' verbal consent to agree to being recorded starts the interview process. The researcher follows the semi-structured interview process by querying the interview questions from Appendix D- Participant Selection Questionnaire, Appendix E- Health Literacy Knowledge and Appendix F- Interview Guide. Upon completion of the interview process the researcher informs the participants that Appendix G- Observation Guide will be used to collect information of environmental neighborhood characteristics where they reside. The researcher informs the participants that their presence is not required to complete Appendix-G Observation Guide. After completion of the interview, the researcher distributes a \$25 gift card to the participant. The participants sign their name and zip code on the gift card log book as written documentation of receipt of their gift card.

Observations. Critical health literacy (Nutbeam, 2000) entails the ability to evaluate information, make meaning of the social determinants of health (e.g., how education, income, race and environmental and community conditions contribute to health disparities), and collectively advocate for one's health needs and improve health outcomes for oneself and one's community (Chinn, 2011; Prins & Mooney, 2014). Observations of the participants in the context of the neighborhood environment where participants reside was the second source of primary data. Because a case study should take place in the real-world setting of the case, one way of eliciting this information is creating the opportunity for direct observations (Yin,

2014), an opportunity that provides vital and in-depth case study information. My primary source included the following: availability and conditions of sidewalks, presence of pedestrians in the neighborhood utilizing the sidewalks, and the overall condition of the neighborhood. Observing these neighborhood characteristics provided greater insight into the social and environmental impacts that may help to explain the prevalence of hypertension among African American women in Durham, North Carolina.

Data Analysis

An integral premise of PHCR is that data should not be perspective-less, but should be considered in particular social contexts of the individuals that are categorized in intersectional roles of oppression by gender and race. In defining this study, race-related constructs measures were seen as context-specific because racism functions differently depending on the place, population, time and context (Ford & Airhihenbuwa, 2010, p. 1393). Intersectional analysis draws attention to the policies, practices, and outcomes of institutional racism and discrimination (Schulz & Mullings, 2006, p. 195). The historical implications of unequal distribution of quality education in segregated and low-performing schools diminishes the ability for students to have adequate health literacy which is essential to promoting and maintaining optimal health in adulthood.

The lived experiences of participants as self-reported African American women were measured with sensitivity to the implications of the history that created the United States of America and the maintenance of the status quo today. Intersectional analysis emphasizes the importance of the ways social groups and individuals are represented—the ways they are viewed and depicted in the society at large (Chin & Humikowski, 2002; hooks, 1992; Zambrana, Mogel, & Scrimshaw, 1987); one result is the acceptable negative imaging and

portrayal of African American women in the media and political environments. Their intersectional experiences are greater than the sum of racism and sexism; any analysis that does not take intersectionality into account cannot sufficiently address the particular manner in which Black women are subordinated (Crenshaw, 1989).

The perspectives of subjects must inform data interpretation and meaning designation (Graham et al., 2011). Data, considered in the absence of context, are often misperceived, misconstrued, and mismanaged (Graham et al., 2011; Lawrence, 1995). In a sense, all qualitative data analysis is content analysis in that the content of interviews, observations, and documents are analyzed (Merriam, 2009). Beginning with the observation guide, a simple way to summarize time-limited data, the researcher proceeds through first-level coding, second-level or pattern codes, and the process of deriving even more general themes called memoing (Miles & Huberman, 1994).

The observation guide is a single sheet used to write some general observations and brief summarized answers to the interview questions and any other salient information to assist in the explanation of the phenomenon of study. The observation guide sheet captures thoughtful impressions and reflections (Miles, Huberman & Saldana, 2014). In the current study, the observation guide captured the presence of sidewalks and whether they were used if available. The second step of data analysis is completing a theme version of the observation guide to categorize the most salient points from the answers to the interview questions into relevant themes being presented. The third step in the data analysis process is to complete a document summary form; this form inventories all relevant information to the observations of the geographical location (i.e., pictures, crime reports, and maps). The final

step of data analysis is the interview recordings were transcribed by a professional transcriptionist. The transcriptions were compared with the original recordings for accuracy.

Data Coding

The process of reviewing a set of field notes, transcribed or synthesized, and dissecting them meaningfully, while keeping the relations between the parts intact is coding (Miles & Huberman, 1994). Transcribed data was analyzed for emergent themes by a single coder using the constant comparison approach (Bernard & Ryan, 2010).

When assigning meaning to the information compiled during a study into categories, codes are created to reflect relevant information for interpretation. Coding the various words, phrases, sentences, paragraphs—connected or unconnected—guides the researcher in quickly finding, pulling out, and clustering segments relating to a particular research question, construct or theme (Miles and Huberman, 1994). The researcher began the analysis using aprior codes related to previous research to answer the research questions. The aprior codes were founded on existing research in regard to health disparities. Predetermined codes at the initial phase of analysis were directly related to the research questions: experiences, knowledge, personal factors, social factors, environmental factors, facilitators and barriers. Using pre-determined codes is popular in the health sciences to explain health-seeking behaviors (Kodish & Gittelsohn, 2011). After each transcript was read, duplicate idea and quotes revealed patterns of emerging themes. Emergent themes were compared and contrasted with a priori codes. Emergent themes confirming or rejecting a priori codes resulted in emergent themes prevailing. The final read resulted in emergent themes saturated by sequential participant transcripts with no new themes emerging.

Data Theming

Themes are recurrent unifying concepts or statements (Boyatzis, 1998) about the subject of inquiry (Bradley et al., 2007). Theming the data is appropriate for virtually all qualitative studies, and especially for phenomenology and those studies that explore a participant's psychological world of beliefs, constructs, identity development, and emotional experiences (Giorgi & Giorgi, 2003; Saldana, 2013; Smith et al., 2009; Smith & Osborn, 2008; Wertz et al., 2011). A subcategory of themes under each major code category were determined as they were revealed from the data collection process. As categories were revealed, they reflected a range of properties along a continuum that depicted specific characteristics (Strauss & Corbin, 1998). The analysis of the participant interviews generated categories and properties that corresponded with the five research questions for this study. As data processing occurred, I converted to inductive coding to be open to emerging codes than were then incorporated.

Some experts (Janesick 2003; Morse, 1994; Morse & Richards, 2002;) argue that a single researcher conducting all the coding in a qualitative study is both sufficient and preferred (Bradley et. al., 2007). In case study analysis, the case study information is edited, redundancies are sorted out, parts are fitted together, and the case records are organized for ready access either chronically or topically (Merriam, 2009). In the current study, the information gleaned from the data collection process was subjected to the three-criterion analysis method described by Huberman and Miles (1994): data reduction, data display, and conclusion.

Data reduction refers to the process of “selecting, focusing, simplifying, abstracting and transforming” (Miles & Huberman, 1994) the words from the participants into

explanations and descriptions of the phenomenon. The reoccurring perceptions and themes of my target population that resulted from the interview were coded and organized in a taxonomy system. Taxonomy is a formal system for classifying multifaceted, complex phenomena according to a set of common conceptual domains and dimensions (Bradley et al., 2007; Patton, 2002).

The second phase, data display, was achieved in narrative form, supported by excerpts from the data (Appleton, 1995). After completing all interviews, I conducted a comparative analysis of emergent themes. The comparison allowed me to assess whether certain concepts, relationships among concepts, or positive/negative perspectives were more apparent or are experienced differently in one geographical location than in another (Bradley et al., 2007). The third stream of analysis activity involves drawing meaning from the recurring themes from the interview narrative text and field observations for a deeper understanding of the phenomenon. Any common themes that emerged from maximum variation have the highest value from capturing the core experiences of the target population of the phenomenon.

Positionality/Subjectivity Statement

Baptiste (2001) suggested that qualitative researchers make explicit their epistemology, that is, the “nature, sources, and process of [their] knowledge and knowing” (p. 8). As Ladson-Billings (2000) explains, epistemologies encompass not only ways of knowing and perceiving the world but also systems of knowing the world. From all of these experiences, many patients and community members, especially persons of color, would ask to have the health information that they received from another health care professional to improve or maintain their health status be “translated” into “words” that they can understand

known as plain everyday English. The idea is that epistemology needs to be “colored” and that the research community may need to be exposed to theories, perspectives, views, positions, and discourses that emerge from the experiences and points of view of people and researchers of color that represent minority groups (Milner, 2007).

Prior to interviewing those who have had direct experience with the phenomenon, the researcher usually explores his or her own experiences, in part to examine dimensions of the experiences and in part to become aware of personal prejudices, viewpoints, and assumptions (Merriam, 2009). Hurtado’s 1996 essay focuses on how positionality is manifested in the writings of feminists of color—disclosure of the researcher’s biases and philosophical approaches is important (cited in Bradley, Curry, & Divers, 2007). Given that all writing is positioned with the researcher, it is critical that he or she be transparent and willing to reflect on the effect of his or her background, life experiences, and connection to the focus of the study (Creswell, 2003). The writing and writing style should reflect the emotional nature of the work—the researcher’s passions, concerns, and purpose (Graham et al., 2011).

I am African American woman living in Durham County, North Carolina, who has been diagnosed with hypertension in the past but is presently not affected by the disease. I am classified as a health care professional with 13 years of direct patient care experience at a major health care system and 7 years of community health experience with two non-profit organizations (Community Health Coalition and American Heart Association). As a result, I am very aware of the social and environmental factors that impact individual health that results in the diagnosis of hypertension in Durham. I have an emic perspective of this phenomenon, defined by Merriam (2009) as the perspective of an insider to the culture.

My father literally dropped dead in front of my sister when I was 16 from a heart attack from undiagnosed hypertension. My mother had her first heart attack when I was 19, another when I was 23. After the second heart attack, my mother started to have uncontrollable seizures, so my sister had to move back into the house with my mother and we took jobs working alternate schedules so one of us was always available for our mother. My mother was hypertensive, which means she took at least three different high blood pressure medications to try to control her hypertension, and they, in combination, did not succeed. My mother had her final heart attack two weeks after my 26th birthday. My determination is fueled in this area of research so that other woman of color live longer than my mother and their children will not have to watch their mother suffering helplessly from the complications of uncontrolled hypertension.

Validity and Reliability

Ensuring validity and reliability are essential in qualitative research. The investigator must ensure that a reader is confident about the methods used to conduct and subsequent results. Validity is understood in two ways: as having *internal* validity and *external* validity. Internal validity centers on the extent to which the results match reality; the essence of external validity is the reader's ability to apply the findings to other situations. Predicted patterns appear to be similar; in this way, the results can help a case study to strengthen its internal validity (Yin, 2014, pg.143).

Likewise, ensuring reliability is problematic in qualitative research. Instead of aiming for a reader to replicate the study, the aim is to ensure that the findings are consistent with the data collected (Merriam, 2002). To ensure validity and reliability, I employed multiple strategies. The first strategy was triangulation. Denzin and Lincoln (2011) proposed four

types of triangulation: the use of multiple methods, multiple sources of data, multiple investigators, and multiple theories to confirm emerging findings. Specifically, I used multiple sources of data. Two methods of data collection were used to triangulate the data: semi-structured interviews and observations. The second strategy includes member checks. According to Merriam (2002), it is important to return transcriptions of interviews to participants to ensure that their responses are accurate. In addition to returning the transcripts, I shared my preliminary findings with participants to verify that my interpretation matches reality. I provided rich, thick descriptions of my participants and detailed write-up of their quotes so that the reader is able glean a sense of the wholeness of the data. And, finally, I was explicit about my positionality and subjectivities as a researcher. All of the aforementioned strategies were to ensure rigor for this study.

Chapter Summary

This chapter outlined my overall qualitative methodologic research approach, exploring how African American women diagnosed with hypertension construct knowledge and the personal, social and environmental experiences that shape their health behaviors post diagnosis in Durham, North Carolina. The chapter first discussed the design of the research that includes the case study design, site selection and sampling strategy to achieve purposeful sampling of the target population on the research phenomenon. The chapter then disclosed the participant selection criteria for inclusion in this research study. Next, the chapter explained the data collection process that includes interviews encompassed by step by step process of capturing participant data and collecting observation data. The chapter then unveils the data analysis data coding and levels of data theming of the research data finding collected. The following chapter divulges the researcher's positionality and subjectivity in

regard to the research phenomenon and the study in itself. The last chapter reports the validity and reliability of the research data collection methods in conducting the research. Chapter Four presents the findings of the investigation. Chapter Five presents conclusions, importance, and recommendations.

CHAPTER FOUR: FINDINGS

Employing a qualitative case study method provides the opportunity to explore the learning of African American women diagnosed with hypertension and the personal, environmental, and social experiences that shape their health behaviors. The research questions that explore those constructs are answered most appropriately with using a qualitative case study research design. The research questions guiding this work are as follows:

- 1) What are the experiences of African American women diagnosed with hypertension?
- 2) How do African American women diagnosed with hypertension construct knowledge?
- 3) How do personal, social, and environmental factors shape the health behaviors of African American women diagnosed with hypertension?
- 4) What factors facilitate behaviors of African American women diagnosed with hypertension?
- 5) What factors hinder the health behaviors of African American women diagnosed with hypertension?

This chapter explores the experiences of these women within the context of the personal, social and environmental factors that shape their health behavior as they live their daily lives in Durham, NC. These findings are detailed in two sections.

First, the demographics of each participant that includes the geographical location in which they reside is presented. The next section captures the voices of the participants'

experiences in their own words, including how they prefer to acquire new health knowledge, and the personal, environmental, and social experiences shape their health behaviors.

