2015

Perceived Factors Contributing to Coronary Heart Disease in African American Women

Funmilola O. Sholanke
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Funmilola Sholanke

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Anne Fetter, Committee Chairperson,
Public Policy and Administration Faculty

Dr. Mary Bruce, Committee Member,
Public Policy and Administration Faculty

Dr. Tanya Settles, University Reviewer,
Public Policy and Administration Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2015

Abstract

Perceived Factors Contributing to Coronary Heart Disease in African American Women

by

Funmilola Sholanke

MPA, Governors State University, 2006

BS, Northern Illinois University, 2002

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration

Walden University
February 2015

Abstract

African American women (AAW) suffer from disproportionately high death rates due to coronary heart disease (CHD) compared to Caucasian women. Although there have been a number of studies targeting African American adults with CHD in clinical interventions, very few studies have addressed the social determinants of health and the influence of AAW's perceptions of health factors on health outcomes. The purpose of this phenomenological study was to fill the gap in the existing knowledge base by examining the lived experiences of 10 AAW diagnosed with CHD with a focus on the perceptions of environmental, socioeconomic, and cultural factors related to their disease. The framework for this study was Stokol's socioecological theory. Data were collected through individual semi structured interviews that were audio recorded, transcribed, inductively coded, and organized into themes. Results confirmed an expected connection between CHD and key external factors such as smoking, poor nutrition, and low exercise. The findings also indicated that financial considerations were a factor, including the affordability of healthy foods, although the historical cultural connections to cooking and eating were a greater impediment. The financial burden of medical treatment was less troublesome for the participants of this study, as all had access to private or public insurance plans. Other significant barriers included the inability to schedule appointments with physicians due to work and home commitments. The findings from this study contribute to social change by providing insight into the need for public policy that encourages a more culturally-competent health care system to better educate people about CHD, amend AAW's perceptions on CHD, and aid in the possible reduction of CHD.

Perceived Factors Contributing to Coronary Heart Disease in African American Women

by

Funmilola Sholanke

MPA, Governors State University, 2006

BS, Northern Illinois University, 2002

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration

Walden University
February 2015

Dedication

First, I give Glory and Honor to Almighty God for making this dissertation completion possible. To Him only All Glory is due. I dedicate this dissertation to my son, Ayomide Emmanuel Ajayi, and parents, Victor and Anthonia Sholanke. You are all a driving force behind all I do. You stood by me and encouraged me throughout the entire process with your prayers and words of encouragement. Ayomide was always there for me through the good and bad times and motivated me all the way. I appreciate you dearly, son. To both of my parents, I thank you for your constant spiritual support and words of encouragement to hold on. My parents instilled education and achievement in me and my four sisters as children. Education was said to be one of the determinants of success. I appreciate you both and your efforts to mold me into the woman I have become today. I am overjoyed to share my accomplishments with you all. You are my inspiration.

Acknowledgments

Special thanks to my committee members; your guidance and support means so much to me. Dr. Anne Fetter, my chair, I thank you for encouraging and pulling me through with finishing my dissertation. Dr. Fetter, I thank you for taking charge and providing your guidance throughout the entire process with great leadership skills and constant feedback. Dr. Mary Bruce, my methodology expert, I appreciate your patience, support, and great advice from the very beginning, and Dr. Tanya Settles, URR, your time and dedication was valuable.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

The large number of African American women (AAW) suffering from cardiovascular disease (CVD) is a public health concern nationwide. CVD is a broad description of different types of diseases affecting the heart and blood vessels (World Heart Federation [WHF], 2014). There is consistent evidence that AAW are more likely than White women to develop coronary heart disease (CHD), which is also known as coronary artery disease (CAD). CHD is a form of CVD and many AAW have been diagnosed with or are at risk for CHD (WHF, 2014). CHD is caused by a build-up of plaque inside the arteries of the heart, which is also described as the hardening of the heart (American Heart Association [AHA], 2014). CHD is the number one killer of all types of CVD, claiming nearly 50,000 AAW lives yearly (AHA, 2014). According to the National Heart Lung and Blood Institute (NHLBI, 2014), CHD is one of the most probable causes of death among AAW. For this reason, CHD continues to contribute to the increased epidemic of the negative health conditions and decreased quality of life experienced by AAW.

The reported statistics by the National Center for Health Statistics (NCHS, 2012) showed that CHD ranked number one in the United States among the 15 top causes of death in 2010. The report further indicated that 597,689 people (24% of those who died) died of CHD among the total of 2,468,435 people of the entire U.S. population in 2010, followed by other causes of deaths such as cancer (23%), chronic lower respiratory diseases (6%), stroke (5%), accidents (4%), Alzheimer's disease (3%), diabetes (2%), nephritis (2%), influenza and pneumonia (2%), and intentional self-harm or suicide (1%; NCHS, 2012). CHD resulted in more reported deaths, with AAW (7%) generally higher than White women (6%; Office of Minority Health [OMH], 2014). To further understand the mechanisms through which CHD affects AAW, 30% of AAW are more likely to die from CHD than non-Hispanic Whites, with about 34% of AAW having high blood pressure (hypertension) compared to 24% of White women (OMH, 2014). These statistics indicate the need for more preventive measures against CHD.

Although there has been vast scientifically based research conducted on CHD awareness indicating a need for increased preventive measures, there is still a need to close the gap in lack of knowledge about CHD awareness particularly among AAW. Women are at higher risk than men of having CHD due to lifestyle choices and medical conditions developed over their lifetimes (Centers for Disease Control and Prevention [CDC], 2010). Many women, especially AAW, are unaware of the signs and symptoms of CHD and ways to prevent it. For example, 49% of AAW ages 20 years and older have CHD and 52% of AAW are not aware of the signs and symptoms of this illness (AHA, 2014). The lack of knowledge about CHD in AAW compared to women from other ethnic groups is of concern and needs immediate attention. Therefore, it is important to identify the environmental, socioeconomic, and cultural factors experienced by AAW and their connections to an increase of CHD development.

In the first part of Chapter 1, I present the background about the prevalence of CHD in AAW and then introduce the problem addressed by my qualitative study. I then state the purpose of my study, which was to examine AAW's perceptions of CHD using the socioecological theoretical conceptual framework by Stokols (1996) as a lens. I present the research questions followed by the significance and scope of the study. I also include the definitions of terms, assumptions, scope and delimitations, and limitations of the study. Finally, I discuss the significance of the findings of the study in advancing knowledge and practice, as well as implications for positive social change.

Background of the Study

Many historical prevention methods and health promotion programs have focused on the reduction of the risk factors for CHD (U.S. Department of Health and Human Services [DHHS], 2011). Some of these programs have identified both modifiable and nonmodifiable risk factors (AHA, 2014). The modifiable risk factors consists of Body Mass Index (BMI), hypertension (high blood pressure), tobacco use, alcohol abuse, raised blood glucose (diabetes), physical inactivity, unhealthy diet, high cholesterol, being overweight, and obesity (WHF, 2014). These modifiable risk factors are controllable and can be treated or changed (WHF, 2014). In contrast, the nonmodifiable risk factors for CHD are uncontrollable and cannot be changed and include age, gender, ethnicity, family history, and diabetes mellitus (Type 1, Type 2, and gestational diabetes; AHA, 2014; WHF, 2014).

Although there have been numerous reports outlining disparities in awareness of risk factors of CHD among different sociodemographic groups based on race, ethnicity, and gender (Lipsky, Bohnen, & Barnhart, 2010), there is still very little scholarly research that addresses the social determinants of health (e.g., poverty and the environment) that may be related to poor health outcomes, specifically CHD in AAW

(Lewis-Moss, Paschal, Sly, Roberts, & Wernick, 2009). As such, there is a need to expose certain individual and modifiable risk factors, including deficiencies in health promotion, and perceptions of health among AAW affecting their overall health outcomes, specifically CHD, in this study.

According to Chithamo and Huey (2013), AAW are more satisfied with their body images than White women due to their cultural beliefs that having a heavier body structure is fine. One of the many modifiable risk factors for CHD is BMI, which is a function of a person's weight and height and which serves as an indicator of body fatness for most people (CDC, 2010). BMI is used as a screening tool but not as a diagnostic tool (CDC, 2010). The BMI in women, as reported by the World Health Organization (WHO, 2009), is categorized as underweight < 18.5, healthy weight 18.5 - 24.9, overweight 25.0 - 29.0, obese 30.0 – 39.9, and morbidly obese $\geq$ 40.0. For example, when looking at a sample (*N*= 332) of non-Hispanic AAW at an average age of 20 years, these women had a mean BMI of 49.6 (morbidly obese), compared to non-Hispanic Whites with a mean BMI of 33.0 (obese) and all Hispanics with a mean BMI of 43.0 (morbidly obese; Rosamond, Flegal, Friday, Furie, & Greenlund, 2008).

In a report by DHHS (2011), factors such as socioeconomic status, environmental factors, and cultural values were labeled and associated with CHD (CDC, 2011). As such, a significant goal of this study was to investigate the nature of the relationship between certain environmental, socioeconomic, and cultural factors (the independent variables) and CHD development and health outcomes (the dependent variable) in AAW. Environmental factors (conditions such as air pollution, access to healthy food, abandoned homes, inadequate outdoor infrastructure, and lack of access to health care facilities) also contribute to the higher incidence of CHD (Hausauer et al., 2009). Reinier et al. (2011) reported that socioeconomic factors among AAW (including individual risk factors, health promoting behaviors, income, educational attainment, and neighborhood characteristics) have also been related to increased CHD and negative health outcomes (including an increased rate of mortality, higher risk of chronic illnesses, and sudden cardiac arrest). AAW are greatly influenced by their cultural beliefs when dealing with general health as well as negative health conditions (AHA, 2014). Moulton (2009) indicated that one of the common cultural perceptions of AAW was feeling well and getting better without the use of medication, which can lead to organ damage when professional health care is not sought.

Supporting Moulton's (2009) findings, results from the AHA (2014) showed that AAW are more prone to having CHD than other ethnic groups because they may have a genetic marker that makes them more sensitive to the effects of salt, which in turn increases their risk for developing high blood pressure (AHA, 2014). Not many individuals are aware of this new finding: those with this genetic marker usually have increased systolic or diastolic of blood pressure readings (AHA, 2014). Blood pressure is usually written as a ratio with the numerator as the systolic number that measures the pressure in the heart when it beats, and the denominator as diastolic, which measures the pressure between the arteries when the heart beats (AHA, 2014). However, AAW’s with this genetic marker may experience blood pressure increases as much as a minimum of five millimeters of mercury when they consume as little as one extra gram of sodium (half a teaspoon) in one serving of any type of processed food in a day (AHA, 2014). This result indicated that a nonmodifiable risk factor of CHD, genetics, does impact the modifiable risk factors, food choices (salt), and the increase of risk factors of CHD.

A 2014 report by the WHF indicated that many risk factors are linked with the development of CHD in AAW, including exposure to tobacco, high blood pressure, high cholesterol, obesity, physical inactivity, diabetes, and an unhealthy diet. Given these facts, it is important for AAW to incorporate more mindful lifestyle behaviors such as eating the recommended daily servings of fruits, vegetables, and whole grains, as well as including lean meats, poultry, beans, fish, and fat-free or low-fat dairy products (NHLBI, 2014). These modifiable risk factors, alongside many others, adversely contribute to the increased number of AAW with CHD. Therefore, to address the high prevalence of CHD among AAW, in this study I identified both the modifiable and nonmodifiable risk factors of CHD and AAW's perceptions of their connections to the higher incidence of CHD. In the next section, I discuss the statement of the problem, the purpose of this study, and the conceptual framework best suited to address the issue of CHD in AAW.

Statement of the Problem

Despite efforts to reduce CHD in the United States, it remains the number one cause of death among AAW (AHA, 2014). AAW continue to die at a much higher rate than women from other racial groups (CDC, 2011). The research problem addressed in this study focused on the issue that although there has been an increased awareness and prevention of CHD, investigating and understanding the connection between the environmental, socioeconomic, and cultural factors (the independent variables) and the epidemic of CHD in AAW (the dependent variable) are paramount.

Purpose of the Study

The purpose of this qualitative phenomenological study was to explore and determine among a sample of AAW ($N = 10$) their lived experiences and perceptions of environmental, socioeconomic, and cultural factors relative to their current and ongoing CHD status. The primary goal of the research was to identify the perceived factors that impede AAW’s understanding of health and quality of life as they relate to their CHD status. It was critical to identify what types of actions were prominent in understanding the knowledge base of CHD in this sample. The main purpose of the study was to increase the body of knowledge on the impact of perception on AAW's understanding of health and health outcomes of CHD. It is hoped that the findings from this study will serve as the basis to develop health promotional programs and interventions for AAW as well as enlightening health care professionals for the need for a more culturally competent health care system aimed specifically at AAW with CHD.

Conceptual Framework for the Study

Most health promotion programs and policies target individuals' modifiable behaviors such as an increase in physical activity or a change in eating habits (Glasgow, Klesges, Dzewaltowski, Bull, & Estabrooks, 2008). Such programs or policies often fail due to lack of appropriate ongoing follow-up support (Glasgow et al., 2008). However, Fleury and Lee (2006) found that potential modifiable behavior changes were influenced by social context, which is important to consider when examining AAW’s environmental, socioeconomic, and cultural values and beliefs relative to their CHD health status. Due to these facts, behavioral change can be difficult to achieve. For this reason, the socioecological model (SEM) of health promotion was best suited to address the multiple levels of society for this study: individual, organizational, community, and policy levels of health promotion in AAW with CHD.

According to Creswell (2009), theory is used inductively in qualitative research to study and explain behavior and attitudes in individuals and organizations. Given the many complexities with environmental and socioeconomic status that are related to people’s potential behavior, in this study I used Stokols's (1996) SEM as a lens to analyze and explain the relationship between individuals and their environment. SEM was conceived as a tool that provides a useful approach to addressing the multiple levels of society (Glanz, Rimer, & Lewis, 2002). To address the high prevalence of CHD among AAW, it was determined that every level of society needed to be identified and investigated in order to discover the relationship and connection between these levels and their impact on the reduction of CHD in AAW.

Although two other theories, the transtheoretical model of behavior change developed by Prochaska and Diclemente (1986) and the health belief model by the U.S. Public Health Service (Andersen, 1995), are both widely cited and have been used in previous literature on the topic of health disparities, they were not selected for this study. The focus of this research went beyond the individual changes in health behavior to include the multiple levels of change from the individual, community, and public policy angle to the systematic, step by step changes at all levels of government policy and environmental interventions (Glanz et al., 2002). The implementation of SEM assisted in identifying the root problems of CHD development through the different levels of society and captured the perceived environmental, socioeconomic, and cultural factors in the sample of the 10 AAW women participants with some degree of CHD from their views and lived experiences as they relate to the prevalence of CHD.

In this phenomenological study, I focused on the broad approach of health promotion intervention strategies. I used the SEM to assess the AAW sample ($N = 10$) to examine the environmental, socioeconomic, and cultural factors contributing to the increased incidence of CHD in AAW, as well as the effects these factors have on health and quality of life for AAW with CHD. Robinson (2008) described the SEM as an approach that provides a useful framework for achieving a better understanding of the multiple factors and barriers that impact dietary behaviors and, therefore, can provide guidance for developing culturally appropriate and sensitive intervention strategies for African Americans. Robinson further stated that SEM includes a more comprehensive approach that involves multiple levels of influence to impact health behavior and final health outcomes. Similarly, Stokols (1996) indicated that the SEM that integrated multiple levels of influence was best in improving health of vulnerable populations such as African Americans and individuals with lower income status who require intervention strategies.

Research Question

The core research question was to determine among a sample of AAW with CHD, the nature of the relationship between the independent variables (environmental, socioeconomic, and cultural factors) and the dependent variable (AAW’s perception about CHD and health outcomes). The main question in this study was, to what extents do AAW's perceptions of environmental, socioeconomic, and cultural factors contribute to their CHD status? Secondary questions included the following:

1. Is there a connection between certain environmental factors (access to food supply, unsafe public spaces, air quality, and housing conditions) that are related to urban AAW and their perceptions of their CHD status?
2. Is there a connection between certain cultural beliefs and values (language, thoughts, communication, and social groups) that are related to urban AAW and their perceptions of their CHD status?
3. Is there a connection between certain socioeconomic factors (access to health care services, personal or family income, and educational attainment) that are related to the lack of CHD screening and early detection in urban AAW and their perceptions of their CHD status?
4. Is there a connection between certain built environmental factors (outdoor exercise facilities, transportation, and walking trails) that are related to the urban AAW and their perceptions of their CHD status?
5. Is there a connection between certain barriers that urban AAW with CHD perceive when seeking medical treatment and, if so, how do these perceptions affect their behavior?

The Significance and Scope of the Study

CHD remains the primary cause of premature death in AAW (Lin, Dudley, & Redberg, 2008). Therefore, studying how AAW with CHD perceive their illness and how they perceive the risk factors are significant to identifying and addressing the deep-rooted problems contributing to the high number of AAW without CHD awareness. Lewis-Moss et al. (2009) suggested that although there have been a number of studies targeting African American adults in health interventions and clinical research on CHD, very few studies have yet been conducted to address the social determinants of health (e.g., poverty and the environment) that may be related to poor health conditions in this population group. To narrow the gap in the existing literature base, the intent of my research was to understand, explore, and describe the association of urban AAW's perception of environmental, socioeconomic, and cultural factors with their CHD status. In order to address these gaps in the existing literature, it was imperative to identify the differences in AAW's perception on health and how it has negatively contributed to their lack of health maintenance and health outcome in order to contribute to the body of knowledge currently available with CHD.

It is hoped that the findings from this research might impact social change positively in several ways. First, they can address the deep-rooted social problems such as the issue of perception on health in AAW disfavoring these women. Second, they can address the need for a more culturally competent health care system needed to provide adequate health promotion and prevention strategies of CHD geared towards urban

AAW. Third, they can help focus on public health problems facing local communities and other urban areas.

Definition of Terms

Cardiovascular disease (CVD): A broad phrase for a set of different types of diseases affecting the heart and blood vessels (WHO, 2009).

Coronary heart disease (CHD): A specific form of CVD and also called coronary artery disease (CAD). CHD is a condition in which plaque builds up inside the coronary arteries. These arteries supply oxygen-rich blood to the heart muscle (AHA, 2014).

Food desert: A place such as neighborhood or community where people do not have adequate access to healthy and fresh foods due to little or no access to transportation services (Furey, Strugnell, & McIlveen, 2001). Food deserts are areas that are poverty driven, with high unemployment rate, low-income, inadequate access to transportation, and limited amount of grocery stores that provide fresh fruits and vegetables (U.S. Department of Agriculture [USDA], 2012).

Health literacy: As defined in Healthy People (HP; 2010), it is the point at which individuals have the opportunity to receive, comprehend, and understand basic health information and services required to make appropriate health decision. Health literacy encompasses the ability to read and understand medical education brochures, prescription drug labels, and appointment slips and ability to negotiate the health care systems. Health literacy also requires being able to read and listen and the development of analytical and decision-making skills needed to deal with different health situations (National Network of Libraries of Medicine [NNLM], 2011).

Healthy People 2010: Healthy People 2010 goals were a set of health goals and objectives for the nation to achieve over the first decade of the new century as presented by the CDC (2010). These goals represent a comprehensive and systematic health promotion and disease prevention agenda that provides 467 health improvement objectives and 434 sub-objectives in 28 focus areas that were to be achieved by the year 2010, with only a few of them met by 2010 (CDC, 2010).

Assumptions

The study was guided by two assumptions:

1. The instrument used for the semi-structured interviews identified barriers and challenges of environmental, socioeconomic, and cultural factors and their connection to AAW's perception of CHD and CHD development.
2. Respondents participated of their own accord and answered the questions truthfully.

Delimitations and Limitations of the Study

Delimitations

The study was limited to interviewing a sample of 10 AAW residing in the Chicago, Illinois area, all of whom had been diagnosed with some form of CHD more than 6 months prior to the data collection. The study was restricted to exploring AAW's perceptions of environmental, socioeconomic, and cultural factors that contribute to their CHD status.

Limitations

This study was limited to the use of qualitative research method. However, there is a debate that quantitative research is perceived as having stronger validity, reliability, and objectivity than qualitative research (Creswell, 2003). This study was limited to the phenomenological method to convey and ascribe the messages expressed by the participants throughout the interview process. Creswell (2009) described qualitative research as a method for familiarizing and understanding how individuals or groups perceive a social or human problem. Bowling (1997) suggested that qualitative research methods have advantages over quantitative methods because of preexisting knowledge. However, the researcher's perceptions can influence the findings, which can hinder both objectivity and the possibility of study replication, which ultimately can weaken the reliability of the qualitative research method (Ulin, Robinson, & Tolley, 2005).

Some of the key limitations present in this study include the following:

1. The sample was restricted to a small percentage of urban AAW with CHD who live in the Cook County area, which is unlikely to represent the total African American female population with CHD in the United States. The purposeful sample represents urban AAW between the ages of 21 and 55 years.
2. The transferability of the findings is limited to the targeted population of urban AAW with CHD living in the Cook County, Illinois area due to the sampling strategy, which included the use of a purposive sampling. Purposeful sampling is a nonrandom selection of participants for a specific

purpose (Groenewald, 2004). This sampling technique was used to recruit the bulk of the study participants.

3. The interviewing responses to questions could be biased due to the current economic situation contributing to the high unemployment rate, increased foreclosed property, and closed businesses.