Table 2
Participant Demographic Overview

Pseudonym	Durham Native	Age	Years Diagnosed with High Blood Pressure	Family Members with High Blood Pressure	Veteran	Marital Status	Employment Status	Education Level
Cynthia	Yes	50	15	yes	No	Head of Household	Full time Employment	College Graduate
Emma	Yes	39	3	Yes	No	Head of Household	Full time Employment	1 to 3 years of College
Karo	Yes	43	8	No	No	Head of Household	Full time Student	1 to 3 years of college
Janie	Yes	42	3	Yes	No	Head of Household	Full time Employment	1 to 3 years of college
Jenny	Yes	44	7	Yes	No	Divorced	Disabled	College Graduate
Jessie	No	41	2	Yes	No	Single	Self-Employed	College Graduate
Josephine	Yes	78	5	Yes	No	Divorced	Retired	1 to 3 years of college
Leora	Yes	44	8	Yes	No	Single	Full time Employment	College Graduate
Louise	No	57	10	No	No	Married	Full time Employment	College Graduate
Lula	No	62	20	Yes	No	Married	Full time Employment	1 to 3 years of College
Mary	No	49	7	Yes	No	Married	Full time Employment	College Graduate
Rebecca	Yes	55	10	No	Yes	Divorced	Full time Employment	1 to 3 years of College
Rita	No	35	9	No	No	Married	Full Time Employment	1 to 3 years of College
Virginia	Yes	44	7	Yes	No	Married	Full Time Employment	Graduate School
Wilma	Yes	23	1	Yes	No	Single	Full Time Employment	College Graduate
Average	n/a	47	8	n/a	n/a	n/a	n/a	n/a

Participant Demographic Overview

Table 2 presents basic demographics of the African American women who consented to participate in this research study. Of the fifteen participants in the research study, ten are Durham natives and five are non-natives to Durham. Those that are Durham natives prove a strong foundation and connection with family, friends, and the community in which they were born and raised. The participants' ages range from 23 to 78 years of age, with an average age of 44 years.

The range of years participants have lived with the diagnosis of high blood pressure is from 1 to 20 years, with an average of 8 years of living with this chronic disease. Eleven of the participants have family members that also live with the diagnosis of high blood pressure.

The marital status of the women are as follows: seven are single, three are divorced, and five are married. There were nine participants that are head of the household, a status that suggests the women have additional responsibilities of financially providing and caring for other members of their immediate family, especially children. Most heads of household are also employed full time. Eleven of the ladies that participated in the study work full time outside of the home. The other three women are disabled, retired and self-employed. Of the fifteen participants, only one participant is a veteran of the armed forces of the United States. The education levels of the participants include seven individuals with 1 to 3 years of college, seven women who possess college degrees, and one woman who has a graduate degree. The participant cohort is comprised of educated African American women; however, many reported that they have difficulty in filling out medical forms by themselves and/or problems learning about their medical condition because difficulty understanding the written information and/or that they need someone to help them read hospital materials.

The Participants' Voices

The stories of the African American women diagnosed with hypertension in this study are full of authenticity, candor, perseverance and strength. These stories are narrative portraits of everyday lives of African American women not heard in the general media or any other public outlet.

American society's views of African American women are very often viewed from a negative perspective. According to intersectionality theory, the different status identifies holders within any given social group as differently situated with respect to how much, and the form of, discrimination they are likely to face (Carbado & Gulati, 2001).

African American women's negative everyday interactions in American society can be seen as contributors to the high prevalence of hypertension. This section of this chapter highlights the perspectives and experiences of fifteen African American women with hypertension, a voice never considered before as a way to answer the research questions that guide this study.

This section begins with a detailed summary of the findings for each of the five research questions. Table 3 illustrates the summary of findings for each research question.

Table 3
Summary of Findings per Research Question

-
- RQ 1: What are the experiences of African American women diagnosed with hypertension?
- a. Participants were in the state of stressing at the moment of being diagnosed with hypertension
 - i. The reason for the some of the participants stressing was entering or expanding their parenting role
 - b. After diagnosis participants dedicated themselves to improving their health behavior
 - i. The majority of the participants improved their health behavior by changing dietary habits
 - ii. Some of the participants started improved their health behaviors by exercising more as part of their daily routine
 - iii. Almost all participants felt strongly committed to increasing their health awareness of hypertension complications, medication and risk
- RQ 2: How do African American women diagnosed with hypertension construct new health knowledge?
- a. The majority of participants preferred style for acquiring new health knowledge is experiential learning
 - i. The participants preferred the experiential learning of new health knowledge to be acquired from peering with other African American women diagnosed with hypertension
 - b. A few of the participants preferred acquiring new health knowledge by learning from health care professionals
 - c. Almost all participants acquired new health knowledge by searching the internet
- RQ 3: How do personal, social and environmental factors shape the health behaviors of African American women diagnosed with hypertension?
- a. The vast majority of participants intersectionality positioning had the strongest impact on health status
 - i. The negative stereotypes of the African American population in the United States results in the participants being subjected to prejudice
 - ii. The historical implications of the creation of the United States assigning value and opportunities to people based on their physical characteristics results in the participants being subjected to racism
 - b. Underutilizing of sidewalks, when present in neighborhoods, to yield positive impact on health behaviors

Table 3 continued

RQ 4: What factors facilitate positive health behaviors of African American women diagnosed with hypertension?

- a. The greatest positive influence on positive health behavior for participants is being part of a family
 - i. The participants having children/grandchildren motivates them to improve their health behaviors

RQ 5: What factors hinder positive health behaviors of African American women diagnosed with hypertension?

- a. Many participants expressed lacking self-efficacy was the greatest hindrance to their implementation of positive health behaviors
 - b. Several participants stated that the lacking disposable finances is an additional hindrance in the implementation of positive health behaviors
 - i. Some participants strongly expressed that the pricing of healthy foods was a hindrance in the implementation of positive health behaviors
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Cynthia

Cynthia is 50 years of age and has been living with diagnosed high blood pressure for 15 years. She has other family members that are diagnosed with high blood pressure. Cynthia is a Durham native residing in the rural part of the county. She is a college graduate with full time employment and head of her household. Cynthia is confident filling out medical forms, does not need someone to help her read hospital materials, and does not have problems learning about her medical condition because of difficulty understanding written information. Cynthia defines high blood pressure as, “When your top number is higher than your bottom number. I can’t say the technical terms but I think that’s it. Some of the factors come from weight, your family history, eating, lack of exercise, lack of knowledge as well.” After her diagnosis with high blood pressure, Cynthia has made herself more aware of the choices she makes related to exercise, eating and how she lives her life because she is aware that high blood pressure will affect her life span.

Cynthia's neighborhood does not have the presence of sidewalks that could be used to facilitate positive health behaviors like walking. Cynthia stated that, "My community is lacking sidewalks. It doesn't stop me from getting out since I live in a community that is off from the main street so I can still walk in my community, but I would say community as a whole is lacking sidewalks."

Cynthia feels to improve the knowledge of heart health for women in her community, there could be the addition of, "Probably health fairs at different locations where people shop. Make people aware where they can go to an open forum where they can have dialog and discussion, where they can learn information how they can make changes in their life."

Emma

Emma is 39 years of age and has been living with her diagnosis of high blood pressure for 3 years. She has other family members that are diagnosed with high blood pressure. Emma is a Durham native residing in the suburban part of the county. She has attended college and employment status is fulltime. Emma is head of her household.

Emma is confident filling out medical forms and does not need someone to help her read hospital materials, but she occasionally has problems learning about her medical condition because she has difficulty understanding the written information related to this chronic disease. Emma requires more education on the actions, risk factors, and symptoms related to heart disease. Emma defines high blood pressure as, "When the numbers are high, I would say when you're dealing with stress." After hearing the diagnosis of high blood pressure, Emma recalled learning new knowledge to improve her health status:

When I had the headaches, I had to learn to limit my caffeine intake and the fried foods and the greasy foods. I learned these things from other people diagnosed with

high blood pressure. I heard other people and their side effects, so I don't want to be prescribed any medicine that could damage other organs or other parts of my body. Emma's discussed how her community helps her improves her health: "Well our recreation center contributes to the fact that I can go there and exercise." Emma neighborhood does not have the presence of sidewalks that could be used to facilitate positive health behaviors like walking. Emma increases her health knowledge by asking questions of other African American women with high blood pressure. Emma feels to improve the knowledge of heart health for women in her community, "There need to be more group studies done in the communities and in the recreation centers to help inform Black females about hypertension and high blood pressure."

Karo

Karo is 43 years of age and has been living with diagnosed high blood pressure for 8 years. She has other family members that are diagnosed with high blood pressure. Karo is a Durham native residing in the rural part of the county. She is a full-time college student and head of her household. Her health literacy level is adequate. Karo is confident filling out medical forms, does not need someone to help her read hospital materials, but she occasionally has problems learning about her medical condition because she has difficulty understanding the written information related to this chronic disease. Karo defines high blood pressure as "a throbbing headache and you feel like your head is about to explode."

After hearing the diagnosis of high blood pressure, Karo recounted learning knowledge to improve her health status:

I had to learn from the doctor to be less stressful and if I feel like the headache part is coming on to take something to get rid of it. Health care professionals play a

significant role because they try to help me keep my blood pressure down. I think they play a very important role if you listen to them.

Karo's neighborhood does not have sidewalks that could be used to facilitate positive health behaviors like walking. Per Karo, "The larger African American population high rate of heart disease needs to be addressed by learning a bit more about heart disease and advocate for that education."

Janie

Janie is 42 years of age has been living with diagnosed high blood pressure for 3 years. She has other family members that are diagnosed with high blood pressure. Janie is a Durham native residing in the rural part of the county. She has attended college and is employed full time. Janie is head of her household. Janie is confident filling out medical forms, does not need someone to help her read hospital materials, and does not have problems learning about her medical condition because of difficulty understanding written information. Janie explains how her high blood pressure affects her: My heart has a harder time pumping the blood throughout my body due to factors such as weight, stress, thickening or hardening of the arteries which I'm sure is due to my lifestyle; how I eat, how I don't exercise."

Janie explained how her community contributes to her health:

Well, working downtown Durham, I realize that they're kind of catering more to those that are trying to do more of a healthy living. We have signs that tell you how many miles you walked if you go from one point to another. We've got trails in my community now for those that like to walk or bike, like the American Tobacco trail.

Janie's neighborhood does have the presence of sidewalks, but Janie does not utilize them to facilitate positive health behaviors like walking. Janie strongly advocates about what needs to be done to address the high rate of heart disease in the African American population:

Education, I think it probably needs to start in the school system with the children. I would love for children to come home and say we learned today that instead of cooking in this oil or instead of adding butter to everything that here's an alternative. If they're learning it in schools kids can get parents to do something a little different.

Jenny

Jenny is 44 years of age and has been living with diagnosed high blood pressure for 7 years. She has other family members that are diagnosed with high blood pressure. Jenny is a Durham native residing in the rural part of the county. She is a college graduate but not employed due to being disabled. Jenny is divorced.

Jenny often does not feel confident filling out medical forms, sometimes needs someone to help her read hospital materials, and often has problems learning about her medical condition because she has difficulty understanding the written information related to this chronic disease.

When asked to explain what high blood pressure is to her, she says, "I don't know. I've never been asked that question. Something my doctor said I have that I need to take pills for." After hearing the diagnosis of high blood pressure, Jenny had to learn knowledge to improve her health status.

She explains the extent of what she learned:

I guess the problem is I didn't learn anything. I just was told to watch my diet and my salt intake but as far as the affect it has on my heart I was never given any

information. My health care professional just give me medicine whenever I run out. They never ask anything about it. I still don't have any knowledge about it. Because I'm African-American it feels like 'hey just give her medication', I'm not going to ask questions about it or get more information about it.

Jenny's neighborhood does have the presence of sidewalks, but Jenny does not utilize them to facilitate positive health behaviors like walking, nor does she use the on-site recreational facility. Jenny strongly advocated that what needs to be done to address the high rate of heart disease in the African American population is, "Lower the prices of healthy foods or assist us with places to get healthier foods."

Jessie

Jessie is 41 years of age and has been living with diagnosed high blood pressure for 2 years. She has other family members that are diagnosed with high blood pressure. Jessie is not a Durham native, but she currently resides in the rural part of the county. She is a college graduate and is self-employed. Jessie is single.

Jessie often feels confident filling out medical forms by herself and occasionally needs someone help her to read hospital materials, but she never has problems learning about her medical condition because of difficulty understanding written information. Jessie states that high blood pressure is, "Anything that is higher than the normal. I think the normal is 120/80 I believe and mine is always both the bottom number and the top number." Jessie states the factors influencing her decisions about the need to increase her health knowledge,

I think basically because I did have a stroke (8 months ago, I was 40) and so that is something that now I'm like OK, I have things to do other than employment. Because I did have a stroke now I'm very much aware that I want to change it.

Jessie's neighborhood does have the presence of sidewalks, but Jessie does not utilize them to facilitate positive health behaviors like walking. Jessie strongly advocated what needs to be done to address the high rate of heart disease in the African American population:

Affordable health care. A lot of people may go to the doctor twice a year just because it's their annual checkup or it's their pap smear or whatever. So I would think just having access to medical professionals; just being able to say I'm not feeling good; I'm scared about something and being able to go and see someone.

Josephine

Josephine is 78 years of age and has been living with diagnosed high blood pressure for 20 years. She has other family members that are diagnosed with high blood pressure.

Josephine is a Durham native residing in the suburban part of the county. She has attended college and is retired. Josephine is divorced.

Josephine always feels confident filling out medical forms by herself and always has someone to help her read hospital materials; she also does have problems learning about her medical condition because of difficulty understanding written information. Josephine states that high blood pressure is, "I guess it's dizziness and you can pass out too." Josephine's neighborhood does not have the presence of sidewalks that could be used to facilitate positive health behaviors like walking.

Josephine would inform an African American woman newly diagnosed with hypertension that, "I would tell her that you must think about herself and stick to a healthy diet and exercise. Exercise is very important. It's more important than a healthy diet."

Josephine wants to see the larger African American population's high rate of heart disease

addressed by more education with information on how to treat their hypertension and stress relieving techniques to reduce anxiety.

Leora

Leora is 44 years of age and has been living with diagnosed high blood pressure for 8 years. She has other family members that are diagnosed with high blood pressure. Leora is a Durham native residing in the urban part of the county. She is a single, college graduate and gainfully employed fulltime. Leora often feels confident filling out medical forms by herself but sometimes needs someone help her to read hospital materials; she sometimes has problems learning about her medical condition because of difficulty understanding the written information.

Leora states that high blood pressure is, “When your body gets an overload of too much sodium and it’s not being released or digested properly and it’s making harder for your heart to pump.”

The moment Leora learned she had high blood pressure she was going through a significant life experience:

Then I had a young friend of mine who was probably about 4 years older than me now, about 44, he ended up having a stroke too. It scared the bejeezus out of me and made me worry. So for probably about a month my doctor just monitored my blood pressure and first she tried to ease my mind and give me something to keep me calm and it worked for a while but whenever I got really stressed it would just go up. So from preventing anything from happening to my kidneys when my blood pressure goes up like that, she started me on a diuretic.

Leora's says her community improves her health in the following way: "I would say pretty much my environment does have great sidewalks and trails but there are a lot of dogs and it's not but a couple of streets over from a couple of extra people so I don't do much in my community." Leora would educate newly diagnosed African American women with hypertension by giving them the following advice:

Be conscious of what you eat. Be conscious of your stress, of what you're worried about. Find something to meditate on. Find faith or a belief no matter what it is. Take some time for yourself; that's one thing we're really short on is taking time for ourselves. Take some time for yourself to wind down in the evening, and drink plenty of water.

Leora strongly desires for the larger African American population high rate of heart disease be addressed in the following way:

You know how they have all those posters about being diabetic when you walk into the doctor's office? Check your toes; check your eyes. I think they need more heart posters or something like that. If you're feeling like this; anything to just say more women are diagnosed with heart disease and just start pumping some more knowledge about the effects of it and the warnings of it and how can I get checked. What questions do I ask my doctor? You can ask your doctor some questions but not everybody is going to give you a test.

Louise

Louise is 57 years of age and has been living with diagnosed high blood pressure for 12 years. She has other family members that are diagnosed with high blood pressure. Louise

is not a Durham native, but she currently resides in the suburban part of the county. She is a married college graduate and gainfully employed fulltime.

Louise always feels confident filling out medical forms by herself and does not need someone to help her to read hospital materials, but she sometimes has problems learning about her medical condition because of difficulty understanding the written information.

Louise states that high blood pressure is, “When 120/80 is not making it. Salt contributes to it; not exercising contributes to it; stress contributes to it. Your job contributes to it. High blood pressure I think is something that could be the food you eat.”

After hearing the diagnosis of high blood pressure Louise had to learn new health knowledge to improve her health status. She explains how she learns:

I guess you just hear people talking about it so you learn from other people. After the doctor told you you’re like what are you doing, do you have high blood pressure? It’s just taking ownership yourself and finding out some of the things after being told.

Louise’s community improves her health in the following way: “On the job they’re starting to put things more into place, wellness type activities. Even with the kids they’re trying to do more wellness so we have this wellness committee they’re putting together.”

Louise’s neighborhood does have the presence of sidewalks, but Louise does not utilize them to facilitate positive health behaviors like walking.

Louise explains how she wants to see the high rate of heart disease in the larger African American population addressed:

In our community I would like to see more workshops where they invite the women.

Can we have someone to set up a place where you get free health screening and diagnosis? There are some women out there who are afraid because it’s detrimental to

someone, especially women that have family members that have died of it and they didn't know they had it because they hadn't been to the doctor in years. Getting in the community and knocking on those doors if you have to. It's kind of like we knock on the doors to get folks votes. Why don't we knock on the door to say we're here about heart health, how can we help you? Talk to those women and find out.

Lula

Lula is 62 years of age and has been living with diagnosed high blood pressure for 20 years. She has other family members that are diagnosed with high blood pressure.

Lula is not a Durham native but resides in the rural part of the county. She is a college graduate with full time employment and is head of her household. Lula always feels confident filling our medical forms by herself, does not need someone to help her to read hospital materials, and she does not have problems learning about her medical condition because of difficulty understanding the written information. Lula defines high blood pressure as, "When your diastolic is higher than you're systolic which means you heart takes more time to beat; it is pressure on your heart."

The moment Lula learned she had high blood pressure, she explains:

I was going to the doctor and probably during a physical and my blood pressure they told me was high. Can't remember the numbers but they said it was high. I didn't think anything of it because to me I've learned that all black people have high blood pressure.

After hearing the diagnosis of high blood pressure, Louise had to learn new health knowledge to improve her health status:

I had to learn that diet was very important. I learned that from the doctor, my primary care physician. I also was told that it was hereditary. I thought by losing weight I wouldn't be considered hypertensive anymore but that proved not to be the case. Lula's neighborhood does have the presence of sidewalks and Lula does utilize them to facilitate positive health behaviors by walking. Lula is dedicated to utilizing her sidewalks, saying, "I get out and walk a mile in the complex in the morning, it's not a bad community." Lula would tell an African American woman newly diagnosed with hypertension to, "think about themselves first and change their diet and exercise. And find a way to lessen the stressful situations in their life." Lula wants to see the high rate of heart disease in the larger African American population addressed by more education.

Mary

Mary is 49 years of age and has been living with diagnosed high blood pressure for 20 years. She has other family members that are diagnosed with high blood pressure. Mary is not a Durham native. She resides in the urban part of the county.

She is a college graduate with full time employment and is head of her household. Mary is confident with filling out medical forms by herself but occasionally needs someone to help her to read hospital materials and occasionally has problems learning about her medical condition because she has difficulty understanding the written information. Mary needs more education on the actions, risk factors, and symptoms related to heart disease. Mary defines high blood pressure, saying, "It is when the blood pumps through your veins at a high rate and harder than normal." Mary explains what happened when she first learned she had high blood pressure:

I had just had my little girl and I went back for my checkup, the 6 weeks checkup, and that's when they said we're going to watch this for a couple of months and see what happens. They told me that they were going to state with my food. Well that didn't work. So like 6 months later full-fledged hypertension with medication and all. Mary's neighborhood does not have the presence of sidewalks. Mary describes her community environment: "We do have a park at the end of our street because we have a dead end street, it's mostly trails, walking and bike trails."

Mary feels society's view of her as an African American woman with high blood pressure is that "they probably think it's normal. They probably say she's got high blood pressure; that's normal for someone like her."

Mary believes that the larger African American population's high rate of heart disease needs to be addressed by in the following way: "More not advertisements but more billboards, more commercials, more specifics in those commercials and billboards everywhere. I read in the newspaper and see it online, it's everywhere but people just aren't talking about it."

Rebecca

Rebecca is 55 years of age and has been living with diagnosed high blood pressure for 2 years. She has other family members that are diagnosed with high blood pressure. Rebecca is a Durham native who resides in the rural part of the county. She has attended college and has full time employment. Rebecca is divorced. Rebecca is confident filling out medical forms, does not need someone to help her read hospital materials, and does not have problems learning about her medical condition because of difficulty understanding written information. Rebecca defines high blood pressure: "The intake of too much salt, getting a

dizzy feeling, your vision is a little blurred, and just feeling yucky.” After diagnosis with high blood pressure, Rebecca changed her health behaviors, saying:

I stopped cooking with salt period. I found different ingredients that are salt free. I tried not eating as many fried foods as I used to. Stopped eating real bacon and went to turkey bacon. I’m not a big exerciser but I will walk every few evenings.

Rebecca’s neighborhood does have the presence of sidewalks, but Rebecca does not utilize them to facilitate positive health behaviors like walking.

Rebecca would tell an African American woman newly diagnosed with hypertension to, “think about what your doctor told you and do as many of the things she told you as you can to improve your health.” Rebecca believes that the larger African American population’s high rate of heart disease needs to be addressed by more education.

Rita

Rita is 35 years of age and has been living with diagnosed high blood pressure for 9 years. She has other family members that are diagnosed with high blood pressure. Rita is not a Durham native. She resides in the rural part of the county. Rita has attended college and has full time employment. She is married. Rita is confident with filling out medical forms by herself but occasionally needs someone help her to read hospital materials and occasionally has problems learning about her medical condition because of difficulty understanding written information.

Rita defines high blood pressure this way: “It’s a disease that affects and can be hereditary or can be brought on by certain lifestyles.” Rita describes her reaction when she received the diagnosis:

I didn't really think a whole lot about it. I thought that maybe I would get it because it's something that runs in my family. My mother, my sister; my grandmother died from that. It wasn't really like a shock.

After diagnosis with high blood pressure, Rita learned new health knowledge that included, "Basically staying away from foods that were high in salt or processed foods. Try to get my weight under control or lose a little bit and stay active." Rita would tell an African American woman newly diagnosed with hypertension to, "definitely listen to the advice of her doctors or nurses. Take it seriously and start implementing tactics and she'll be alright."

Rita's neighborhood does have the presence of sidewalks, but Rita does not utilize them to facilitate positive health behaviors like walking. Rita believes that the larger African American population's high rate of heart disease needs to be addressed by, "Just health care; to have it more available to women who are unable to afford the cost of it."

Virginia

Virginia is 44 years old and has been living with diagnosed high blood pressure for 6 years. She has other family members that are diagnosed with high blood pressure. Virginia is a Durham native and resides in the rural part of the county. She is a college graduate and possesses a graduate degree. She is gainfully employed full time and is married. Virginia is confident filling out medical forms, does not need someone to help her read hospital materials, and does not have problems learning about her medical condition because of difficulty understanding written information. Virginia defines high blood pressure, saying, "I know that it was something to do with the way your blood pumps throughout your body and I guess when your blood pressure is high it's harder for your body to circulate the blood."

She states the factors influencing her decision about the need to increase her health knowledge:

I would say based on how I feel. Maybe when people that are my age or younger have heart attacks and just fall dead; I guess looking at my family members and seeing how their health is. I increase my knowledge by reading on the internet.

Virginia's neighborhood does not have the presence of sidewalks that she could utilize to facilitate positive health behaviors like walking. Virginia said, "At my job we're given Choose to Move so you're given 30 minutes a day to exercise."

Virginia would tell an African American woman newly diagnosed with hypertension to "definitely exercise or at least doing some walking. Eating a lower fat diet and don't allow stress, don't allow people to stress you." Virginia believes that the larger African American population's high rate of heart disease needs to be addressed the following way:

I think a lot of it is diet. In some communities there aren't a lot of financial resources and it seems like the foods that are bad for you are the cheapest and foods that are healthier for you are very expensive. Also making sure women go to the doctors and having regular health checks and I guess ensuring we know you don't have to be old to have a heart attack.

Wilma

Wilma is 23 years of age and has been living with diagnosed high blood pressure for 1 year. She has other family members that are diagnosed with high blood pressure. Wilma is a Durham native and resides in the rural part of the county.

Wilma is a college graduate and is gainfully employed full time. She is single. Wilma occasionally is not confident filling out medical forms by herself but does not need someone

to help her read hospital materials, and she does not have problems learning about her medical condition because of difficulty understanding written information.

Wilma needs more education on the actions, risk factors, and symptoms related to heart disease. Wilma defines high blood pressure like this: “Your blood pressure is high. When it’s more than 120 over 80.” Wilma states the factors influencing her decisions about the need to increase her health knowledge and how she increases her knowledge base: “My mom. I told you I’m trying to stay healthy because if I see her health getting worse I just want mine to get better so we can both live a long time. I want her to outlive me.”

Wilma adds to her health knowledge by Googling a lot of stuff and says, “I have a friend in medical school so I will ask her as well.” As an African American woman in the U.S. society, Wilma describes society’s view of her as an African American woman with high blood pressure:

I’ve already got it harder being an African-American woman compared to anybody else like a white man or white woman but it’s especially me being young because I’ve got fair skin and the curly hair I’m more I guess approachable. But you still get the looks from certain people that don’t speak. Any black woman I think has it the hardest of anyone out here. Black men really don’t treat black women how they should be treated either. Black men have it the hardest when it comes to White men, but Black women have it the hardest from everybody.

Being a Black woman, people are going to automatically judge me some type of way especially me being young. People are going to think you are uneducated even in my job and I’m like I am a four-year college graduate. People are always going to judge what they see rather than getting to know you first.

Wilma's neighborhood does have the presence of sidewalks that she utilizes to facilitate positive health behaviors:

In my community specifically we have streetlights and we've got sidewalks so people can walk any time of night. I would take walks at 2:30am in the morning and I never felt in danger or anything because I live in a good community that has sidewalks and they're patrolled by the police and they have security and everything. So I feel safe in my community so I can walk or go the gym late at night.

Wilma would tell give an African American woman newly diagnosed with hypertension the following advice:

Take care of yourself, watch what you eat; watch your habits, don't overstress. Take a walk and try your best to stay calm because being riled up can relate to high blood pressure. If you're in a calm, peaceful environment then your blood pressure will be calm. Don't allow people to stress you.

Wilma believes that the larger African American population's high rate of heart disease needs to be addressed in the following way:

More knowledge of what is really going on because people could be diagnosed but they don't; know the severity of high blood pressure. They don't think about I could die; they just think let me pop these pills and I'll be alright. People don't take something being wrong with them seriously. They take it as a joke until it's too late and they have a heart attack or a stroke and they can't function or do the things they normally do in their later life. I say doctors have got to dumb it down, simplify stuff. Yes you have high blood pressure but take it seriously. You could have a heart attack

or a stroke. You really, seriously need to exercise or eat right. Talk to the patient to make them understand on their level.

Experiences of African American Women Diagnosed with Hypertension

The first research question sought to understand the experiences of African American women after diagnosis of hypertension. The interview process for each participant was semi-structured for each participant, the discussions revealed two contexts that correlated with the women diagnosing with hypertension. Associated with these two contexts was the moment of learning of the diagnosis and their mental state when living through their daily lives.

From these two contexts, two major themes of stressing and improving health behaviors emerged. From the first theme of stressing, the subtheme of parenting role was revealed. The second theme of improving health behavior unveiled three subthemes: changing diet, exercising and increasing health awareness.