Summary

In spite of advances in public health awareness and prevention programs of CHD prevention and early detection, many minorities, especially AAW, still lead the way in the death rate from CHD. First, in this study, I found that certain environmental, socioeconomic, and cultural factors are adversely related to the development of CHD in AAW. Second, this study's results revealed the need for understanding the impact of culture on AAW’s perception towards health. Third, the study's results showed that a more culturally competent health care system is needed in the formation of best approaches to CHD awareness and prevention programs among urban AAW.

In Chapter 1, I discussed the global concern with the prevalence of CHD in AAW and its impact on this population group. I then exposed some of the hidden facts contributing to this great epidemic. I further identified the effects of environmental, socioeconomic, and cultural factors contributing to the mortality and morbidity among AAW with CHD as they relate to the modifiable and nonmodifiable risk factors. Additionally, I presented certain challenges experienced by these women. Furthermore, I presented Stockols’s 1996 SEM of health promotion as the conceptual framework for the study. The study research questions pertained to exploring urban AAW’s perceptions of the environmental, socioeconomic, and cultural beliefs that together may influence modifiable health behaviors. Finally, I conclude Chapter 1 by examining and discussing some of the major assumptions and limitations of the study and potential implications for social change.

In Chapter 2, I present the literature review, which is an extensive assessment of the literature that relates to the study questions. I evaluated the literature and compared relevant qualitative and quantitative studies; however, I used only the qualitative methodology approach and results to demonstrate and support the issues and concerns that arise with the impact of environmental, socioeconomic, and cultural factors on health behaviors and perceptions in AAW with CHD. Further, I set forth themes and factors that contributed to CHD development in these women and I identified and discussed health promotion and prevention of CHD pertaining to behavior modification and perception of health in urban AAW.

In Chapter 3, I present the study's design and qualitative phenomenological methodology. I conducted a pilot study ($n = 2$), recruited participants, and then implemented the face-to-face, semi structured interviews with 10 AAW who had been diagnosed with some type of CHD more than 6 months before the data collection. The selection and rationale for qualitative research method are explained and justified.

In Chapter 4, I present a brief summary of the pilot study ($n = 2$), the setting of the main study, and a field background that describes the demographics of the study participants ($N= 10$). In Chapter 4 I also present a brief description of the interview questions, the semi structured interview method used for data collection, as well as description of the location, duration, frequency, and recording methods used for the study. Further, in Chapter 4, I present a description of the content and how the interviews were conducted, recorded, transcribed, and member checked. Lastly, I describe how thematic analyses were implemented, address credibility and dependability, and present the analyzed results by theme.

In Chapter 5, I present the findings of thematic analysis for the research questions identified in Chapter 4. I also present an interpretation of the study findings, the limitations of the study, recommendations, and implications of social change for AAW with CHD. Lastly, I present a summary of the outcomes derived from the study that were identified and provided from the responses obtained from the women participants during the face-to-face interview technique and posing of several questions of which they expressed their perceptions and lived experiences as it relates to their CHD status. Suggestions for future research study is needed to increase AAW’s knowledge and awareness of CHD risk factors and the need for policy makers and health care professionals to implement a more culturally competent health care system needed to decrease health disparities disfavoring AAW with CHD conditions.

Chapter 2: Literature Review

Introduction

While there is much clinical and public health research on CHD, there is not much scholarly information available on the public policy system strategies that aid in the awareness and prevention of CHD in AAW. The problem is that although past researchers have demonstrated an increased awareness of CHD among AAW, the AAW continue to lead the way in the number of reported deaths from this silent killer (CDC, 2011). For this reason, in this literature review, I examine the factors contributing to the epidemic of CHD affecting AAW from a socio-ecological point of view. Secondly, I evaluate the negative health outcomes resulting from the environmental conditions, socioeconomic status, and cultural beliefs and values that together affect AAW's health. Lastly, I discuss the findings of past literature that focused on the connection between AAW's perception on health and its impact on behavior and attitude towards health and lifestyle choices.

Public policy in this literature is defined as laws, regulations, formal or informal rules, and understandings that are adopted on a collective basis to direct individual and collective behaviors in people (Schmid, Pratt, & Howze, 1995). The goal of this literature review was to examine prior literature from a socio-ecological perspective to understand how AAW's health conditions have been impacted by their environmental conditions, socioeconomic status, and cultural beliefs, which together contribute to unhealthy lifestyle choices and the awareness and use of available resources needed for improved health outcomes.

As such, policy prevention strategies and improved quality of life in AAW with CHD were the focus of this research. Based on the literature review, three broad relationships between various influences were captured: (a) environmental factors and CHD, (b) socioeconomic status and CHD, and (c) sociocultural influences and CHD. In my review, more than 100 sources were assessed and examined encompassing these three topics. Due to these key concepts, the literature review was deliberately organized around the three identified themes. The literature review included an array of various qualitative and quantitative studies that investigated the environmental, socioeconomic status, and cultural factors that prevent individuals with CHD from achieving improved health and quality of life.

Literature Search Strategies

In Chapter 2, I discuss the article selection, evaluate the literature and compared relevant qualitative and quantitative studies, and review titles and abstracts to determine relevance to the research topic. To discover existing gaps in the empirical literature base, I also review previous studies in order to make the case for future inquiry on CHD prevention and the factors that contribute to ethnic/racial health disparities.

The process of selection for the literature review and method for collecting and analyzing the data included evaluating peer-reviewed journals and statistical data analysis information. The use of peer-reviewed articles was determined using articles within the last 10 years of publication. Databases researched were the Health and Medical Complete, Academic Search Complete, Web of Knowledge, PubMed, SocIndex, and Pro Quest Cental. These databases were searched using the following search terms: *African*

American Women (or Black women) and CHD, social support, health literacy, CHD screening, health perception, health disparities, culturally competent health care system, and *health equity.* Additional search terms included *low-income, educational level, motivation, barriers, health care unitization, health care access, physical inactivity, tobacco, food desert, built environment, environmental characteristics,* and *culture.* The Academic Search Complete database yielded the most peer-reviewed articles pertaining to the topic. Overall, Chapter 2 is an explanation of past research and summary of the current literature pertaining to CHD conditions among AAW in Cook County, Illinois.

Overview of CHD and Related Research

Despite the continued reduction of CHD incidents and mortality over the last decade, CHD still remains the number one cause of death in American women (CDC, 2010). Although CHD affects people of all age groups, genders, and ethnic groups, it is older adults, African Americans, Native Americans, and Native Alaskans who are at higher risk for CHD when compared to others (Villablanca et al., 2010). However, AAW are more likely than other racial groups to die from CHD (DHHS, 2010). AAW do not receive the same care and attention for CHD when compared to White women and AAW receive different tests and treatments that result in more deaths (DHHS, 2010).

CHD is the most common type of CVD in the United States, and lifestyle changes, medicines, and medical procedures can help prevent or treat the disease and may also reduce the risk of other related health problems (NLBI, 2012). However, minority women generally experience more health challenges that are directly associated with personal behavior, genetics, and access to health care services than high income women or White women (NLBI, 2012). A good example is the disparity between care of Whites and the care experienced by AAW in CVD detection and accessibility to health centers (Villablanca et al., 2010). AAW women have been reported to have the highest age-adjusted CVD death rate when compared to other female race/ethnicity groups in the United States (Villablanca et al., 2010).

It is estimated that about 81.1 million American adults (33%) in the United States have been diagnosed with one or more CVD diseases (CDC, 2010). In addition, CHD is a serious illness and disability, which is known as a silent killer and which decreases life expectancy (CDC, 2010). About 600,000 people in 2008 were estimated to have experienced a form of heart attack in the United States, and approximately 320,000 (53%) people were predicted to experience a repeat attack (Rosamond et al., 2008). As indicated by the CDC (2011), CVD has been a serious health concern in the United States for many decades. For instance, by the late 1940s, CHD claimed the lives of half of all U.S. citizens, which prompted the National Institute of Health (NIH) to fund the Framingham Heart Study. The findings from the Framingham study helped to explain the risk factors for CVD and redirected the focus of public health. Although CHD still ranks number one as the cause of death in this country, there has been a reduction of about 60% in reported CVD deaths annually (NIH, 2011).

CHD is a state in which an individual’s coronary arteries are filled or blocked with plaque. Plaque consists of fatty tissues, cholesterol, calcium, and other substances dissolved in the blood, which makes it difficult for the arteries to supply blood to the heart muscle. When the plaque builds up, it hardens and narrows the coronary arteries

(NHLBL, 2012). As a result, this condition restricts the flow of blood to the heart muscle and could cause a blood clot to form on the surface of the plaque. This situation sometimes results in blockage of any blood flow through the coronary artery resulting in a heart attack (NHLBL, 2012). If blood circulation ceases for too long, the victim could possibly die or suffer damage to the heart and/or brain (Austin, Hutter, Zimmerman, & Humphries, 2004). Wolff, Miller, and Ko (2009) found that approximately 58% of deaths reported in the United States were due to CVD.

There are many modifiable risk factors of CHD that are classified under environmental, socioeconomic, and cultural factors. These modifiable risk factors contribute to the prevalence of CHD in low-income minority populations (CDC, 2011). The CDC (2011) also reported that less than half of the people who were diagnosed with high blood pressure managed their illness. One in three Americans with high cholesterol receives the proper care, and fewer than a quarter of those who smoke receive some help to quit from their physician (CDC, 2011). These statistical findings indicate that although there has been an increase of CHD awareness in recent years, less than half of the people with increased risk sought and applied the appropriate medical treatment.

An estimated nine out of 10 patients with CHD have a minimum of one risk factor (CDC, 2010). Women are at an especially higher risk than men due to lifestyle choices and medical conditions such as obesity, poor nutrition, smoking, diabetes, high blood pressure, cholesterol, and physical inactivity (CDC, 2010). According to the Illinois Department of Public Health (IDPH, 2011), 1.1 million Americans experience a heart attack yearly and an estimate of 460,000 (42%) of these incidents are serious. Heart attacks occur within an hour of the beginning of the symptoms and about half of reported occurrences lead to death (IDPH, 2011). Although the Healthy People (HP) 2010's ultimate target was to eliminate health disparities nationwide and to increase the quality and years of life expectancy in Americans, not all of its targeted goals were achieved (HP, 2010). Only a 20% reduction of CHD goals was met and over 50% of other objectives in health disparities, particularly regarding racial and ethnic populations and educational level for low income people, still need to be accomplished (HP, 2010).

Not only is CHD the most prevalent cause of death, it is also the most costly (CDC, 2011). CHD leads the way in the types of CVD with an estimated annual cost of $108.9 billion to treat patients in the United States; it is followed by hypertensive disease, which is estimated to cost $93.5 billion, and stroke, which is estimated to cost $53.9 billion (CDC, 2011). Lastly, treatment of heart failure has the least projected expenditure for 2010; however, it still costs the American health system $34.4 billion each year with AAW leading the way in the number of reported cases (CDC, 2011).