Stressing

The African American women participants diagnosed with hypertension described their mental state as they progressed during their daily lives as most often in a stressing capacity. Twelve of the fifteen participants expressed being in stressful situations when they were diagnosed with hypertension. Wilma, a 23-year-old college graduate, strongly believed her diagnosis of hypertension was founded on, "I would say stress because stress can be bills or being worried ...or anything like that. Stress, not getting the exercise I need because I work and sleep a lot." Lula, 62 years of age, has been living with diagnosed high blood pressure for 20 years. Her barrier to improving her health behavior is stress. Stress was a great part of the majority of these women's everyday lives but was most reflective in those that are in the parenting role as mothers.

Becoming a parent. Some participants in this study developed hypertension after giving birth to children due to the degree of distress when acquiring or expanding in the parent role. The role of being a mother added additional life responsibilities and time constraints in these women's already busy lives. Janie, a 42-year-old Durham native, has been living with diagnosed high blood pressure for 3 years.

Janie recalled, "I was at the doctor's office in order to get my allergy shots and had my blood pressure taken and it was too high for her to do anything. She (the doctor) told me I needed to go straight to the hospital and my labor was induced."

Mary, a 49-year-old college graduate who has been living with high blood pressure for 7 years, also recounted her hypertension diagnosis presented as she began the parent role:

I had just had my little girl and I went back for...the 6 weeks checkup, and that's when they said we're going to watch this(hypertension) for a couple of months and see what happens. So like 6 months later full-fledged hypertension with medication and all.

Virginia, a 44-year-old with a master's degree who has been living with high blood pressure for 7 years, remembers receiving her diagnosis of high blood pressure when she had "given birth to her youngest son and the doctors said that over time it (hypertension) would go away within the next 6 to 9 months. I'm still waiting." After the diagnosis, many participants started the journey of improving their health behavior to stop the progression of the effects of hypertension on their bodily organs.

Improving health behavior. The second most prevalent theme gleaned from the voices of African American women in this study was improving their health behavior after diagnosis with hypertension. More than three-fourths of the participants were told at a regular

doctor visit that they had high blood pressure as part of a routine check-up. Positive health behavior changes are critical in maintaining a quality lifestyle while living with a chronic disease.

Once they received the diagnosis of high blood pressure, over one-third of women dedicated themselves to making positive health behavior changes. Their descriptions of these health behavior changes resulted in two subthemes: changing diet and exercising.

Changing diet and exercising. The participants' experiences after diagnosis motivated them to improve their health behavior, which resulted in their changing diet and exercising, putting more focus on self, and increasing their awareness in regard to their health diagnosis and its impact on their overall health. Karo, 44 years of age, who has been living with high blood pressure for 8 years, revealed, "I started doing a little bit of exercising and trying to be less stressed."

Janie, 42 years of age and head of the household, stated she changed her health behavior by using the following resource:

A list of foods that are a little better for you than some others. Do a little better as far as cooking at home. Not to load everything down with butter; just kind of be a little more cognizant of my stress levels. Trying to get in as much exercise as possible even if it just means parking a little further away from the building. Maybe not running the track or anything but include a few more steps than what I've been doing.

Concurring with Janie, Josephine, 78 years of age and living with high blood pressure for 5 years, stated she transformed her health behaviors in a positive direction, "To correct things: diet and exercising."

Increasing health awareness. Jessie, a single college graduate, emotionally expressed the factors influencing her decisions about the need to increase her health knowledge. She says, “I think basically because I did have a stroke 8 months ago, I was 40 and so that is something that now I’m like OK,....now I’m very much aware that I want to change it [high blood pressure].”

Virginia, 44 years of age and living with high blood pressure for 7 years, states the factors influencing her decision to increase her health knowledge: “I would say based on how I feel. Maybe when people that are my age or younger have heart attacks and just fall dead.”

Rita, 35 years of age and diagnosed 9 years ago, stated the factors influencing her decisions about the need to increase her health knowledge and why she increases it: “I don’t want to end up having a stroke or die at an early age.”

Constructing New Health Knowledge

The second research question sought to understand how African American women diagnosed with hypertension construct new health knowledge, focusing on what key things they need to learn about heart health experiences. Do they feel knowledgeable about heart health? Do their health care professionals assist in their learning process about heart health and what factors influences their decisions to increase their health knowledge? The main factor that influenced the decision for participants in this study to increase their health knowledge was their health status. The most prevalent theme stated by close to half of the participants was that they best acquire new health knowledge by experiential learning.

Experiential learning. Emma is 39 years of age and has been living with diagnosed high blood pressure for 3 years. She recalled learning new health knowledge:

When I had the headaches I had to learn to limit my caffeine intake, fried foods and the greasy foods. I learned from other people diagnosed with high blood pressure. I heard other people and their side effects so I don't want to be prescribed any medicine that could damage other organs or other parts of my body.

The participants learned important health information that included lifestyle changes and critical feedback on medication side effects from their peers. The majority of the participants felt it was best to learn new health knowledge from the experiences of other African American women who are diagnosed with hypertension. The experiential learning from other African American women living with high blood pressure is viewed as authentic, highly credible, and sincere by the participants.

Learning from other African Americans with hypertension. Louise, a 57-year-old grandmother, had to learn new health knowledge from other African American women with hypertension to improve her health status. She explains, "I guess blood pressure you just hear people talking about it so you learn from other people." Janie increases her health knowledge by first starting with her family: "Well my mother and dad have issues with high blood pressure so I think once I was diagnosed with hypertension then I kind of started asking more questions of them (parents)."

Wilma, 23 years of age, explains her motivation for learning new health knowledge: "I just want to live a long time and like I said my Mom because she's older I think about this could be me in my 40's so what she's going through is a learning experience."

Cynthia had to learn new health knowledge to improve her health status:

I had to learn that my weight was a big contributor to my blood pressure and to my heart working harder. Also through my sister and her awareness and making me more

informed about heart health. I increase health knowledge through my sister and the internet.

Searching the Internet. The second most universal theme presented by participants was learning new health knowledge on hypertension and heart disease by accessing the internet. Recent studies of self-directed learning have uncovered the fact that the internet is an important learning resource (Merriam, Caffarella, & Baumgartner, 2007). About one-third of the participants preferred searching the internet for increasing their health knowledge base.

Karo, a 43-year-old head of the household, increases her health knowledge by, “Using the internet to learn new health information.” Virginia, 44 years old and married, states, “I increase my knowledge by reading on the internet.” Mary, 49 years of age and living with high blood pressure for 7 years, concurs that she increases her health knowledge in the following way: “I’m always on the internet looking at stuff; all the time looking up things.”

With our society being maintained and led by technology, the internet is the easiest, most accessible, and quickest way to learn new health information. Rita, 35 years of age and married, increases her health knowledge because, “I don’t want to end up having a stroke or die at an early age. I do internet searches a lot.” Virginia also recalled increasing her health knowledge by reading on the internet. The information learned by most of the women included the risk factors that contributed to the diagnosis of hypertension.

The risk factors that women learned were being overweight, the consumption of fried foods, family genetics, lack of exercise, and smoking. Some participants learned ways to improve their health like meditation and deep breathing techniques as ways to reduce stress.

Many of the participants implemented these behavioral changes after learning the new information. More than half of the participants feel knowledgeable or very knowledgeable about heart health and its relationship with their diagnosis of high blood pressure. The interaction with the internet for health knowledge is absent of perceived bias and prejudice that may occur in healthcare and societal experiences. Jenny, 44 years of age, diagnosed 7 years ago, strongly feels: “Whatever questions I have I feel like I can get them answered on the internet without being pre-judged.”

Learning from health care professionals. Less than one-fourth of the participants did not feel they learned anything after their diagnosis of the chronic disease hypertension from their health care professional. The responsibility of the women for acquiring new health knowledge related to hypertension, risk factors and the most appropriate way to improve their health is that of the health care professional that confirmed the diagnosis of the chronic disease. The health care professional needs use the terminology understandable at the participant’s health literacy level to be able to reach and provide effective positive health education about this deadly and chronic disease instead of just prescribing medications.

Over twenty-five percent of the participants learned their new health information related to their hypertension diagnosis from their health care professional. Lula, 62 years of age and living with diagnosed hypertension for 20 years, feels, “My health care professionals play major role because I guess if I probably wouldn’t be as well informed as I am.” Mary, 49 years of age and married, says the greatest facilitator for positive health behavior is her doctor: “I talk to her all of the time.

If I don’t email her I’m calling her. I know what’s going on. She emails a lot, checking on stuff.” Rebecca, 55 years of age and divorced, had to learn new health

knowledge that included “how to exercise which I did not. Learning how to change the way that I eat; the way that I cook. Weight was an issue which I lost a piece of a pound. My doctor plays a big role” in learning new health knowledge to improve her health status.

Cynthia, 50 years of age and head of household, was provided information and resources through her doctor in the learning process. She explains, “They play a major role because through my doctor and my regular checkup and conversations and information that I get from them (health care professionals).” Karo recounted learning knowledge to improve her health status from the doctor: “Health care professionals play a significant role because they try to help me keep my blood pressure down. I think they play a very important role if you listen to them.”

Personal, Social and Environmental Factors Shaping Health Behaviors

The third research question investigated the personal, social, and environmental factors shaping the health behaviors of African American women diagnosed with hypertension. The fact that the participants are African American women defines their existence in the United States with historical and social implications that impact their health behaviors. The categorization of the participants in this study gender as women and race as African American presents an intersectionality of interlocking positions of oppression in the U.S. society.

The subthemes that arose from over half of the participants were prejudice and racism that impacts their personal, social, and environmental factors that shape their health behaviors. Prejudice is “an aversive or hostile attitude toward a person who belongs to a group, simply because he/she belongs to the group, and therefore is presumed to have the objectionable qualities ascribed to the group (Stuber, Meyer, & Link, 2008). Since Black

women have been denied the authority to challenge the model of White males being the norm, this model consists of images that define Black women as a negative other, the virtual antithesis of White male images (Hill Collins, 1986).

Being subjected to prejudice. Fourteen out of the fifteen participants presented the primary theme of their intersectional positioning as the strongest impact on the personal, social and environmental factors that shaped their behavior.

Prejudice is strongly believed to negatively impact the health status of members of society whose intersectionality, like African American women diagnosed with hypertension, does not belong to the dominant group. Janie articulated the prejudice towards African Americans in the U.S. society:

Because I think that we've been stereotyped as blacks that because wrong decisions and actions have been made by other blacks that we are all the same way. That all of us are quote, "hoodlums." We all think the same way; we're not educated, we're never going to do much with life. We always want something for free. So I think the bad apples have spoiled it for all of us is I guess the best way I could put it.

African American women's high rate of hypertension can be explained and worsened by their socially-constructed position of being African American and a woman, which results in the negative experiences that occur in their interactions in the U.S. society. The African American female participants have lives that are composed of working full time jobs; being mothers, caregivers for aging parents and siblings; and being active members in systems in which routine daily interactions produce negative results for them. At present, their experiences are shaped from the stereotypes created out of ignorance that influences negative perceptions of African American women in many of their activities in society due to

prejudice. With the normalcy of prejudice in society that creates unjustified negative images of being African American, it is important to explore how often the participants think about their race, what situations prompt them to think about their race, and how they feel society views them in ways that impact their health status with hypertension.

Participants feel the U.S. society's view of them as an African American woman with high blood pressure is a normal status because the participants' believed they are viewed as careless, that they don't take care of themselves, and that they lack motivation to maintain a healthy weight. Leora, 44 years of age and single, stated,

People view African American women with high blood pressure as they're not healthy or eating the wrong things, too much bad foods. It could be something else like family history.....So it doesn't mean you're a bad eater.

Mary, 49 years of age and head of her household, feels society's view of her as an African American woman with high blood pressure is, "They probably think it's normal. They probably say she's got high blood pressure; that's normal for someone like her."

More than three-fourths of the women in this research study think about their race every day. Cynthia, 50 years of age and a Durham native, thinks about her race,

Every day. With everything going on in the world (current events), I can't help but think about my race and who I am and how my race affects opportunities and as far as survival. Even my health as far as me getting A1 service when it comes to health benefits and medical services. If I notice discrimination with myself or experience it myself it stresses me out and what causes me to overeat which affects my overall health.

Janie, 42 years of age and a Durham native, said she thinks about her race every day due to, “Health issues, the killing of Black men, social media and thinking about the past history and the future of my children prompts me to think about my race.” Jessie reflected on situations about her race that cause physical and emotional symptoms:

I’m not going to say because how I was treated but I know I was watching the debate one day and I said I’m just going to do my own trial and error and the foolishness that Donald Trump was saying; I couldn’t take it no more, I could feel my blood pressure rising. And just the fact that all of this being election year.

Rebecca, a 55-year-old government employee, feels society’s view of her as an African American woman with high blood pressure is that “I don’t take care of myself. I’m eating greens and pork skins and neck bones and stuff like that which is not true. Anyone can get high blood pressure or heart disease. It does not pick races or genders; it could be anyone.” Unfortunately, societal prejudice is also projected in interactions with health care professionals. The health care provider can make assumptions about the socioeconomic status, race, and living location of a client. These assumptions are believed to affect the quality of care.

Additionally is the belief that “Blacks do not take pride in their health care issues (Fongwa, 2002, p. 21). Less than one-fourth of the participants perceived that when seeking health care felt they experiences were worse than people of other races. Rita, 35 years of age and married, feels very emotionally that,

In certain situations, it’s harder for me to get prescription refills or something like that. I know that they look up all of your information. It just seems like if I were a

different person I might get a satisfactory response. I'm not calling just to get a refill just to take extra medication. I'm calling because I need it.

Jenny, 44 years of age and a Durham native who has been living with diagnosed hypertension for 7 years, strongly feels like she is treated worse in her interactions with the health care system:

I feel like if I was of another race I would have been given more information about high blood pressure or any other thing I may have. Because I'm African-American it feels like, "Hey just give her medication" because I'm not going to ask questions about it or get more information about it from them. Whatever questions I have I feel like I can get them answered on the internet without being pre-judged.