Figure 1 shows the forecast of the future estimated direct and indirect costs of major CVD in the United States as of 2010. For example, in 2009, some direct and indirect costs of major CVD were the costs incurred from health care expenditures and lost productivity from deaths and disability, which were projected to be more than $475 billion (CDC, 2010). Other direct costs of CVD were due to many Americans making more than 72 million doctor visits yearly for treatment and management of CVDs (CDC, 2010). The indirect costs of CVD were incurred due to many adults between the ages of 35 and 64 years who were diagnosed with CVD. Many of them were at the peak of their productivity capacities but were impacted in premature mortality and preventable losses of employment, income, and quality of life due to their CVD condition (Grover, et al., 2003).

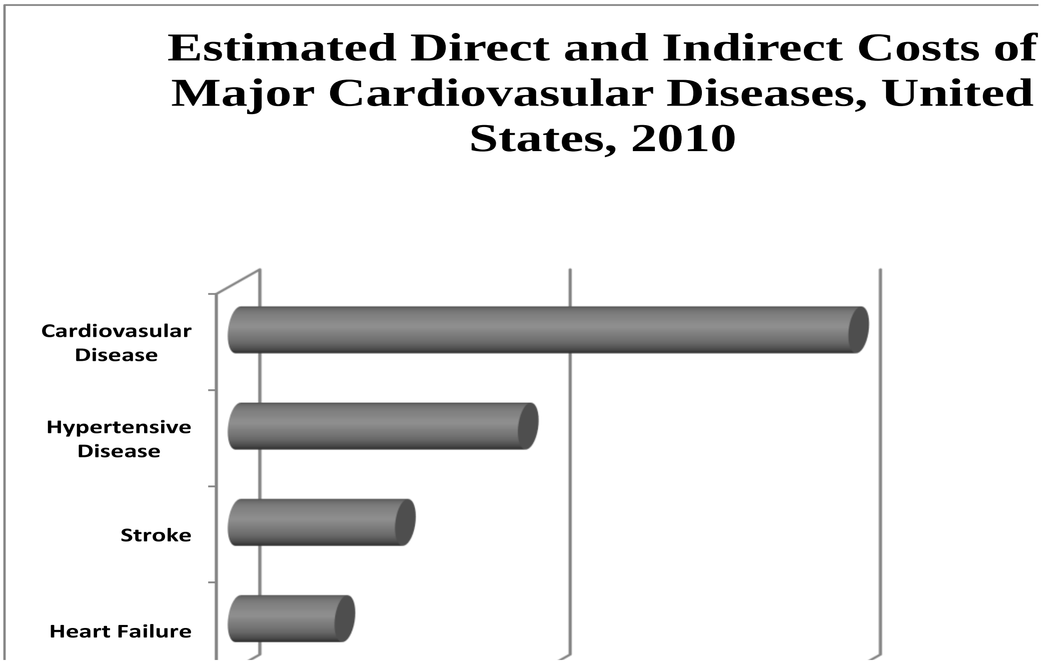

Figure 1. Direct and indirect cost of major types of CVD. Adapted from "Estimated Direct and Indirect Costs of Major Cardiovascular Diseases in the United States, 2010." Copyright 2011 by Center for Disease Prevention Center.

Literature Review Pertaining to Research

Curtis and McClellan (1995) confirmed that supermarkets have constantly migrated to the suburbs, which has contributed to inner city residents depending on small corner stores with limited food selection at considerably higher prices. An example of regional equity of retail businesses and food stores and its effect on residents' health was tested under a study conducted by Morland, Wing, Diez-Roux, and Poole (2002) to compare the availability of food stores and restaurants across different types of neighborhoods. The study included 216 participants in 1990 census tracts in four geographical locations in the United States. The census tracts were used as proxies for neighborhoods and the areas were analyzed for food and restaurant placement. Information pertaining to addresses of businesses of about 2,437 individuals was obtained through the Department of Environmental Health and state Department of Agriculture in the four study areas (Morland et al., 2002). The data were then grouped into five categories of food stores (supermarket, grocery stores, convenience store, convenience store with gas station, and specialist food store) and five categories of restaurants (full-service restaurant, franchised fast-food restaurant, carryout eating place, specialty carryout eating place, and bar/tavern). Other factors such as house values for each location were also collected to measure neighborhood wealth (Morland et al., 2002).

Morland et al. (2002) analyzed the 10 different food stores and restaurants by the five levels of neighborhood wealth and discovered disparities in the existence of supermarkets, small grocery stores, and bars. The results indicated that there were 300% more supermarkets in the highest wealth neighborhoods compared to the lowest wealth neighborhoods (Morland et al., 2002). Ultimately, Morland et al. concluded that the presence of supermarkets in neighborhoods with a high percentage of Whites was 400% more frequent than areas with mostly Blacks. In contrast, in neighborhoods that were predominantly Black, Morland et al. found that there tended to be only smaller corner grocery and convenience stores. As such, most Blacks do not consume the appropriate number of fruits and vegetables, which inevitably affects long-term health conditions (Robinson, 2008). Similarly, DHHS (2010) noted that the lack of adequate dietary nutrition results in many chronic health diseases (USDA, 2011). Figure 2 depicts the U.S. nationwide consumption of recommended daily intake of fruits and vegetables in 2009. The chart shows that in 2009, people consumed less fruits and vegetables per day. (CDC, 2010).

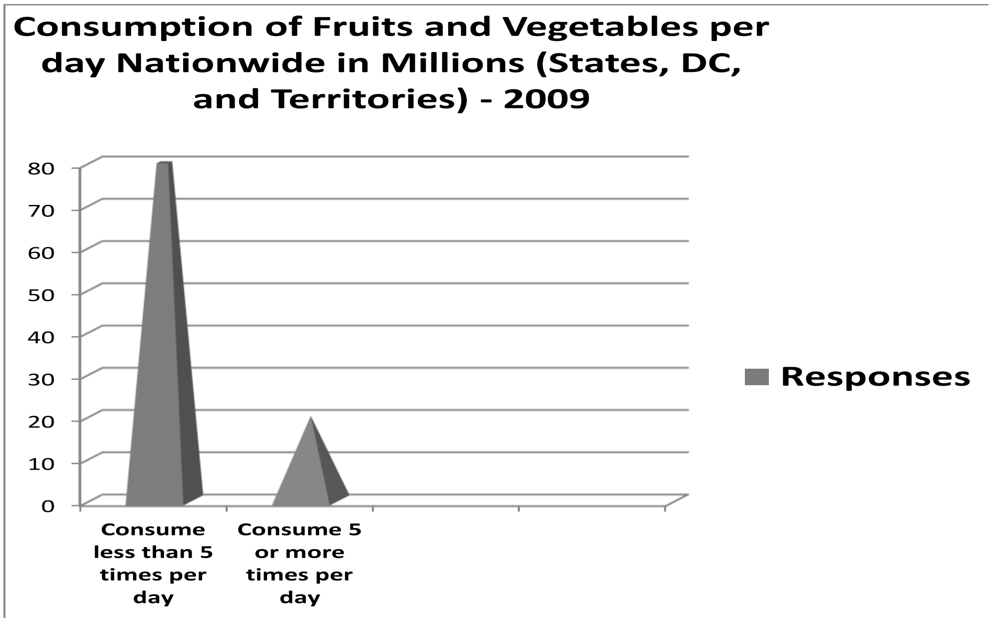

Figure 2. The United States' statistics on consumption of fruits and vegetables in percentages in 2009. Adapted from "Guide to fruits and vegetable strategies to increase access, availability and consumption." Copyright 2010 by Center for Disease Prevention Center.

Environmental Factors and CHD

There are many qualitative and quantitative studies that have been conducted that demonstrate the impact of environmental living conditions on the incidence of CHD. The environments in which people live, work, and engage in activity for enjoyments have a huge impact on their individual health. As such, health outcomes of these citizens are also directly shaped by policies implemented to guide a community's daily process and procedure (CDC, 2010).

In other to understand health inequity, it is imperative to understand the disparate access to personal resources and environmental conditions affecting minorities with health issues (Richardson, 2010). There is still a high level of segregation in the United States despite the dismantling of legal segregation during the 20th century. Racial and ethnic minorities still reside in physical environments that do not have adequate resources needed to maintain and sustain health (Richardson, 2010). There is a link between race/ethnicity and socioeconomic status in the United States (Richardson, 2010). A good example provided by Richardson (2010) is segregation experienced in African American neighborhoods, which are characterized by substandard housing. Examining these environmental factors experienced by minorities and the connection between health disparities and health outcomes is essential in reducing discrimination in health care resources, awareness, and a need for a culturally competent health care system nationwide.

The built environments, among other factors affecting African American minority communities, is a one of the top determinants of chronic health problems, which is linked to obesity, lack of exercise, poor nutrition, and pollutants (Hutch et al., 2011). Factors such as physical safety, exposure to pollutants, and access to basic amenities like water and sewer services, social support, and opportunities for routine physical activity affect residents in urban neighborhood environments (Bullard, 2007). As a result of these living conditions, in 2006, the Federal Collaboration of Health Disparities Research (FCHDR) assembled a group of 14 federal governments consisting of scientists and officials through a collaboration action to establish the built environment as one of the important precedents for health disparity elimination (Hutch et al., 2011). The FCHDR’s Built Environment Workgroup's responsibility was to research and bring together government and nongovernment organizations along with the private sector to analyze the effects of socioeconomic factors on the health outcomes of low-income and disadvantaged vulnerable populations (Hutch et al., 2011).

In low-income countries, physical inactivity ranked fourth and exposure to outdoor urban air pollution ranked 14th among the top 15 risk factors for the Global Burden of Disease (WHO, 2009). Similarly, in high-income countries, physical inactivity also ranked fourth but outdoor air pollution ranked eighth (WHO, 2009). According to Gletsu and Tovin (2010), excess weight gain in people is linked to higher health risks. AAW have the highest rates of obesity and diseases related to obesity and, unfortunately, these women have been ignored and have paid less attention to integrating everyday physical activity to their daily lifestyles (Gletsu & Tovin, 2010). These results confirmed AAW’s lack of awareness of the danger of being obese and the effect of culture on perception of body image and weight gain. Unfortunately, these women view their extra weight as appropriate due to the lack of awareness of the effects of extra body fat on CHD development and other types of chronic health problems.

Other studies from the Oregon Sudden Unexplained Death Study (as cited in Reinier et al., 2011) also showed that poorer neighborhoods had a 30 - 80% higher incidence of sudden cardiac arrest. Further, the results from another study of geographical differences in self-reported CHD in 2010 ranged from 3 to 8% among states in the United States (Reinier et al., 2011). Hawaii had the lowest percentage of reported incidents (3.7%); followed by the District of Columbia, which was second with 3.8%; West Virginia ranked third with 8.0%; and Kentucky ranked highest with 8.2% (Reinier et al., 2011). Overall, southern states reported the highest levels of CHD cases (Reinier et al., 2011).