Being subjected to racism. One-third of the participants recognized stressors from being victims of racism as an addition theme in the personal, social and environmental factors that contribute to their health behaviors. The basis of these stressors is frequently perceived as involving racism (Brown, et al., 2006). According to Jones (2003):

Racism is a system (consisting of structures, policies, practices, and norms) that structure opportunity and assigns value based on phenotype, or the way people look, that: unfairly disadvantages some individuals and communities; unfairly advantages other individuals and communities; and undermines realization of the full potential of the whole society through the waste of human resources (p. 10).

Mary thinks a lot about her race, "Especially working here (courthouse)." The situation that prompts Mary to think about her race is, "Because that's all (African Americans) that comes in here to the courthouse."

The United States society's racist perception of African American women is as perverted now as the days of slavery that a political figure believed it was acceptable to state on a social media site that the First Lady of the United States, Michelle Obama was an, "Ape in Heels." (CNN, 2016). Due to heightened societal racial discrimination of African Americans in the U.S. society, almost half of the African American women participants felt that they were treated worse than people of other races. Cynthia, living with diagnosed hypertension for 15 years, experiences frequent discrimination:

If I'm going to a store and there's another race individual and that person is getting more attention than I am considering I was there first. That's a stressor for me because it's blatantly in my face and that makes me more aware of differences that occur daily in this society. I label the experience, "Living in America While Black".

Janie, head of her household, believes,

We've been stereotyped as Blacks that because wrong decisions and actions have been made by other Blacks that we're all the same way. That all of us African Americans are quote "hoodlums". They feel we all think the same way; we're not educated; we're never going to do much with life; we always want something for free.

Gilkes (1981) points out that Black women's assertiveness is resisting the multifaceted oppression they experience has been a consistent threat to the status quo. As punishment, Black women have been assaulted with a variety of externally-defined negative images designed to control assertive Black female behavior (Hill Collins, 1986).

Many participants felt emotionally upset as a result of the stressed induced on them by how they were treated based on their race during the last presidential election. About a

third of participants were frustrated by the perceptions of African American women and upset due to the last presidential election debates and media advertisement. Jenny, a divorced and disabled Durham native, feels, “When I look at TV about the election is the only thing that make me think about my race and feel upset.” Rebecca feels the situation that prompts her to think about her race is, “The election. The election prompts you to think about your race.” Jessie, 41 years of age and single, felt physical symptoms based on her race due to the Presidential election, “I was watching the debate one day and the foolishness that Donald Trump was saying; I could not take it no more, I could feel my blood pressure rising. And just the fact that all of this being an election year.” Internalization of stigma and prejudice by marginalized individuals has been linked to serious health harming consequences (Stuber, Meyer, & Link, 2008).

Utilizing Sidewalks. Nine out of the fifteen participants have the presence of sidewalks in their neighborhoods. The environmental factor of sidewalks in the participants’ residential neighborhoods shaping their health behaviors yielded a very small result.

Of the nine participants that have sidewalks present in their residential neighborhoods, only two participants as utilizing their sidewalk to positively impact their health behavior. Wilma stated:

In my community specifically we have streetlights and we’ve got sidewalks so people can walk any time of night. I would take walks at 2:30am in the morning and I never felt in danger or anything because I live in a good community that has sidewalks and they’re patrolled by the police. So I feel safe in my community so I can walk.

Lula is dedicated to utilizing her sidewalks, saying, “I get out and walk a mile in the complex in the morning, it's not a bad community.” These findings confirm the previous (2003)

Women's Cardiovascular Health Network Project findings from a study at seven sites in the U.S., among more than 4000 women of diverse ethnicities, safety from crime was the only consistently significant correlate of physical activity level (Sharpe, et. al., 2008).

Factors Facilitating Positive Health Behaviors

The fourth research question investigates what factors facilitate positive health behaviors of African American women diagnosed with hypertension. Facilitators that support participants' ability to make good choices for positive health behaviors include being empowered to be healthy, exercise, make healthy food choices, and participate in a wellness program at work.

Being part of a family. The greatest facilitator for positive health behaviors for the majority of participants is being part of a family. In the African American community, family is the most supportive positive foundation for any personal, social and environmental experience. In addition, the African American family is the refuge from the negative interactions experienced by all its members. All participants strongly believed that family was the greatest factor influencing their decision to increase their health knowledge. Eleven of the participants have family members that also live with the diagnosis of high blood pressure. Louise, 57 years of age and a college graduate, stated her greatest facilitator for positive health behaviors was her family: "If you have children you want to be there for those children. If you have family you want to be there for the family. If you have a husband you want to be there for him."

Having children/ grandchildren. Thirteen of the fifteen participants have children, and six out of the fifteen were also grandmothers. These women wanted to improve their health for all of their children's and grandchildren's sakes. In the African American

community within the United States, the women most often serve as head of the household, which is consistent with the participant cohort for this study. More than half of the participants are single mothers and heads of their households. The responsibility of African American women as the head of the household in most African American families can be viewed as an additional societal stressor due to the larger societal issues of the assassinations and high rate of imprisonment of African American men. Being head of the household places African American women in the position that they must endure negative situations in order to provide the livelihood of the family unit.

Rebecca, a Durham native who was diagnosed with hypertension 10 years ago, states the factors influencing her positive health behavior changes are, “My kids and my grandkids influences my decisions and I add to my health knowledge by trying to cook better; trying to take a little exercise. Just trying to live my life as cleanly as I can.”

Janie, a Durham native, states family is her greatest facilitator for positive health behaviors and acquiring new health knowledge:

My children and grandchildren. I think having literature on hand for me to read even if it's Goggling something. I'm a reader but I won't say a reader of books. I like short reads. A documentary about something; a pamphlet about something. My ability to read and comprehend and then if it's something I don't understand provide me with a website or a chat session or a phone number for someone I can contact in order to ask further questions.

Louise, married and diagnosed with hypertension 10 years ago, states the factors influencing her decisions for positive health behaviors and the need to increase her health knowledge:

“Again children and family. Just wanting to be a healthy person.” Rebecca's greatest

facilitators for her positive health behaviors is her family: “As I stated before my children and my grandkids. I know you have to do it for yourself but they motivate me to want to live. If I have to be injected with rat piss to live I will.”

Factors Hindering Positive Health Behaviors

The fifth research question investigates what factors hinder positive health behaviors of African American women diagnosed with hypertension. The most prevalent theme recalled from the participants was self-efficacy. Self-efficacy or confidence in one’s ability to participate in a given behavior, is a common element in programs designed to improve chronic illness self-management (Warren-Findlow, et al., 2012). The subtheme for self-efficacy was family responsibilities. Over a third of the participants’ feel that the leading barriers preventing them from achieving positive health behaviors is family obligations.

Lacking self-efficacy. Louise stated her greatest barrier to achieving positive health behaviors was self-efficacy: “You want to be living a healthy life for yourself. You want to feel good. Find some way of helping your self-esteem because I think a lot of that goes back to self-esteem. A lot of women just have poor self-esteem.” In general, Black women in the United States have lower household incomes, lower rates of marriage, a higher rate of divorce and separation, and higher likelihood of living in a female-headed household with children (Ahye et al., 2006; McKinnon, 2003). Zora Neale Hurston (1937) famously caricatured the role of Black women as “the mules of the earth” for “carrying the load” for oppressed Black men in addition to their own (p. 4).

Lacking disposable finances. The second most prevalent theme that arose from the participants as a hindrance to healthy behaviors was finances. The subtheme is the cost of healthy food. A heart-healthy lifestyle is centered on a healthy food consumption diet.

The best foods for a heart healthy lifestyle are fresh fruits, fresh vegetables, and lean meats. However, those best foods are the most expensive to purchase in a local grocery store.

Pricing of healthy foods. Janie explains the biggest barrier to improving her health behavior is the cost of maintaining a healthy lifestyle: “The price of food. As I attempted to do healthy eating I realized it was killing my pockets; just trying to buy fruit. Trying to buy things that had less sodium or healthy eating. It seems that my dollar doesn’t go so far.”

Understanding African American women’s food management strategies after diagnosis with hypertension is important to its relationship to positive health outcome among these women (Ahye et al., 2006). Wilma states the cost of healthy foods is her biggest barrier to positive health behaviors:

Everyone if they could would buy organic and all this other stuff but it’s expensive. If I buy fruit for smoothies I spend \$60 and that only lasts me 5 or 6 days. So imagine trying to do that for a lifetime; that’s a whole other bill just to eat healthy. And then it takes time and preparation or you go to Wendy’s and you can eat for a week for \$28. Jenny’s advice for increasing women’s health is simple: “Lower the prices of healthy foods.”

Implementing Actions to Address Epidemic of Hypertension

Participants strongly articulated that education was greatly needed to address the high rate of hypertension and heart disease in the African American population with more billboards and more commercials with specific recommendations.

Cynthia feels the African American population’s higher rate of heart disease requires “more specific health education about this chronic disease;” she thinks some door to door (high blood pressure education) is “the best way to distribute the education.” Janie has a similar idea about how to improve outcomes for African Americans:

Education. I think it probably needs to start in the school system with the children, I would love for children to come home and say we learned today that instead of cooking in this oil and instead of adding butter to everything that here's an alternative. Or provide some recipes. If they're learning it in schools kids can get parents to do something a little different.

Louise would like to see hypertension addressed in the African American population, saying, "In our community I would like to see more workshops where they invite the women. I know they have them and you've got to be motivated to go but there are a lot of women who can't get there. In our community I would like to see more workshops where they invite the women."

Community education that provides basic, simple hypertension prevention and action to improve health status can improve the health of individuals thus impact the community. This process provides an opportunity for community members to broaden their understanding of the factors determining health, and they can learn which actions to take to support health in their community (English, 2012). Through education, we learn the strategies and approaches that help us either accommodate or resist power relations in our personal and public lives.

Education can also counter hegemony by helping people understand how they might resist and challenge oppressive social structures and behaviors (Nesbit, 2006). Cynthia advocates for African American woman newly diagnosed with hypertension to change their perspective:

She needs to put herself first and get as much information about your heart health, make lifestyle changes and get a support system. Women need to be more aware and

I think women probably are aware but we bear many burdens daily as far as being mothers, as far as our children as far as working many jobs. I guess we need to as a whole understand we've got to put ourselves 1st. You've to put yourself first.

Chapter Summary

The perspectives of 15 African American women diagnosed with hypertension were gathered through in-depth interviews as well as researcher notes and observations. The participants responded to five research questions with the following broad topics: experiences after diagnosis; how to construct new health knowledge; personal, social and environmental factors that shape their health behavior; factors that facilitate positive health behaviors and factors that hinder positive health behaviors. Responses to the first questions highlighted the experiences of family obligations in the parent role that induced stress which was followed by diagnosis of hypertension, a finding that aligned with previous research.

After diagnosis, the women did make great efforts to improve their health status and many made positive health behavior changes. Themes for the second questions support the great need for experiential learning techniques to increase the health knowledge of African American women with hypertension. The great impact of learning new health information from other African American women also diagnosed with hypertension would be the most positive educational tool. The third question's responses brought out the impact of our societal ills of prejudice and racism on African American women's health. These societal ills are projected on individuals that are categorized at the intersection of two or more groups—in this study, participants' status as both African American and women set them up as targets of multi-layered oppression. The fourth question focused on the impact of family as a facilitator for improved health behavior of the participants. The last question brought forth

several important themes that hinder positive health behaviors which are finances and self-efficacy. Lack of self-efficacy is the strongest hindrance followed by disposable income needed to maintain a positive dietary lifestyle. This study's research findings are vital in assisting public health educators with creating strategies and interventions to empower African American women with necessary tools to achieve optimal health status after their diagnosis with hypertension.

Chapter Five describe conclusions regarding these findings and clarifies the implications of the study for future research, health education, health policy and practice.

CHAPTER FIVE: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The aim of this research study was to understand the experiences of African American woman after their diagnosis with hypertension; how these women construct new health knowledge; how personal, social and environmental factors shape their health behaviors; the factors that facilitate their positive health behaviors; and the factors that hinder their positive health behaviors. Analysis of the data presented in the previous chapters resulted in the following conclusions specific to each research question:

- 1) The experiences of African American women diagnosed with hypertension resulted in the following reaction: at the time of diagnosis the participants were in a state of stress, and after diagnosis, participants dedicated themselves to improving their health behavior.
- 2) African American women diagnosed with hypertension constructed new health knowledge from experiential learning from friends and family, learning from health care professionals, and searching the internet.
- 3) The personal, social and environmental factors that shaped the health behaviors of African American women diagnosed with hypertension are their intersectional identities in society as well as experiences of prejudice and racism.
- 4) The factors that facilitated positive health behaviors of African American women diagnosed with hypertension were being part of a family in addition to having children and grandchildren.
- 5) The factors that hindered positive health behaviors of African American women diagnosed with hypertension were a lack of self-efficacy, scarcity of disposable finances, and pricing of healthy foods.

Conclusion One: Being a Parent Motivated Participants to Improve Health Behavior

This research began from exploring the specific experiences of a select sample of African American women when they were diagnosed with hypertension. Those experiences showed that the majority of women were in the state of stress at the onset of the diagnosis. This research finding confirms previous research by Cohen et. al. (2007) and Williams et. al. (2008) showing that stress is a factor that can lead individuals to engage in specific health behaviors that can have negative health consequences. More than half the participants had recently acquired the responsibility of being in a new or additional parent role at the point of diagnosis of hypertension. Copeland's (2005) study found mothers experience some degree of distress in the parent role. The participants' intersectional oppressive positioning in the U.S. society and the inherent daily negative experiences resulting from this positionality increases their stress level as parents because they now must guard their child/children from negative experiences as much as possible to ensure them a happy and healthy upbringing.

The participants in this study also stated that the diagnosis of hypertension motivated them to improve their health behaviors. The African American women with hypertension in this study began to think about their health after the diagnosis and take positive actions by focusing on taking their high blood pressure medicine, decreasing sodium consumption, putting more focus on self, and increasing their awareness of the impact of the diagnosis on their overall health.

The participants' dedication to improving their health behaviors after diagnosis could strongly be attributed to their desire to be alive and healthy to raise their children to adulthood. The participants' articulation of the love they have for their children was shown in their dedication to improving their health behaviors.