Fahs, Grabo, James, Smith, and Spencer (2001) focused on comparing the cardiovascular risk of urban, suburban, and rural women: 108 women who were $\leq$ 35 years of age participated in the study. No statistically significant differences were found in the risk of the different cardiovascular risk factors among the three groups (Fahs et al., 2001). In spite of that, rural women in the sample were found to be more likely to develop high blood pressure (Fahs et al., 2001). However, the results were vague concerning the effects of lifestyle factors or age gaps between the three geographical groups (Fahs et al., 2001). As such, results from this study confirmed that people can be exposed to certain environmental factors and or living conditions, which can adversely increase their development of different forms of CVD conditions.

Similarly, a single-site cohort study on CVD was conducted by Wyatt et al. (2008) about African Americans in the metropolitan area of Jackson, Mississippi. The focus of the study was on factors such as hypertension prevalence, awareness, demographic variables, lifestyle, and access to care. Results from Wyatt et al.'s (2008) study showed that although blood pressure declined with advancing age, there was a 66.4% overall blood pressure reduction in women than men. Results from Wyatt et al.

revealed that although women were found to have better control over their blood pressure when compared to men, some of them did not have access to timely medical treatment due to no health insurance coverage, which is one of many socioeconomic factors affecting AAW’s ability to timely medical treatment and increased knowledge of CHD awareness. In addition, uncontrolled hypertension and other cardiovascular conditions were also prevalent in AAW perhaps due to lower socioeconomic status and lack of health insurance (Wyatt et al., 2008).

Access to Healthy Foods

The food and beverages that are available in a particular location are influenced by the physical environment (Morland et al. 2002; Story & Kaphingst, 2008). The food consumed by people is dependent upon the food resources available for purchase to them through the food distribution system (Bullard, 2007). Some neighborhoods in the United States, especially low-income urban areas, have been labeled as a *food desert* because of the lack of supermarkets that provide affordable and nutritious foods to its residents (Ploeg, 2010). As a result, these low income residents with little or no transportation options, according to Ploeg (2010), do not have the option to purchase healthy food, which usually costs more and is in lower supply. Furthermore, this shortage of food supply also contributes to food insecurity of not having enough healthy food to consume (Ploeg, 2010).

A food desert was defined by Furey et al. (2001) as a place where people do not have adequate access to healthy and fresh foods. According to Lang and Caraher (1998), the concept of the food desert was developed in the 1990s in the United Kingdom by a group of working people for the Low Income Project Team of the Department of Health. The concept of a food desert focused on and addressed the issues pertaining to the rapid growth of large supermarkets in suburban areas and the continual closing of food retail stores in inner cities (Lang & Caraher, 1998). Thomas (2010) explained that the structuring of food retail stores moving to suburban areas negatively contributed to inner city populations experiencing the increasing distance from accessing certain food retailers, which makes it difficult to purchase healthy food (in essence, creating a food desert).

Similarly, lack of public or private transportation also affects residents that live in a *food desert.* These low income residents need to drive or ride a bus (if available) several miles to purchase healthy food and depend on smaller grocery stores in the neighborhood that do not have adequate amount of healthy foods or reasonable and affordable prices (Ploeg, 2010). Lack of public transportation in metropolitan areas is considered a hindrance for people without cars (Bullard, 2007). According to Ploeg (2010), the census in 2000 reported that about 23.5 million people, about 8.4% of the U.S. population, resided in neighborhoods that were more than a mile from a supermarket. Low income neighborhoods in the report were defined as populations with over 40% of the residents having income less than or equal to 200% of the federal poverty threshold ($34,100 per year for a family of four in 2000; Ploeg, 2010). Results from Ploeg showed that the issue of food desert can be linked to environmental factors that mostly affect low income people living in neighborhoods without adequate resources to public transportation services and easy access to various numbers of food chain stores and business that provide healthy and affordable food choices.

As stated by the USDA (2012), the *Food Desert Atlas* helps people obtain a spatial overview of a community's opportunity to gain access to healthy foods. The Food Desert Atlas also provides researchers with food environment indicator statistics that can be used to determine diet quality and food choices (USDA, 2012). The three broad categories included in the Food Desert Atlas are the food choices, community characteristics, and healthy well-being of the population (USDA, 2012). As stated by the Local Commission Center for Livable Commission, the creation of food secure environments enables community members to gain access to grocery stores to help aid in the proper way of eating. Poor neighborhoods with predominantly Blacks contain fewer grocery stores with more corner and convenience stores (Morland, Wing, Diez-Roux, & Poole, 2002).

Physical Activity Level

The neighborhoods in which people live affect their physical safety, exposure to pollutants, access to basic amenities and routine physical activity, all of which impact their ability to maintain health (Bullard, 2007). Physical activity is important and required to maintain healthy weight and prevent many diseases and illnesses (Gletsu & Tovin, 2010). Due to the low level of regular physical activity level in both adults and children in the United States, it is reported that 78 million adults and 12 million children are obese (National Conference of State Legislature (NCSL, 2014). As a result, obesity is a common health issue that increases the risk of many chronic illnesses such as heart disease, type 2 diabetes, and cancer, which affects more than one third of adults and 17 percent of youths in the United States (NCSL, 2014).

Harley et al. (2009) illustrated the importance of physical activity by examining AAW’s development of long term physical activity participation. The participants were urban, AAW between the ages of 25-45 years of age, who exercised for 1 year at CDC recommended levels (Harley et al., 2009). Harley et al.'s results (2009) indicated that social support is important in the successful maintenance of physical activity. Yanek, Becker, Gitttelsohn, Moy, and Koffman, (2001) also focused on the physical activity interventions among AAW that explored the effects of nutrition and physical activity-based interventions in reducing the CVD risk profiles in AAW, and found that AAW who were more active during the study increased their energy output much more than the participants in the control group . The two study outcomes confirmed that incorporating physical activity regularly also increases one’s energy level and enhances stress management (Gletsu & Tovin, 2010; Yanek et al., 2001).

In contrast to Yanek et al. (2001), Banks-Wallace (2002) qualitatively analyzed several points of view from AAW participants on the issue and significance of physical activity as a determinant and tool for CHD risk development. The Banks-Wallace (2002) study consisted of 26 Black women between the ages of 23 and 72 years. These participants made up of two focus groups in which they participated in narrating and sharing their experiences and awareness with CHD and the importance and role of physical activity in health promotion, barriers, and benefits of regular physical activity. The participants in the study concluded that their role as a caretaker plays a huge part in time creation for physical activity and they felt the amount of responsibility as a caretaker for their families negatively contribute and is a barrier to regular physical activity participation.

Access to Health Care Services

Many factors contribute to people’s inability to access health care services. Several factors such as health care insurance, a primary care provider, an existing source of care, and inability to communicate with a health care provider create a barrier to accessing heath care services (Anderson, Scrimshaw, Fullilove, Fielding, & Normand, 2003). According to Richardson (2010), it is important to understand the effects of built environment, social environment, residential segregation, stress, racism, and discrimination on health care access. The inability to access health care services not only affects low-income United States families but also middle income families (Esser-Stuart & Lyons, 2002). One of many variables that may also help to explain differences in the health care status is the issue of transportation as it is important for patients to maintain contact with a regular physician or health care provider in a specific setting (Esser-Stuart & Lyons, 2002). Understanding the barriers created from these factors in gaining access to health care services is important in reducing health disparities and medical delays in minorities.

Most uninsured people are from working families. Statistics show that 67 % of the estimated 48 million Americans that were uninsured in 2005 had at least one person in their household working full time (Collins, Davis, Doty, Kriss & Holmgren, 2006). According to Reinier et al. (2011) people of low income status have greater burden of risk factors for CHD, do not seek timely medical treatment, and are unable to control cardiovascular risk factors when compared to people of high socioeconomic status. In addition, disparities in health outcomes vary infinite across all socioeconomic status. As such, it is important to examine the lack of health promotion and awareness of CHD across of socioeconomic statuses.

By the same token, Fitzpatrick, Power, Cooper, Ives, and Robbins (2004) conducted a study with the elderly who are covered under Medicare. Fitzpatrick et al. (2004) identified obstacles and barriers experienced by this group pertaining to health care access. The participants were selected randomly from the Medicare eligible participants residing in four communities within the country (Allegheney County, PA; Washington County, MD; Forsyth County, NC; and Sacramento County, CA). The total 5,888 participants had a mean age of 75 years. The questionnaire completed by all the participants confirmed that the most common barriers affecting access to health care were due to the lack of communication between patients and physicians, lack of transportation, safe streets, low economic status, medical insurance coverage, age, gender, and medical expenses.

Socioeconomic Status and CHD

Socioeconomic status has been seen to have great influence on health outcomes such as mortality rate, risk factors of chronic illnesses and incidents of CVD (Reinier et al., 2011). Several socioeconomic factors such as education, income, health insurance, race/ethnicity, transportation, age, and gender are linked to issue of high CHD and poor health outcomes in AAW (Kaplan & Keil, 1993). Socioeconomic status is also associated with increased risk of sudden cardiac arrest by several effects which are related to individual risk factors, health-promoting behaviors, or neighborhood characteristics (Reinier et al., 2011). Klassen, Smith, Shariff-Marco, and Juon (2008) found that a high percentage of AAW by United States standards are in low-income socioeconomic strata. These AAW women live under serious stressors and constantly experience delays and impediments to early access to health care services that result in them having poor health and essentially different health outcomes when compared to other ethnic groups. As further evidence of the stressors and delays experienced by AAW, Lefler and Bondy (2004) confirmed that certain factors that were linked to medical delays were related to being a female, age, minority status, low income status, educational level, and lack of insurance.

As stated by Plowden and Young (2003) poor health outcome is derived from low socio economic status and lower quality of care. Hill and Sutton (2000) suggested that close attention should be focused on demographic variables that will help improve health outcomes with patients and reduce racial health disparities. Plowden and Young (2003) also noted that African Americans experience certain social factors that debar them from paying for health care services. A study by Royster, Richmond, Eng, and Margolis (2006) also revealed that the lack of money has contributed to the health disparities faced by African American men and women seeking health care. These external factors contributing to health disparities in health care reported in past research studies confirms that there is a connection between socioeconomic status and African American men and women affordability and access to health care services.

Income/Employment Status

Employment is a determinant factor with the issue of income status in the United States. African Americans nationwide have one of the highest unemployment rates when compared to Caucasians (CDC, 2014). The unemployment rate of Blacks since the 1940s has steadily risen twice the rate of unemployment rates for Whites (CDC, 2014). The findings by the Bureau of Labor Statistics showed that unemployment rate for African American workers were 16.7%, which doubled the 9.1% of the rest of the United States population (Bureau of Labor Statistics 2011). As a result, African Americans' unemployment rate is twice as much that of 8% Whites' unemployment rate (CDC, 2014).