The resilience that arose from withstanding the negative experiences of marginalization exhibited the women's strength of voice in the action focus of PHCR. One participant stated she would, "Drink rat piss to stay alive for her children." Lifestyle, diet, and stress are areas of human behavior clearly shaped by cultural differences that play a role in the management of chronic diseases like hypertension (Shaw et. al., 2009).

Conclusion Two: Experiential Learning to Increase Health Knowledge

The aim of the second research question was to understand how African American women diagnosed with hypertension learn new health knowledge. This research concluded that the participants preferred to acquire new health knowledge primarily by experiential learning from culturally-similar peers and family. The second focus of PHCR is knowledge production with the affiliated principle of social construction of knowledge under its focus (Ford & Airhihenbuwa, 2010). The social construction of knowledge within groups that share the same ethnic culture may not encompass the knowledge base of the dominant group.

The context of acquiring new health knowledge, or increasing an individual's health literacy level, is a very important factor. Recall the definition for health literacy is the skills that individuals bring to health situations and the abilities of health professionals and institutions to provide health information effectively to their target population (English, 2012). The participants in the current research study are categorized as highly educated.

All participants possessed a high school diploma and at least 1 year of college. Seven participants possessed college degrees and one participant possessed a graduate degree. The majority of participants in this study self-reported that despite being classified as highly educated: several needed someone to help them read the health information they received; some also reported that they were not confident filling out medical forms themselves or have

problems learning about their medical condition because of problems understanding the written health information. These results confirm Farmer & Ferraro (2005) consumption that the health benefit Black receive from their education is less than what Whites receive for the same amount of education (cited in Hinze et, al., 2012, p. e92). These findings confirm Baker (2006) results that patients who lack the ability to decipher medical terms and educational materials are hindered in understanding information needed to manage illnesses and negotiate the health care system, engendering nonadherence to prescribed treatment regimens and preventive care and poor health outcomes (cited in Kasworm et, al., 2010, p. 297). The research disconfirms Hill & Ziegahn (2010) findings that, “The highly educated will usually find their way to the knowledge they need and have the skills to navigate the health care system to access the answers and treatments desired (cited in Kasworm et, al., 2010, p. 297). This research disconfirms the research that people with more education report having lower morbidity from common acute and chronic diseases; likewise, it disconfirms the idea that the more highly educated people are those with higher health literacy levels, which enables them to better access, understand, and communicate actionable health information (Feinberg, et. al., 2016).

Communication about health and wellness may be hindered by differences in levels of education between medical professionals and patients or community understandings about certain health conditions (Davis, 2010). Schillinger (2004) found that patients with inadequate health literacy were more likely to report worse communications with their health care providers in the domains of clarity, explanation of condition, and explanation of process of care. Seeking health information is not only related to literacy and educational levels, but the desire to seek such information also has many other correlates including gender, age,

education levels, pre-existing health conditions, and race (Feinberg et. al., 2016). This research reinforces and confirms Sheared's (2010) finding that disciplines such as health care "scatter and diffuse issues" with advanced vocabulary in health terminology that disguises salient areas that need the greatest attention regarding minority populations' health. This result confirms Hurtado's (1992) claim that unequal allocation of resources is dependent on racial and gender social categorizations that "determine what access individuals have to knowledge, what is considered knowledge, and ultimately how it is that one comes to perceive oneself as knowledgeable" (p. 374).

The second focus of PHCR is knowledge production with the affiliated principle of social construction of knowledge under its focus (Ford & Airhihenbuwa, 2010). The social construction of knowledge within groups that share the same ethnic culture may not encompass the knowledge base of the dominant group. More than half of the participants in this study preferred experiential learning from other African American females diagnosed with hypertension to acquire new health knowledge related to hypertension. The participants in this study preferred experiential learning to acquire new health knowledge related to hypertension and other health information. The experiential learning from other African American women living with high blood pressure is viewed as authentic, highly credible and sincere by the participants. Fenwick (2003) states, "The outcome of experiential learning as participation is that the community refines its practices, develops new ones, or discards and changes practices that are harmful or dysfunctional" (cited in Merriam et. al., 2007, p. 160). The experiential learning from other African American women with hypertension who have common cultural practices already embedded validates the learning experiences.

W.E.B. DuBois (1897) noted that people's histories are interconnected by how they see themselves as groups through the lens of race; it has served to define how people operate and communicate with each other as individuals and within groups (cited in Sheared et. al., 2007, p. 5). This unique perspective is honored as the highest level of trustworthiness with health information related to hypertension diagnosis, side effects, and treatment.

This choice of experiential learning to acquire new health knowledge by the participants aligns with the authenticity of the unique voice of people of color, a major contributor of two of the core focuses of the Public Health Critical Race Praxis. This conclusion extends Matsudo et al.'s (1993) suggestion that the experiential knowledge of people of color can lead to "a better understanding of the impact of race on marginalized groups and the overt and covert benefits that members of the dominant society derive from this oppression" (cited in Sheared et. al., 2007, p. 280). The current study's findings extend research from Alexander, Schallert, and Hare (1991) that shows even when cultural knowledge is not the direct focus, ways of talking, ways of thinking, and ways of conceptualizing the world reflect the cultural milieu of the individual.

This research confirms and extends the declaration of Hill Collins (2000): "For African American women those individuals who have lived through the experiences about which they claim to be experts have more credibility than those who have just read or thought about the experience" (p. 257). The second research finding shows that participants in this study preferred to acquire new health knowledge from the internet. Almost all of the participants in this research study vigorously learned new health information from the internet. This research extends Prins and Mooney's (2014) finding that non-formal education cultivates and improves health outcomes by increasing people's knowledge and trust of

“information on health risks as well as how to avoid them” (p. 29). The participants added to their health knowledge about hypertension and heart disease from the new health information they researched on the internet.

This conclusion confirms Feinberg’s (2016) findings that indicated use of the internet is a significant and moderating factor related to better health status regardless of education status (p. 14). The internet environment is optimal for these African American women participants due to its continuous availability, the self-paced environment, the vast amount of information, and, most important, the unbiased and non-interactive medium of learning. The internet is the participants’ ideal learning environment for increasing health knowledge because it is absent of perceived bias and prejudice that may occur in healthcare settings and other societal experiences.

The third research finding of how participants in this study preferred to acquire new health knowledge is from health care professionals. There were a few participants who acquired new health knowledge from health care professionals, yet less than half of the participants preferred not to acquire new health information from health care professionals. This hesitation eludes to a deeper issue of the phenomena of hypertension in the African American population. This finding extends the IOM’s (2003) conclusion that doctors may treat African-American patients differently, and this differential (less favorable) treatment may lead African Americans to comply with treatment less frequently. This acknowledged and perceived less favorable treatment creates a negative experience for the African American patient’s relationship with the individual health care professional and the health care industry as a whole.

Patients' and providers' behavior and attitudes influence each other reciprocally and reflect the attitudes, expectations, and perceptions that each group has developed in a context where race and ethnicity are often more salient than these participants recognize (IOM, 2003). These subtle interactions between the patient and provider in a health care setting make up the environment where health disparities are born. This research extends the IOM's (2003) conclusion that stereotyped beliefs held by the doctor can, therefore, turn a situation of a priori equality into one of ex post disparity.

Language and culture are important factors in understanding health disparities to the extent that African American women are less likely to have access to health care services and the kind of assistance that facilitates full communication with their provider (Schulz, A. & Mullings L., 2006, pg 196). Health care professionals and advocates are left with the question of how to effectively present health information to the individual as an intervention to achieve positive health behavior.

Conclusion Three: Being an African American Woman is the greatest Social Determinant of Health

The aim of the third research question was to understand how personal, social and environmental factors shape the health behaviors of African American women diagnosed with hypertension who reside in Durham, NC. The primary research finding revealed that being an African American woman and the intersectional positioning it carries in the U.S. has the strongest impact on the personal, social, and environmental factors that shape their health behaviors.

Several emerging hypotheses to explain the excess burden of hypertension in African American women concern psychosocial and environmental factors (Cozier et al., 2006). The

reason for focusing on this specific population in this context is that the participants are African American woman in a southeastern city and state classified as part of the “Stroke Belt” in the United States. The Stroke Belt classification is based on that region having the highest prevalence of heart disease/stroke morbidity and mortality rates within the United States. This research study confirms and extends Slade-Sawyer’s (2014) finding that health status and its consequences appear to be directly tied to geographical and socioeconomic boundaries.

The racialized society in which we live dictates the environment in which most people of color live in the U.S. due to historical implications before the Civil Rights movement. The environment of the participants’ lives strongly impacts the personal factors that shape their health behaviors. For the individuals in this study, being African American women in the U.S. has the greatest impact on their health behaviors due to their intersectional socially-constructed existence, meaning that women of color are “marginalized” along the lines of gender and race at the same time (Parker & Lynn, 2002). With the participants in this study occupying two different interlocking socially constructed categories that are and have been oppressed in our society, all their experiences are perceived through the lens of the intersection of their being African American and women.

This research finding extends Melton’s (2011) research study that found his sample of (HIV-positive Black women reported how “intersectional stigma and stereotypes” informed their experiences (cited in Collins et. al., 2014, p. 303).

This study concluded that the participants’ intersectional identities of being African American and women, both oppressed groups in the United States, subjected them to feeling victimized by prejudice and racism with their day-to-day interactions. The normalcy of

racism in our society is so interwoven in the African American women with hypertension's daily interactions that some of the women in the study described the racist experiences but lack the full awareness to label the experience as Racism. This conclusion confirms the first focus of PHCR that the contemporary patterns of racial relations is that the ordinariness of racism impacts the everyday experiences of most people of color in the United States. Sue et al. (2007) explains racism in our society:

Racism is more likely than ever to be disguised, covert and has evolved from the "old fashioned" form, in which overt racial hatred and bigotry is consciously and publicly displayed to a more ambiguous and nebulous form that is more difficult to identify and acknowledge. (p. 272)

Due to heightened societal racial discrimination of African Americans women in the U.S., there were African American women in the study who perceived that they were treated worse than people of other races. The culture of Black people being viewed as lesser than others or treated as inferior to others is still active in both subtle and obvious interactions in the southern cities of the U.S. such as Durham N.C.

This research finding regarding the experiences of African American women with hypertension confirmed the literature that African American women are more at risk for negative thoughts and day-to-day experiences that results in high levels of ambulatory blood pressure that develops into cardiovascular disease (Williams & Cashion, 2008). This research finding extends previous research conclusions that found "chronic exposure to the microaggressions of everyday racism (e.g. being followed while shopping or targeted by police based on race) may be a source of unrelenting stress for minorities" (Ford & Airhihenbuwa, 2010, p. 395).

Unfortunately, societal prejudice is also projected onto interactions with health care professionals. A few of the participants perceived that when seeking health care, they felt their experiences were worse than those of people of other races. Race and experiences based on race are not equal; thus, the experiences that women of color have with respect to race and racism create an unequal situation (Decuir & Dixson, 2004). Those unequal health interactions result in health inequalities in the health status of African American women with hypertension. Distrust in health care providers is a potential barrier to adherence to medical advice among Black women with hypertension (Abel & Efird, 2013). Internalization of stigma and prejudice by marginalized individuals has been linked to serious health harming consequences (Stuber, Meyer, & Link, 2008). The most common serious health consequence resulting from the internalization of stigma and stress is the chronic disease hypertension.

This study's conclusion confirms Kovner and Knickman's (2011) research that health is still strongly determined by behavioral, community, and societal-level forces—not by medical care.

Conclusion Four: Having Family Motivates to Great Health

The aim of the fourth research question was to understand factors that facilitate positive health behaviors of African American women diagnosed with hypertension. The reason for focusing on this specific population in this context is the need to celebrate the things in the lives of the African American woman with hypertension in this study that motivates them to maintain and/or improve their health behaviors. The greatest facilitator for optimal health for most of the participants is family, specifically children and grandchildren. The majority of the women in this study are mothers and some are grandmothers. The participants in maternal roles all spoke of improving and maintaining good health because

they wanted to see their children and/or grandchildren completely grown up and taking care of themselves. One of the beliefs in the African American culture is their faith first, then family. Ahye et al. (2006) describe this familial support: “Intergenerational support, including that provided by grandmothers, has been shown to be important to the health and competence of some African American families. Specifically, social support from family members has been associated with eating a healthy diet” (p. 6).

Conclusion Five: Finances and Self-Efficacy are Impediments to Achieving Optimal Health

The aim of the fifth research question was to explore the factors that hinder the positive health behaviors of African American women diagnosed with hypertension who reside in Durham, NC. Analyzing the data that answered the fifth research question revealed the themes of finances and self-efficacy as the primary factors that hindered the participants from achieving optimal health after their diagnosis with hypertension. The African American women in the study stated the leading barriers preventing the women from living a healthy heart lifestyle were financial limitations and low self-efficacy. Self-efficacy, or confidence in one’s ability to participate in a given behavior, has been associated with better chronic disease self-care management (Warren-Findlow et al., 2012). The easiest and cheapest form of positive health behavior to achieve optimal health with the diagnosis of hypertension is walking. All of the participants’ residences are located within the city limits of Durham and more than half of the participants’ neighborhoods had the presence of sidewalks in their neighborhoods but only two participants utilized them for exercising.

This confirms Anderson & Miller’s conclusion (2005) that the extent of disadvantage results from limited resources at the individual as well as a lack of neighborhood and

community-wide resources. Lack of time for self-care because of caregiving responsibilities has been identified as another possible barrier to disease management (Ahye et. al., 2006). The daily lives of the African American women that participated in this study are composed of working full time jobs, being mothers, assisting as caregivers for aging parents and siblings; these daily responsibilities routinely contribute to negative health behaviors.

Due to responsibilities and family obligations, the women in this study were not able to allocate the time needed to achieve optimal health for themselves. African American women's lives, specifically in the climate of racism, race and gender-based oppression, causes an overburden of stress in their daily lives. This research study's findings confirm that "the daily common experiences of racial aggression have significantly more influence on frustration and self-esteem than traditional overt forms of racism" (Sue et al., 2007, p. 272). The greater responsibility that African American women hold in the family unit may be due to the limited resources that were invested in minority cultures during and after legalized slavery in the U.S., thereby forcing African American women to take on the roles of mother, nurturer, and bread winner out of economic and social necessity.