In like manner, gaining employment has been impacted by many factors from transportation, education, accessibility, and health. Unfortunately, many jobs are located in suburban areas and as a result make it difficult for people living in the city to obtain employment (Bullard, 2007). According to Bandura’s social causation theory women who are employed are affected by certain health problems such as cardiovascular CHD and other chronic illnesses. However, the social selection theory (Bandura, 2001) postulates that women who have good health status are more likely to enter and remain in the work force compared to those with worse medical conditions. In addition, the multiple role theory (Bandura, 2001) posits that women who take up multiple roles such as family and employee may have better health status than women with fewer roles (Carson et al., 2009). Furthermore, Carson et al. (2009) stated that it is complex to investigate the relationship between health and employment because of the multiple roles assumed by women as caretakers for children, homemakers, caring for elderly parents, and being employed outside the home. To support these findings, the National Health and Nutrition Examination Survey II and the Atherosclerosis Risk in Communities Study showed that unemployed women had higher risk of hypertension compared to employed women (CDC, 2010).

The second determinant income status affecting CHD health outcome is education attainment level. Although African American education level has increased in recent years which have helped to narrow the inequality in salary earned between Whites and Blacks, there is still a (CDC, 2014). Many jobs have moved from the inner cities and are located in suburban areas which makes them inaccessible for inner city residents due to lack of transportation (Bullard, 2007). The lack of adequate transportation services in certain geographical areas still persists within the country and as a result contributes to the increase of African Americans difficulty in gaining access to suitable employment and educational services needed to increase family income level and skill development.

The third health determinant affecting health outcome is the United States corporations outsourcing of jobs to China and India which has contributed to the loss of many manufacturing jobs often held by African American workers (CDC, 2014). In addition most of the remaining jobs in the country were moved to suburban areas making it difficult for these Black workers to gain access due to their reliance on public transportation (CDC, 2014). The Bureau of Justice Statistics reported that in 2009, nearly 40% of the total United States corrections system incarcerated inmates of 1.6 million Americans adults in state or federal prisons were African Americans, even though this ethnic group only consist of about 13% of the United States population (West, 2010). Furthermore, African Americans are six times more likely to be incarcerated than Whites, and three times more likely to be in prison than Hispanics (CDC, 2014).

Reinier et al. (2011) conducted a study to test whether there was a difference in trends across all groups in the United States and Canada. To assess the strength of the sudden cardiac arrest, they focused only on the lowest and highest socioeconomic groups, which were used to evaluate possible differences between the two countries. The results of the study showed that neighborhoods with low-income people reported a greater incidence of sudden cardiac arrest compared to higher socioeconomic neighborhood within the six of the seven metropolitan areas studied. Linear tread of increasing incidence of cardiac arrest was observed and was associated with groups with median household income across all sites (Reinier et al., 2011).

Similarly to the United States, despite Canada's universal health care, lower socioeconomic status has been associated with an increased burden of risk factors for CVD and other chronic illnesses (Reinier et al., 2011). In addition, in the United States, older individuals with Medicare and low socioeconomic status have also been linked with late presentation with acute myocardial infarction (Reinier et al., 2011). The results showed that a younger mean age of sudden cardiac arrest in the United States may be consistent with more poorly controlled CVD (Reinier et al., 2011).

Additionally, Pearson (2010) indicated that previous studies show that minority populations rarely have access to screening for CVD. As such, the experience of low socioeconomic status during childhood and adulthood continues into older adulthood

(Forrest et al., 2011). In addition, lack of social support also plays a role in poor health outcomes. Molloy, Perkins-Porras, Strike, and Steptoe (2008) noted that there was a direct relationship between poor health outcomes and lack of social support or social ties. Molloy et al. (2008) conducted a study using predictors for future events and poor health to examine the impact of a low social network and family relationship on patients with acute coronary syndrome (ACD) on participation of cardiac rehabilitation programs, medication attachment, and overall quality of life a year preceding the acute coronary syndrome. The Molloy et al. (2008) study included 193 participants with only a small percentage of women (23%). The findings indicated that partner stress was a determinant of lack of medication usage and lack of social support affected the ACD patient participation in the cardiac rehabilitation program attendance (Molloy et al., 2008). Due to that, an inadequate quality of life after ACD was influenced by both small social ties and partner stress (Molloy et al., 2008).

Health Literacy

Health literacy is defined as a patient’s ability to comprehend and follow instructions given to them by physicians (Shaw et al., 2009). Collins et al. (2002) defined effective communication as an interaction between patients and doctors that is necessary in other to accomplish good medical outcomes. On the other hand, Smith (2010) explained that inadequate communication between a patient and a health care provider can be due to the patient’s limited English proficiency (LEP), which is also connected to limited access to health care.

Language barriers are affected by factors such as educational attainment, physical development, and socioeconomic status (Smith, 2010). However, Solis, Marks, Garcia, and Shelton (1990) focused on language barriers from a socioeconomic level. Solis et al. (1990) found that language barriers are among the three listed obstacles impeding minorities and the poor from receiving adequate health care. Among other factors such as health insurance, literacy, having a regular provider, and socioeconomic status, patients with LEP report fewer visits to their physician and lower use of preventive care after controlling (Smith, 2010). Language barriers also affect patient comprehension and understanding of instructions pertaining to medical information (Smith, 2010).

The inability to communicate between patients and health care providers can result in many different challenges and barriers to access to health care services (Anderson et al., 2003). Lack of communication between a patient and doctor even exists amongst English speaking people. In a national survey conducted by the Commonwealth Fund, 39% of Latinos, 27% of Asian Americans, 23% of African Americans, and 16% of Whites reported having communication problems with their doctors (Anderson et al., 2003). The study showed the lack of communication that exists between patients and health care providers which resulted from the patients not understanding their health care providers and the health care providers not speaking the language understood by the patients. This study further showed that there is a need for a more culturally competent health care system.

A great deal of progress has been accomplished in the past 20 years in the study of causes of heart failure as well as improvement and prevention of the illness to improve health outcomes and quality of life. In spite of these improvements, Blacks are diagnosed with CHD at younger ages compared to other ethnic groups, are underrepresented in large clinical treatment trials, and have more severe disease outcomes (Mitchell et al., 2011).

The level of knowledge pertaining to CHD prevention, access to primary health care, and treatment quality has been linked to the disparities between different socioeconomic levels (Forrest et al., 2010). Even though nutrition has been researched and addressed as a matter of individual choice, many health related illnesses linked to poor diet has been perceived as being related to health education (Bullard, 2007). Considering these facts, Mitchell et al. (2011) found that Blacks are only 20% of participants in cardiovascular trials studies and have a lower enrollment in heart failure studies conducted. Due to the rise in AAW experiencing CHD, it is important that they are included in health research studies. Health literacy is understudied and should be seen as a beneficial non-costly intervention strategy (Mitchell et al., 2011).

Culture/ Social Influence and CHD

African Americans perception of health is greatly influenced by their culture. As stated by Moulton (2009), one of the common health perceptions of African Americans was feeling well and getting better without the use medication. Unfortunately, the health perception assuming good health eventually damages the internal body organs (Moulton, 2009). The work of Ratner et al. (2006) demonstrated that ethnicity and culture could play an important role in symptom awareness. Social-cultural beliefs have an impact on the prevention and health behaviors.

Isaac, Rowland, and Blackwell (2007) stated that disparities in health status are produced by social-cultural norms and beliefs: it is far beyond factors such as health care services and health care delivery inequalities. According to the social causation theory, women who are employed are affected by certain health problems such as cardiovascular CHD and other chronic illnesses. As a result, it is important to determine the connection between certain environmental, socioeconomic, and cultural factors contributing to the development of CHD in AAW.

African Americans have been reported to have greater rates of nonfatal stroke, fatal stroke, and CHD death compared to European Americans (AHA, 2014). Henderson and Ainsworth (2000) conducted a qualitative study and explored the sociocultural meanings of physical activity for African American and American Indian women. The researchers used in-depth interview techniques to obtain information from the participants about physical activities and social expectations. The study consisted of 30 urban African Americans between 40 and 70 years of age. The participants expressed that being female influenced social expectation, which indirectly affects the amount of time available for daily physical fitness (Henderson & Ainsworth, 2000). The women explained that because they were usually the main caretakers, there were negative impacts (such as ruining their hair styles) on participating in daily physical activity (Henderson & Ainsworth, 2000). Therefore, the need to educate AAW on the importance of daily physical fitness is critical in maintaining good health and preventing chronic illness.

According to Parankape and Kaslow (2010), the two distinct cultural factors protecting African American survivors from chronic illnesses are social support levels and spirituality. Spirituality is defined as the interaction and engagement with the inner strength in daily life, it is not an institutional affiliation that guides a shared belief but rather is perceived as a tool to assist individuals thought times of problems by encouraging them to develop a thinking of meaning and purpose in life (Fowler & Hill, 2004). Contrary to spirituality, social support refers to the physical, psychological, and material needs available to the woman in need to provide assistance in distressed conditions. Unlike spirituality, social support is the act of receiving support required to reduce the adverse consequences of an illness or stressors (Parankape & Kaslow, 2010).

Racial/Ethnicity and Gender

Race is considered an important determinant with the issue of health disparities and environmental disfavoring linked to low-income improvised neighborhoods. As noted by Anderson et al. (2003), a need for a culturally competent healthcare system in the United States is critical to alleviating the health disparities affecting minorities. It is reported that 76% of impoverished neighborhoods were occupied by a high proportion of American Americans (Zenk et al., 2005). Although some improvements have taken place in the last decade in African American health status, reported statistics continues to show that African Americans continue to experience health disparities when compared to other racial groups (Braithwaite & Taylor, 2001).

CVD has contributed to 40% of female deaths in the United States (CDC, 2011). One of every four women in the United States has some form of CVD, and over the past few decades, several studies reported higher mortality and morbidity from CVD events in women as compared to men (Pearson, 2010). Cultural differences also play a role in the communication between patients and physicians which directly contribute to the misunderstandings that can arise with chronic illness management, health status, and treatment methods (Shaw et al., 2009). Robinson (2008) asserted that intervention strategies should then be culturally determined when targeting certain groups of people whose needs have not been met by the traditional or general intervention strategies.

A study conducted by Pearson (2010) included women from low-income group in the Appalachian area of Tennessee. Pearson's study focused on translating knowledge about CVD risk factors, screening, and prevention to a disparate population of women and to determine cardiovascular health status in a sample of minority and underserved Appalachian women. Slightly more than half (57%) of the women in the study had been diagnosed with hypertension and 60% of the participants reported that they were taking some type antihypertensive medication (Pearson, 2010). This result confirms that women in Appalachia have higher death rates before the age of 65 compared to the national rates (Pearson, 2010).