In other words, being a Superwoman was necessary for the African American population's survival (Mullings, 2006; Woods-Giscombe, 2010). The legacy of strength in the face of stress among African American women might have something to do with the current health disparities that they face with hypertension (Woods-Giscombe, 2010). Finances was the second theme revealed as a barrier due to the high cost of healthy food.

Fresh food and vegetables can account for a substantial amount of a grocery store bill, and the selection of such healthy food impacts the limited funds available for purchasing

other food for the entire family because the majority of the participants are the head of the household.

In general, Black women in the United States have lower household incomes when compared to non-Hispanic White woman (Ahye et. al., 2006). It is widely known that the cheapest foods are the unhealthiest. In addition, when health care professionals suggest healthier foods to improve dietary habits, those foods may not be an acceptable staple in the cultural dietary practices of the African American population. Diet and nutrition are commonly recognized as culturally-influenced domains of behavior (Ikeda et al., 2002). African American women with hypertension may be reluctant to modify their eating habits when they feel that the recommended changes ask them to give up culturally-meaningful habits and practices (Shaw et al., 2009). Self-reported racism was itself found to be a mediator of the association between healthy food beliefs and healthy dietary behaviors, between financial stress and well-being (Paradies, 2013).

Implications

Implications for Health Education

The participants strongly advocated for more health education specific to hypertension. Many wanted the health education to be specific to the African American culture. Education of the public is key to addressing complex health determinants (Coady & Cameron, 2012; Tones & Tilford, 2001).

They would prefer the health education to be distributed in the communities in which they live to reach the entire African American population. A few suggested hypertension and heart disease education interventions suggested by the participants for implementation include going door-to-door in high risk neighborhoods to raise awareness. The hypertension

and heart disease education must be in plain, everyday language to reach the widest audience and influence a positive lifestyle in the broadest way possible. The education should be simple and not just focus on what foods to avoid; education should also include information on the tasty, less expensive substitute options when possible. African American women must learn to make their health and themselves their first priority in their lives.

Community resources such as the Durham Parks & Recreation (DPR), which has 11 facilities within the city of Durham, offer Healthy Cooking for Adults classes that are four weeks in duration and meet weekly for one hour and 30 minutes. The cost for the Healthy Cooking for Adults class is \$24 for city residents and \$29 for non-city residents. DPR also offers a Jr. Chef class that teaches children ages 6-12 how to make quick & healthy meals with fresh fruits and vegetables. The Jr. Chef class is six weeks in duration and meets weekly in the evening for one hour. The cost for the Jr. Chef class is \$9 for city residents and \$14 for non-city residents. Durham Parks & Recreation offers fee waivers for individuals that receive public assistance through the Department of Social Services (i.e., TANF (temporary assistance for needy families), SNAP (formerly known as food stamps, WIC (women, infant and children supplemental nutrition program), and Medicaid).

The majority of participants in this research study preferred acquiring new health knowledge from the internet. Healthy adult and kid-friendly recipes are located on the internet with healthy delicious version of traditional African American recipes. The National Institute of Health has four different healthy recipe books on their website. Two are African American-themed recipe books with healthier traditional African American culture recipes: Heart Healthy Home Cooking African American Style recipe book located at <https://www.nhlbi.nih.gov/files/docs/public/heart/cooking.pdf>; Soul Food Makeover-Heart

Healthy African American Recipes at <https://www.nhlbi.nih.gov/health/educational/.../recipes/Recipes-African-American.pdf>; Free Healthy Recipes-National Heart, Lung and Blood Institute at <https://www.nhlbi.nih.gov>; and NHLBI Deliciously Healthy Eating Recipes-NIH at <https://healthyeating.nhlbi.nih.gov/>.

Many participants strongly advocated for education about stress management skills. These stress management skills educational interventions need to include meditation, prayer, and methods for redirecting or solving stressful situation without emotional eating. DPR offers a variety of classes that focus on meditation and stress management. The class offerings include Aikido, Healthy Habits through African Movement, Tai Chi, and Yoga. The Healthy Habits through African Movement class has a five-star regiment that addresses the following issues: (1) weight loss concerns, (2) blood pressure and glucose levels, (3) healthy eating habits, (4) stamina building, and (5) positive mind sets.

Health programs for African American women can build on existing interpersonal family values such as responsibility, caretaking, social connections, and should be structured to fit the felt needs of the group (Ahye et. al., 2006). Intergenerational support for the African American family unit to improve the health of African American women with hypertension should first incorporate the reality that many of the participants received diagnosis at the point of becoming mothers. Interventions can focus on raising awareness of the need for mothers to be in optimal health before and during pregnancy, starting with the consumption of a prenatal vitamin that can provide the nutrients that women most often do not receive in their daily food consumption. Prenatal vitamins are strongly recommended for the necessary folic acid needed during pregnancy to prevent birth defects. The March of Dimes, a non-profit that advocates for healthy moms and babies, distributes free prenatal vitamins and

education about achieving healthy pregnancies. Culturally-appropriate health care, or culturally-competent care, has been proposed as a means to reduce health disparities among ethnic groups (Shaw et. al., 2009).

As stated, the women strongly preferred engaging in self-paced education on the internet. However, if the participants are not accessing the correct and most reputable websites for information about hypertension and heart disease such as the American Heart Association or the National Heart, Lung, and Blood Institute, their internet education may not be beneficial to them.

This confirms Feinberg (2016) conclusion that adults of all education levels may have difficulty searching for health information on the Internet due to inability to generate effective searching terms, an aversion to using links on web pages, and difficulty understanding how to use the information obtained.

The health literacy levels of the websites these women access may also exceed the participants' level of understanding, which may decrease their ability to apply the health information to their individual lives. This confirms Feinberg (2016) conclusion that the high literacy demands of health-related websites create problems in understanding and applying information, even for those who have a high school diploma. Small educational classes need to be offered at community centers and public libraries for information on recommended health related websites and to answer questions about information being displayed on webpages.

The need for health advocates to create quick mini-health education modules specific to high blood pressure to be accessed on the internet that cover heart disease symptoms and stroke symptoms is evident. The modules need to be available continuously and be most

effective for individuals with even the lowest health literacy levels. The modules would need to escalate in information and repeat most important information in every other module in different ways in order to optimize learning. The repetition of the most significant information is a way to make the information embedded into the individuals' thinking process such as when they learned the alphabet through repetition.

Implications for Health Policy

Mandatory annual Race Equity training for all health care professionals regardless of whether they have patient contact or conduct research should be implemented. The race equity training must be documented just like all any other continuing medical credentialing at any health care system that receives any Medicaid or Medicaid reimbursements. Any health care professional that does not complete refresher training before the annual due date should be removed off the work schedule without pay (without the ability to use vacation or sick leave) until training is completed. Health professionals must come to realize that health policy should be directed at reducing health inequalities (Coady & Cameron, 2012; Wilkinson, 2006).

Inadequate health literacy levels affect people from varying backgrounds and ethnicities. The estimated cost of inadequate health literacy to the U.S. economy may well be in the range of \$1.6 to \$3.6 trillion annually (Huber et al., 2012; Office of Disease Prevention and Health Promotion, 2010). The urgent need for screening for health literacy levels of all patients at the triage intake entrance of care for all health care systems visits exists. When patients are brought in for initial triage of blood pressure and pulse. The patient should be asked Chew's (2004) three health literacy questions, which takes less than 30 seconds.

The results of the literacy screener can be recorded in the individual's electronic health records along with blood pressure and pulse. The attending health care professional can review the health literacy level result at the same time they are reviewing other pertinent health status information.

When the health care professional is interacting with the patient, they can communicate with them at the correct health literacy level for optimal understanding and application for what intervention is needed to improve the patient's health status for the purpose of the medical visit. The Joint Commission on Accreditation of Health Care Organizations (1994 Accreditation Manual for Hospitals) mandated that hospitals and other health organizations provide instruction understandable to patients, assess patients' knowledge, and document such educational efforts (Williams et. al., 1998). In addition, the epidemic of low health literacy was the driving force of the 2010 Plain Writing Act in the United States. This recent federal legislative action mandates use of clear, plain language in written documents for the public, across government sectors (Hill-Briggs, 2012). This research highlights the need for accountability and oversight to ensure implementation within the healthcare industry of the Plain Writing Act.

Implications for Health Practice

The need for health educators to be added as part of the health care team is strongly needed as part of the intervention process. After the visit with the physician, patients can go to see a health education specialist for a 20-minute consultation to provide specifics or clarify the health education information they just received from the physician. The health educator could provide clarity and a greater detailed explanation of the care plan at the appropriate health literacy level for the patient to implement to improve their health status. The health

educator could also provide a 14-day follow up with the patient to ensure implementation and completion of the care plan recommendations.

More emphasis is needed in marketing and conducting community health education programs in the neighborhoods of those at highest risk of hypertension. Community health education programs can occur every 3 months at community or recreation centers where individuals can feel empowered and the power relationship is at an even distribution. The programs could be designed to incorporate components for each member of the family to participate from children, to parents and grandparents. This would be an intergenerational health approach to increasing and improving the health of the entire family. This recommendation also provides an opportunity for African American women with hypertension to develop an authentic and trusting relationship with the community. This relationship is key for participation and sustainability that lead to positive health outcomes.

Implications for Theory

This body of research conceptualized the application of Public Health Critical Race Praxis in health disparities research. The findings of this study extend the legitimacy and validity in the fields of science, social science, and public health. PHCR's importance as a conceptual framework in health research that focuses on the roots of how health disparities are created. The PHCR framework unveiled how racialization, knowledge production, ordinariness of racism, and intersectionality create an environment in the U.S. of strong levels oppression that affects African American women's mental and physical state results in their bodies being inflicted with hypertension. PHCR illuminates the important contributions that the study of the experiences of ethnic/racial minorities make to the discipline of health research in regard to health disparities. PHCR's focus on action includes prioritizing the

significance of voice, intersectionality and critical approaches and suggests that ideas for public health interventions can be generated from the needs requested from the community. Public health policy should pay attention to the voices from within the targeted community to assess how they want to see the phenomena addressed to reduce mortality and morbidity of the chronic disease of hypertension.

The negative election advertisements that aired on many television channels and the three presidential debates had a strong negative effect on some of the African American women participants which resulted in raised high blood pressure from the perceived stress of worrying about how the election would impact their lives. Additionally, by collecting data in the month of October, timing may have a direct impact on why many participants felt that cancer was the disease with the highest mortality rate for women; after all, October is Breast Cancer Awareness month, and the Susan B. Komen foundation provides a lot of marketing and awareness of cancer throughout the month which the participants noticed, seeing references to cancer awareness at most large social events such as National Football League games and on commercials from many large companies.

Implications for Future Research

Future research needs to focus on how to impact diet and how to incorporate lower sodium, healthier recipes with food items that are already familiar in the culture of African American women with hypertension.

This recommendation has the potential to improve the health status of African American women with hypertension and other chronic disease, since several of the participants stated they had the co-morbidities of asthma and diabetes. Prevention and treatment of the chronic diseases requires research and interventions theoretically-grounded

in an understanding of the complexity of life in the U.S., which is shaped by an individual's racial/ethnic group status as well as other factors (Lillie-Blanton & LaVeist, 2013).

There was no disparity between or within groups based on their geographical location of rural, suburban or urban for the African American women with hypertension. The only apparent disparity by geographical location was due to the participants residing in the southeastern part of the United States as African American women, where racism and prejudice directly impacted their personal, social, and environmental experiences. The participants resided in the same county of a prominent world-renowned healthcare system, yet its presence does not show any positive effect on the participants' knowledge level of hypertension or its relationship to heart disease, nor does the proximity of Duke Health seem to positively impact the health actions participants took to improve their health. This confirms for African American women diagnosed with hypertension, Durham, NC is the City of Medicine but not the City of Health for this specific population.

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APPENDICES

Appendix A: Letter to Non-Profit Organization for Solicitation of Recruitment

April 25, 2016

Attn: American Heart Association
Director of Community & Multicultural Affairs
3135 RDU Center, Suite 100
Morrisville, NC 27560

RE: African American women interested in participating in a research study on the personal, social and environmental factors that shape their health behaviors

Dear Ms. King,

Hello, I am a doctoral student at North Carolina State University. I am conducting a research study exploring the health literacy and health behaviors of African American women diagnosed with hypertension who reside in Durham, NC. I am excited to talk with eighteen African American women diagnosed with hypertension about the personal, social and environmental factors that shape their health behavior.

I would greatly appreciate if you can distribute the enclosed recruitment flyer (Appendix B) to your constituents for participation.

If you or your constituents have any questions, please do not hesitate to contact me by phone at (919) 912-9493, or email at lksmithb@ncsu.edu or LOTTIE4HEALTH@gmail.com.

Warmest Regards,

Lottie K. Barnes, BS, MPH, CHES
Doctoral Student

Appendix A-1: Letter to Non-Profit Organization for Solicitation of Recruitment

April 25, 2016

Attn: Community Health Coalition
Administrative Director
404 Crutchfield Street, Suite 100
Durham, NC 27704

RE: African American women interested in participating in a research study on the personal, social and environmental factors that shapes their health behaviors

Dear Dr. Hart-Brothers,

Hello, I am a doctoral student at North Carolina State University. I am conducting a research study exploring the health literacy and health behaviors of African American women diagnosed with hypertension who reside in Durham, NC. I am excited to talk with eighteen African American women diagnosed with hypertension about the personal, social and environmental factors that shape their health behavior.

I would greatly appreciate if you can distribute the enclosed recruitment flyer (Appendix B) to your constituents for participation.

If you or your constituents have any questions, please do not hesitate to contact me by phone at (919) 912-9493, or email at lksmithb@ncsu.edu or LOTTIE4HEALTH@gmail.com.