Risk Factors of CHD

There are several modifiable and nonmodifaible risk factors of CHD. The modifiable risk factors include (and are not limited to) tobacco use, obesity, hypertension, and hyperglycemia (D’Agostino et al., 2008; Pearson, 2010). Several lifestyle choices that also affect people’s overall health are due to many environmental factors. According to the CDC (2011), tobacco use remains the number one cause of premature deaths in the

United States claiming approximately 440,000 deaths from a total reported death of 2,513,171 (17% in 2011). Although the use of cigarette smoking has declined by more than 50% over the past 4 decades from 42% in 1965 to 21% in 2008, there is still high use of tobacco in some subpopulations (American Lung Association, 2011). There is less known about the exposure of environmental tobacco smoke (ETS) among people living in rural versus suburban and urban locations (Vander Weg, Cunninghama, Howrena, & Cai, 2011). Bell (2010) confirmed that smokeless tobacco use by people residing in rural areas is high. Vander Weg et al. (2011) used a national representative sample of adults in the United States to examine the difference in tobacco use and exposure according to location of residence. The work updated prior research by providing up to date estimates of measuring different types of tobacco use and assessing both self-reported exposure to environmental tobacco smoke and policies regarding smoking at home and the workplace (Vander Weg et al., 2011).

Forrest et al. (2011) found that rural residents were more likely when compared to urban residents to present unhealthy lifestyle behaviors which were strongly linked to CHD development. These rural residents were more likely to smoke, consume alcohol, and exist on an unhealthy diet (Hosler, 2009). McKenzie and Skelly (2010) conducted a qualitative study to explore the thinking of AAW with type 2 diabetes that lived in southern states on the risk of CHD. A semi-structured interview method was conducted to gather information from 48 participants selected randomly from a larger number of 286 participants (McKenzie & Skelly, 2010) and the results showed that AAW with Type 2 diabetes do not believe they are at risk of CVD unless diagnosed with the illness from their primary health care provider. Participants in the study denoted that it can be overwhelming to manage their diabetes to prevent CHD (McKenzie & Skelly, 2010).

Sallar, Williams, Omishakin, and Llyod (2010) conducted a cross-sectional study of a conventional sample of African Americans between the ages of 18-74 years on risk factors for stoke among African Americans residents in the Mississippi region. Sallar et al. (2010) gathered information on risk reduction pertaining to lifestyle changes and certain CVDs and concluded that some participants were not aware of the lifestyle factors resulting in stroke. Some of the participants also expressed their concerns about factors that contributed to the reduction of stroke resulting from living a healthy lifestyle, which is associated with CHD (Sallar et al., 2010), and the authors suggested that health information should be delivered through family members, friends, and churches to aid in the reduction of incidence of stoke.

Humphries and Krummel (1999) surveyed 193 women between the ages of 30 - 64 to explore women's dietary behavior approaches that directly contribute to CVD. The participants in the study were from seven rural primary care centers and were mandated to have a telephone and be eager to complete a 12 page survey and three 24 hour diet recalls. The authors distributed surveys about demographics (age, race, family, education, income and job), willingness to change within 6 months, self-reported CVD risk factors, understanding and behavior change about diet and illness in people, and lastly a statement to clarify readiness to change and improve nutrition intake (Humphries & Krummel, 1999). The authors concluded that weight, income, marital status, and age were risk factors pertained to perceived outcomes, and that the need for awareness is significant and should be increased (Humphries & Krummel, 1999).

Community/Social Interaction

The use of measured criteria can help screen and detect CVD in minorities and poor populations and also help lower the cost of preventive care (Pearson, 2010). In Illinois, the WISEWOMEN (Well-Integrated Screening and Evaluation for Women across the Nation) Lifestyle intervention program is a practice-based intervention policy funded by the CDC to reduce CHD and other chronic diseases by screening and lifestyle classes (DHHS, 2011). The WISEWOMEN program helps to educate women in improving their dietary behaviors, increase physical activity, enhance interpersonal relationships through social networking and increase awareness of personal cardiovascular risk status (DHHS, 2011).

The CDC stated that day care and schools may be contributing to the problem of serving children sugar-sweetened beverages (CDC, 2009), but this can be reduced by and the exclusive consumption of 100% fruit juice and sugar-sweetened beverages through restriction of sales (CDC, 2009).

Methods

The main objective of my study was to understand and present perceived environmental, socioeconomic, and cultural factors that may have contributed to the higher incidence of CHD in AAW. To attain this goal, it was imperative to support and adhere to the methodology and encourage the discourse that was necessary for the participants to freely communicate their experiences with environmental factors that adversely contributed to their behavioral and lifestyle choices that generated into their CHD illness. Qualitative research was the most appropriate for conducting this research because it enabled me to gain a deep understanding about AAW's perception of health and the link between certain environmental, socioeconomic, and cultural factors and the development of CHD (Creswell, 2009).

There are five approaches to qualitative research methods: ethnography, grounded theory, case study, phenomenological research, and narrative research (Creswell, 2003). Narrative research design focuses on social and humanities discipline (Daiute & Lightfoot, 2004). Narrative can be classified as both method and the phenomenon of a story (Creswell, 2007). The use of narrative interview was most appropriate for this study because the participants were able to communicate openly about their personal experiences leading to the development of CHD. The individual narratives produced data that are more accurate, truthful, or trustworthy than structured interviews that would have only asked each respondent a standardized set of questions.

According to Stark and Trinidad (2007), qualitative research methods allow health science researchers to search deeply into questions for meaning, analyze institutional social practices and process, recognize obstacles and facilitators of change, and determine the reasons for the success or failure of interventions. As stated by Creswell (2009), qualitative research procedure relies on text and image data, has unique steps in data analysis, and draws on diverse strategies of inquiry. Qualitative inquiry helps researchers to explore and understand the meaning participants in the study attribute to a social or human problem (Creswell, 2009).

Summary

In 2014 more AAW are at risk for stroke, heart attack, and hypertension than in past generations. Many of these risk factors are due to health care professionals not effectively communicating with patients, low family income, lack of medical coverage, environmental living conditions, and lack of knowledge of preventive methods. Millions of these AAW at risk lack the knowledge and understanding of the causes of CHD that develop over time through life style choices and living conditions. As a result, the need for implementation of environmental policies in improving and maintaining health status and health outcomes for AAW is necessary. Although public health has focused for many years on improving health and promoting health awareness, policies that will aid in the implementation of environmental factors contributing to negative health outcome is detrimental in life saving methods techniques needed to reduce health issues later discovered in life.

The evidence presented for my research on racial and ethnic disparities pertaining to CHD is clearly evident and defined. Many factors such as geographical environment factors (i.e., access to healthy food, access to transportation, and access to health care services), socioeconomic status (i.e., income, education, and employment), and cultural/ social influence (i.e., racial/ethnicity and gender, personal health practices and community intervention) help to illustrate the need for environmental interventions and policies in collaboration with public health processes to eliminate ethnic disparities in maintaining good health. Additionally, this research focused and contributes to the body of knowledge in the effort to reduce racial and ethnic environmental disparities affecting health conditions and outcomes.

In Chapter 3 I examine and describe the methods for this study, including the design, setting, sample, instrumentation, data collection and analysis procedure and steps taken for ethical protection of participants in the study. I also define and elaborate on the study population and sample size.

Chapter 3: Research Method

Introduction

Qualitative research involves a naturalistic view of the world. It enables the researcher to collect data within the location where the issue or problem had evolved (Creswell, 2009). The use of the qualitative research method enabled me to gain a deep understanding about the AAW's perceptions of health and their relationships with certain environmental, socioeconomic, and cultural factors of CHD development. The use of the qualitative research method assisted me in understanding the study participants, and their social, and cultural environment (Toloie-Eshlaghy, Chitaz, Karrimian, & Charkhci, 2011). Qualitative researchers do not have to use numbers as is required in quantitative research, but rather are expected to interpret and reveal concepts and meaning about the subject or research topic (Abbas, Chrtsaz, Karimian, & Charkhchi, 2011). For this reason, the qualitative research method was best suited to investigate and depict the gap in literature in providing knowledge about the external factors contributing to the epidemic of CHD in the AAW population.

My overarching objective of this research study was to examine factors that AAW perceive to negatively contribute to CHD development. In Chapter 3, I focus on the appropriate research methodology that I used to explore the relationship between environmental factors, socioeconomic status, and cultural values with CHD mortality in this population group. This design was explored by focusing on the experiences of AAW with a CHD diagnosis at least 6 months prior to data collection and between the ages of 21 and 55 years. I provide the fundamental reasons for qualitative research method selection rather than quantitative research inquiry. I also explain the themes and research questions selection in the study and lastly described the research process, data collection procedures, data analysis and ethical issues that arose during the study.

According to Hollway (1997), a researcher’s epistemology is literally his or her theory of knowledge about the topic being researched and this knowledge helped in deciding how the social issue or phenomenon was studied. My epistemology regarding this research was to describe as accurately as possible the phenomenon. In order to achieve this goal, I ensured that the data that were collected only consisted of the perspectives of the people who were directly involved with the external factors and thus influenced by certain lifestyles and choices contributing to the development of CHD condition . Secondly, as the researcher and in order to reduce potential bias, I abstained from any preconceived beliefs or mindset. Lastly, my aim was to focus on the lived experiences of AAW with CHD.

The following research questions helped with answering the questions that have often been neglected in past research. Factors such as environmental influences, socioeconomic status, and cultural values were researched and used to evaluate policies and laws that can be developed by policy makers regarding the need for improved environmental living conditions and immediate social change. The main question in this study was, to what extent do AAW's perceptions of environmental, socioeconomic, and cultural factors contribute to their CHD status? Secondary questions included the following:

1. Is there a connection between certain environmental factors (access to food supply, unsafe public spaces, air quality, and housing conditions) that are related to urban AAW and their perceptions of their CHD status?
2. Is there a connection between certain cultural beliefs and values (language, thoughts, communication, and social groups) that are related to urban AAW and their perceptions of their CHD status?
3. Is there a connection between certain socioeconomic factors (access to health care services, personal or family income, and educational attainment) that are related to the lack of CHD screening and early detection in urban AAW and their perceptions of their CHD status?
4. Is there a connection between certain built environmental factors (outdoor exercise facilities, transportation, and walking trails) that are related to the urban AAW and their perceptions of their CHD status?
5. Is there a connection between certain barriers that urban AAW with CHD perceive when seeking medical treatment and how do these perceptions affect their behavior?

Research Design

Research designs are plans and processes for research that start from broad assumptions and move to more detailed methods of data collection and analysis (Creswell, 2009). The three types of research design are qualitative, quantitative, and mixed methods (Creswell, 2009). For this study a qualitative research design was the most appropriate because it enabled me to investigate the external factors contributing to high incidence of CHD condition in AAW by allowing them share their personal experiences. Qualitative variables were used to describe the negative effects of environmental factors, socioeconomic statuses, and cultural values and their perceived impacts on CHD epidemic in this AAW population. The selected design for this study contributed to the knowledge and understanding of external factors affecting AAW's health and provide information about the causes of CHD.

The three qualitative approaches that are frequently used in health research are discourse analysis, grounded theory, and phenomenology (Starks & Trinidad, 2007). Grounded theory is best suited for a study when a theory has not yet been developed to explain a process (Creswell, 2007). A researcher is able to saturate a theory from examining the participants in the study who share a certain lifestyle or characteristic (Creswell, 2007). The goal of grounded theory is to generate an explanatory theory of the general purpose of social processes as it relates to the environment that the issue or problem is taking place (Starks & Trinidad, 2012). These theories when developed inductively can assist the researcher in explaining how the people under the study have experienced a phenomenon and when developed by the researcher can be used as a general framework (Creswell, 2007).