Warmest Regards,

Lottie K. Barnes, BS, MPH
Doctoral Student

Appendix B: Recruitment Flyer

DO YOU HAVE A HIGH BLOOD PRESSURE?



ARE YOU A WOMAN BETWEEN THE AGES OF 21-50?

Do you live in Durham County?

Do you consider yourself an **African American, Black or a Woman of Color?**

You can be part of an important high blood pressure research study.

The purpose of this study is to see what information **Black women** need in order to reduce their **risk of heart disease** which is the **#1 killer** of **Black women**.

A benefit of this study can be improving your knowledge of high blood pressure and the risk of heart disease. This study includes two short questionnaires related to heart disease, health literacy and an interview about your health. This research will take place at a location where you feel most comfortable.

It will take no longer than 30 minutes to conduct the entire study. After completing the study, you will receive a **\$25 gift card** for your participation and time.

For more information, please contact Lottie K. Barnes at 919-912-9493 or email LOTTIE4HEALTH@gmail.com or lksmithb@ncsu.edu

This is a research study conducted as part of the requirement for an EdD in Adult Education-Health Professions at North Carolina State University.

Appendix C: IRB

North Carolina State University INFORMED CONSENT FORM for RESEARCH

Title of Study: Examining health literacy and health behaviors of African American women diagnosed with hypertension in Durham, NC

Principal Investigator: Lottie K. Barnes, BS, MPH

Faculty Sponsor : Dr. Tuere Bowles

What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?

The purpose of this research study is to examine the health knowledge, health literacy and health behaviors of African American women diagnosed with high blood pressure in Durham, NC.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to meet individually with the researcher to collect the following information from you: demographic questionnaire, health literacy questionnaire, American Heart Association awareness of heart disease in women questionnaire. The researcher will read the questions for you, unless you tell the researcher you prefer to read them by yourself. In addition the research will ask question that relate to your health information knowledge and things that help you improve or hinder you from having the best health results. You will ask to grant verbal consent to have the verbal question section of the research study to be recorded. The total duration of the study will be no more than 30 minutes. This research will take place at a location where you feel most comfortable.

Risks

The Institutional Review Board of North Carolina State University has determined that participation in this study poses minimal risk to participants. The possible dangers with this study may be emotional such as getting embarrassed or upset from telling the researcher about some health behaviors or situations.

Benefits

You may gain increased awareness of heart disease risk in women and the knowledge obtained from this research study could help you decrease your risk of heart disease.

Confidentiality

The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in a locked file cabinet at an offsite location only accessible to the principal investigator. No reference will be made in oral or written reports which could link you to the study. You will NOT be asked to write your full name on any study materials so that no one can match your identity to the answers that you provide.

Compensation

For participating in this study you will receive a \$25 gift card from Target or Wal-Mart. If you withdraw from the study prior to its completion, you will receive not receive anything for participating.

What if you have questions about this study?

If you have questions at any time about the study or the procedures, you may contact the researcher, Lottie K. Barnes at (919) 912-9493 or by email at LOTTIE4HEALTH@gmail.com or lksmithb@uncg.edu .

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator at dapaxton@ncsu.edu or by phone at 1-919-515-4514.

Consent To Participate

“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

Subject's signature _____ **Date** _____

Investigator's signature _____ **Date** _____

Would you be willing to be contacted about another study in the near future? Yes _____ No _____

Appendix D: Participant Selection Questionnaire

What is your age? _____

What is your zipcode? _____

When were you first diagnosed with heart disease/hypertension? _____

How long have you suffered from high blood pressure/hypertension? _____ years

Do any members of your family have heart disease or hypertension? _____

Race/ethnicity: How do you describe yourself? (Please circle the one option that best describes you)

- American Indian or Alaska Native
- Hawaiian or Other Pacific Islander
- Asian or Asian American
- Black or African American
- Hispanic or Latino
- Non-Hispanic White

Are you a veteran or active member of the military? _____

Marital status): Are you: (please circle your response

- Married
- Divorced
- Widowed
- Separated
- Never been married
- A member of an unmarried couple

Do you consider yourself a member of the LGBT (lesbian, bisexual, gay, transgender) community?

Do you have any children? If so, how many? Employment status: Are you currently: (Please circle your response)

- Employed for wages
- Self-employed
- Out of work for more than 1 year
- Out of work for less than 1 year
- A homemaker
- A student
- Retired
- Unable to work

Education completed: What is the highest grade or year of school you completed? **(Please circle your response)**

- Never attended school or only attended kindergarten
- Grades 1 through 8(Elementary)
- Grades 9 through 11 (Some high school)
- Grade 12 or GED (High school graduate)
- College 1 year to 3 years (Some college of technical school)
- College 4 years (College graduate)
- Graduate School(Advance Degree)

Appendix E: Dr. Chew's Health Literacy Screener

- 1) Do you have problems learning about your medical condition because of difficulty understanding written information?"
- 2) Do you have someone help you read hospital materials?"
- 3) Are you confident filling out medical forms by yourself?"

Appendix F: Interview Guide

A Case Study exploring the health literacy and health behaviors of African American women diagnosed with hypertension in Durham, NC

Pseudonym:

Place:

Interviewer: Lottie K. Barnes

Scheduled Time:

Date:

Start: _____ End:

Background/Opening Questions

- 1) Are you original from Durham? What brought you to Durham?
 - a. How long you lived in the areas, any family in the area?
- 2) Tell me a little bit about yourself.
 - a. Family background. b. Childhood experiences. c. Early and adult experiences. d. Work history over the years.
- 3) How would you describe yourself?
 - a. Alternate question: Or, if your best friend had to describe you or introduce you to someone, what would he/she say?
- 4) How would you rate your health today? Why did you rate your health in that status?
- 5) In your own words, what is high blood pressure? In your own words, what is hypertension? What is the relationship between high blood pressure and hypertension?

RQ 1: What are the experiences of African American women diagnosed with hypertension?

- 6) How long have you been diagnosed with high blood pressure/hypertension?
 - a. Probe, how old were you when it first began?
- 7) Walk me through the time/moment you learned that you had high blood pressure/hypertension.
 - a. Where were you? b. Who was involved? c. What happened? d. What did you think? e. What previous understandings did you have about high blood pressure/hypertension at the time?
- 8) How did you change any of your health behaviors after you were told you had high blood pressure?
- 9) How has having high blood pressure/hypertension affected the way you think about yourself and your health?

RQ 2: How do African American women diagnosed with hypertension learn and construct knowledge to improve their health status?

- 10) Upon being diagnosed, what were the key things that you had to learn about heart health? a. Who helped you learn those things? b. What resources did you draw upon in order to learn those things?
- 11) To what extent do you now feel knowledgeable about heart health? (Probe: As it relates to your personal health and health of loved ones like grandmother, mother and daughter)
- 12) What role do health care professionals play in your learning process about heart health? (Probe: What do you do when you may not understand the health information you receive from your health care professional?)
- 13) What factors influences your decisions on whether to increase your health knowledge? (i.e. health status, advisement from health professional). What resources/aids/things would you need to increase/improve/ to learn that heart health is an issue for women?
- 14) How do you increase/add to your health knowledge?
- 15) What would you like to see done to improve the knowledge of heart health of women in your community?

RQ 3: How do personal, social and environmental factors that shape the health behaviors of African American women diagnosed with hypertension?

- 16) Please describe for me what a typical day is like for you as person with hypertension/high blood pressure? (Alternate: What do you do differently during a typical day, given that you have hypertension/high blood pressure?)
- 17) How would you describe society's view of you as African American women with hypertension/high blood pressure?
- 18) How often do you think about your race?
- 19) What situations prompt you to think about your race?
- 20) Within the past 12 months, do you feel you were teated worse than, the same as, or better than people of other races?
- 21) Within the past 12 monther, when seeking health care, do you feel your experiences were worse than, the same as, or better than for people of other races?
- 22) Within the past 30 days, have you experienced any physical symptoms, for example, a headache, an upset stomach, tensing of your muscles, or a pounding heart, as a result o how you were treated based on your race?
- 23) Within the past 30 days, have you felt emotionally upset, for example angry, sad, or frustrated, as a result of how you were treated based on your race?
- 24) Please describe any environmental influences, either family, home or community that have affected your overall health?
- 25) How does your community environment affect your ability to improve heart health (i.e., crime, lack of sidewalks)?
- 26) How does your family's behaviors affect your heart health (i.e., diet/exercise)?

RQ 4: What facilitates health behaviors of African American women diagnosed with hypertension?

- 27) What supports your ability to make good choices for a healthy heart?
 28) Please describe any guidelines, steps, or resources that you are using to ensure a healthy heart?

RQ 5: What hinders the health behaviors of African American women diagnosed with hypertension?

- 29) What is the **biggest barrier** preventing you from leading a heart-healthy life?
 30) What **lack** of information or knowledge are you in need of that is preventing you from having a heart healthy life?
 31) In what ways do people **negatively** treat you that may affect your health? ? (Probe: Tell me more. Why do you believe this is the case?)
 a. Can you describe those experiences?
 b. How would you label the experience (e.g. what would you call the experience)?
 32) Specifically, how does your family's behaviors **negatively** affect your heart health? (i.e., diet/exercise)?

Closing Questions

- 33) This is a metaphor question where I need you to compare your experience to something else. So, please fill in the blank. Being an African American woman diagnosed with hypertension/heart disease is like _____. Why? Explain.
 34) If you were to give advice to another Black woman recently diagnosed with hypertension/heart disease, what would you tell her that you **must** think about and do?
 35) What is your opinion of what needs to be done to address the high rate of heart disease in the African American population?

The following are probes that will be employed as suggested by Bogdan and Biklen (2003):

- | | |
|---------------------------------------|-------------------------------------|
| What do you mean? | What were you thinking at the time? |
| I'm not sure that I am following you. | Give me an example. |
| Would you explain that? | Tell me about it. |
| What did you say then? | Take me through the experience. |

Thank you for participating in this research! Distribute Gift Card and complete log.

Appendix G: Observation Guide

Observer: _____

Date of Observation: _____

Time: _____

Place: _____

Purpose of Observation: _____

Actors (participants present and how many): _____

Activities: _____

1. What were the main issues or themes that struck me in my observations at this setting?
2. What questions could be asked concerning the place I observed?
3. What questions could be asked concerning the actors I observed?
4. What questions could be asked concerning the activities I observed?
5. For each of the elements of the social situation (i.e., place, actors, activities) I observed, identify the main information I acquired (or failed to acquire) for the questions above.
6. Was there anything else that struck me as salient, interesting, illuminating or important?
7. If I were to undertake another observation in this setting, what new questions would I consider?

Adapted from: Miles & Huberman (1994). *Qualitative data analysis: An expanded sourcebook* (2nd Ed.). Thousand Oaks, CA: Sage (p. 53).

Appendix H: Coding Excerpt

Exerpts of Participants'

Words and Phrases	Codes	Concepts	Themes
I was at the doctor's office in order to get my allergy shots and had my blood pressure taken and it was too high for her to do anything. She (the doctor) told me I needed to go straight to the hospital and my labor was induced.	Becoming a Mother	Parenting Role	Stressing
They need to think about themselves first and change their diet and exercise. Find a way to lessen the stressful situations in their life.	Improving Eating Habits and Increasing Exercise	Changing Diet and Exercise	Improving Health Behavior
I would say stress because stress can be bills or being worried aboutanything like that. Stress, not getting the exercise I need.	Needing Exercise and Stressing	Stressing	Stressing
When I had the headaches I had to learn to limit my caffeine intake and the fried foods and the greasy foods. I learned these things from other people diagnosed with high blood pressure. I	Learning new knowledge and health behaviors	Peering with Other African Americans with Hypertension	Experiential Learning

heard other people and their side effects.			
I don't want to end up having a stroke or die at an early age. I do internet searches a lot.	Learning new health knowledge	Internet Searching as a Learning Tool	Searching Internet
Health care professionals play a significant role because they try to help me keep my blood pressure down. I think they play a very important role if you listen to them.	Learning New Health Knowledge	Constructing Knowledge	Learning from Health Care Professionals
With everything going on in the world (current events), I can't help but think about my race and who I am and how my race affects opportunities and as far as survival.	Personal Factor	Societal Negative Imaging	Intersectionality
	Social Factor		
	Environmental Factor		
I was watching the debate one day and the foolishness that Donald Trump was saying; I could not take it no more, I could feel my blood pressure rising.	Personal Factor	Societal Negative Imaging	Intersectionality
	Social Factor		
	Environmental Factor		
If I'm going to a store and there's another race individual and that person is getting			

<p>more attention than I am considering I was there first. That's a stressor for me because it's blatantly in my face and that makes me more aware of differences that occur daily in this world. Living in America While Black</p>	Personal Factor	Being Subjected to Racism	Intersectionality
	Social Factor		
	Environmental Factor		
<p>I feel like if I was of another race I would have been given more information about high blood pressure or any other thing I may have. Whatever questions I have I feel like I can get them answered on the internet without being pre-judged.</p>	Prejudice	Being Subjected to Prejudice	Intersectionality
<p>If you have children you want to be there for those children. If you have family you want to be there for the family. If you have a husband you want to be there for him.</p>	Motivation for Positive Health Behavior	Children	Being Part of a Family
<p>My kids and my grandkids influences</p>	Motivation for Positive Health Behavior	Children	

<p>my decisions ... by trying to cook better; trying to take a little exercise. Just trying to live my life as cleanly as I can.</p>			<p>Being Part of a Family</p>
<p>You want to be living a healthy life for yourself. You want to feel good. Find some way of helping your self-esteem because I think a lot of that goes back to self-esteem. A lot of women just have poor self-esteem.</p>	<p>Putting You First</p>	<p>Competing Priorities</p>	<p>Lacking Self-efficacy</p>
<p>The price of food. As I attempted to do healthy eating I realized it was killing my pockets; just trying to buy fruit. Trying to buy things that had less sodium or healthy eating. It seems that my dollar doesn't go so far.</p>	<p>Cost of Eating Healthy</p>	<p>Pricing of Healthy Foods</p>	<p>Lacking Disposable Finances</p>