The second approach, discourse analysis, is a qualitative research approach that focuses on health and health care practice challenges (Cheek, 2004). Discourse analysis approach can also be used in diverse and multidisciplinary fields, spanning everything from urban and business studies (Yakhlef, 2002) to health-related studies (Adams, 1998; Check, 2003). Discourse analysis includes the creation of language practices and determines how language helps with creating and reflecting on cultural, social, and political practices (Starks & Trinidad, 2012). Similar to other qualitative analytical approaches, discourse analysis is not a unified or unitary approach and is often referred to as partial or situated reality (Cheek, 2004).

The third qualitative health related analysis approach that is frequently used in the health field is phenomenology analysis (Starks & Trinidad, 2007). Phenomenology was developed by a European philosopher in the early 20th century (Starks & Trinidad, 2007). A phenomenologicalstudy focuses not on an individual life but rather on a concept or phenomenon (Creswell, 2007). For this reason, a phenomenological research design was determined most aptly suited and relevant to understand and describe the meaning of both the environmental and socioeconomic factors as well as the cultural values contributing to the higher incidence of CHD condition in AAW. The use of phenomenological research design contributed to the deeper understanding of the life experiences of this population group by exposing certain assumptions and preconceived beliefs that might have been taken for granted (Sokolowski, 2000). This phenomenological qualitative research design is best to gather information because the participants were asked to provide data through the use of semistructured predesigned questions directed to each participant (Creswell, 2007).

According to Creswell (2007), phenomenological research design has two approaches that can be chosen, which are transcendental or psychological phenomenology or hermeneutical phenomenology. Van Manen (1990) coined the term *hermeneutical phenomenology*, which was described as research that is focused mainly on lived experiences. Similarly, Moustakas (1994) focused on transcendental or psychological phenomenology, which pays less attention to the interpretation of the researcher but rather on the researcher's description of the participant's experiences (Creswell, 2007).

As stated by Moustakas (1994), participants in a phenomenological study are asked two broad, general questions: What have they experienced in relation to the issue? Secondly, what conditions have contributed to or affected their experiences of the issue or problem? As such, participants in this study expressed and shared their experiences in detail regarding the issue of CHD and their perceptions of external factors that negatively contributed to their overall health condition and health outcome.

The Role of the Researcher

Researchers play an important role in qualitative research design. A researcher has many responsibilities when conducting a study (Creswell, 2007). Apart from recruiting and selecting of participants, researchers must be competent and knowledgeable enough to implement the appropriate instrument, conduct interviews, organize and store the data, analyze data collected, and prepare reports for best results. According to Groenewald (2004), a researcher applying phenomenology is concerned with the lived experiences of the people involved, or those who were involved with the issue that is being researched. In addition, the objective of the researcher is to ask probing questions to encourage the study participant to elaborate on the details of the issue at hand to achieve clarity and to stay close to the lived experience (Starks & Trinidad, 2007).

Frankel and Devers (2000) stated that there is a need for accuracy when conducting a qualitative research. It is required in qualitative research that the researcher pay close attention to details, integrity, and stay professional. In order for the researcher to stay focused the need to recognize preconception and bias is important in other to overcome any obstacles or distractions that may sway them away. Creswell (2007) further explains that validation, reliability, and standards of quality in qualitative research varies and sometimes depends on the qualitative approach. In the case of my study, I controlled my personal bias and ensure internal validity of my study by conducting a pilot study (n = 2) prior to the main study and implementing the member checking techniques during the main interview sessions (*N* = 10).

The credibility of this research was enhanced by the initial implementation of the pilot study that addressed a number of logistical issues such as to ensuring that the instructions given to the participants were comprehensible, that the wording of the survey was easily understood, and checked the reliability and validity of results. To check for validity, the pilot study was used to test and ensure that there were no misleading, inappropriate, or redundant questions.

Secondly, the member-checking techniques were used to address the research questions and the credibility of data collected. The implementation of member checking aided in probing any unclear responses that were provided by the participants. The probing method was added in order to obtain a clear understanding and to obtain rich information of collected data.

Participants of the Study

The main study participants consist of 10 AAW residing in the Cook County, Illinois vicinity. The AAW's ages ranged from 21 and 55 and all self-identified as Black or African American. The participants consisted of women who had been diagnosed with some form of CHD at least 6 months prior. The participants described their daily living conditions pertaining to certain environmental, socioeconomic, and cultural factors impeding them from daily physical activities, access to grocery stores, food consumption, perception of health, and household income contributing to the issue under study. Furthermore, the participants conveyed messages about factors influencing their behavior and attitudes towards healthy lifestyle choices.

Cook County is in the state of Illinois, which had a total population of 5,240,700 as of 2013 (United States Census Bureau [USC], 2014). Whites are the largest racial group in Cook County making up 66% of the population; they are followed in number by African Americans, who account for 25% of the population (USC, 2014). Geographically the county is the fifth largest in Illinois by land area and is mainly urban and very densely populated, comprising the city of Chicago and many suburbs (USC, 2014).

Criteria for Selecting Participants

Several methods and techniques were used to recruit qualified study participants (Hycner, 1999). The participants were recruited by posting flyers in several public locations such as universities, retail outlets, community centers, hospitals, and public libraries. To recruit potential study participants and target the persons with similar characteristics and lifestyle, purposive and snowball sampling were the most appropriate recruitment methods. Purposive sampling is a non random selection of participants on purpose. Snowball sampling on the other hand, is a type of purposive sampling where existing participants recruit future participants in the study from among their acquaintances (Babbie, 2007). Purposive and snowball sampling are the most frequently used in identifying the primary participants (Groenewald, 2004). Purposive sampling helped me to select the best participants suited for the study based on my judgment and the purpose of the research ensuring that they have certain experiences pertaining to the phenomenon (Groenewald, 2004). There was a prescreening stage in which each participant was required to answer certain listed criteria, all of which helped me select the best candidates for the study.

In order to capture additional qualified participants, snowball sampling was also be used. Snowball or chain sampling is a recruitment technique used by researchers to solicit referrals to others as possible participants for a study (Babbie, 2007). Snowballing is a method that is used to expand the sample by requesting participants to recommend other potential persons for the study (Groenewald, 2004). The benefit of using the snowball sample method enabled the researcher to recruit participants who are not usually frequent visitors to recruitment sites for unknown reasons (Ulin et al., 2005). This advantage in recruiting was beneficial to me in recruiting additional study participants for the study. Sample size depends on the analytic objective and the data source (Starks & Trinidad, 2007) and because this study focused on the broad issues of environmental factors, socioeconomic status, and cultural values contributing to high rate of CHD in AAW, a small size in an urban location such as Cook County was ideal in depicting and collecting useful data to understanding the influence of these external factors in the contribution of CHD condition. A sample size of 10 (*N* =10) was used to conduct this research study, which was appropriate for a phenomenology study (Starks & Trinidad, 2007).

Starks and Trinidad (2007) emphasized that although a larger sample of participants might provide a wider range of increased results, data collected from fewer individuals who had experienced the phenomenon might also be adequate to discover the essence of elements of the issue or problem. In this case, it was best to use a small sample size of 10 to conduct this study to gather and elicit the participants' life experiences and perspectives relating to the issue of CHD mortality and morbidity in AAW. My sample consisted of ten individuals who had been diagnosed with some form of CHD no earlier than within 6 months.

The use of qualitative research methods and phenomenological research inquiry contained many advantages and qualities best suited for conducting this study. The design aided in answering the study questions and attained the aims of the study. Through the literature researched, many opportunities and suggestions were presented to the researcher to describe in depth the lived experiences of the study participants, minimize the need to analyze and explain, and allow the philosophical guidance in effectively conducting the study.

Research Procedures

There are four epistemological processes in the qualitative research process. These steps begin with the process of perceiving, which means the researcher is learning everything about the participant’s experiences (Abbas et al., 2011). This process continues until the researcher feels he or she collected enough data to write a full description. Secondly, the researcher combines the reports, experiences, and different situations to describe various numbers of behaviors and reactions. Third, the researcher establishes the idea by comparing and describing the data until it is used to explain the data in simplest form. Lastly, the researcher creates the theory until it can relate to other research studies that was conducted in future studies (Abbas et al., 2011).

Before the research began, I obtained permission from Walden University’s Internal Review Board (IRB). After approval, flyers for the pilot study were posted in several public locations such as the public library, grocery stores, churches, and hospitals (see Appendix A). Only two participants were needed for the pilot study, which was conducted prior to the main study to test the two instruments: the Socioeconomic Data Survey and Interview Protocol. The two women completed and signed the informed consent form for the pilot study (Appendix B). The two instruments were then tested to verify and confirm that the study participants would understand the questions as they are meant to appear and that the instruments were appropriate for the main study.

After the pilot study was conducted and I determined that the survey and interview questions were appropriate to conduct the main study, flyers for the main study were posted at the same locations the pilot study flyers were posted. Ten participants were needed to conduct the study. The first ten individuals that responded to the fliers were scheduled an interview appointment at different dates and time in other to participate in the main study during which they completed the informed consent form

(Appendix C), a 15-minute survey questionnaire (Appendix D) and participated in approximately a 60-minute interview session (Appendix E) either at their homes or at a public library.

The first stage of the main research study interview procedure required that the women participant complete the Informed Consent Form (Appendix C). The informed consent form expounded on the purpose and goal of the study. Study participants were encouraged to express any concerns they might have or ask questions before proceeding to participate in the study. After the consent form was completed and signed, the second stage of research procedure required that theycomplete the Socioeconomic Survey Questionnaire (Appendix D), which took no more than 15 minutes and was self-administered and the participants provided information such as name, age, gender, and state of residency, all of which helped me to verify the inclusion criteria for the study as implied in the flyer. The last stage of research procedure was the interview process. The Interview Protocol (Appendix E) addressed and focused on the three broad topics of the study: the environmental, socioeconomic status, and cultural beliefs affecting AAW's overall health outcome and quality of life. The interview was about 60 minutes and consisted of several questions relating to each of the topics and were used to facilitate the interview process.

The interview sessions were one-on-one, face-to-face, in depth and semi-structured. The participants were asked about their views on health and disease in general and then elaborated on their perception on healthy living and perspective on the negative effects of environmental conditions as well as financial and social involvement on

AAW’s overall health outcome. The interviews were conducted in English using easily understood words. Each interview was no more than 60 minutes with about the same time frame given to each study participant, and 1 to 2 months was set aside for data collection. The three main themes for this study: environmental factors, socioeconomic status, and cultural values were posed as open-ended questions and followed up with prompts for clarification for member checking validation at the discretion of the interviewer during the interview session. This process gave each of the study participants the opportunity to provide detailed responses relating to the themes as they pertain to their everyday life experiences and disparities leading to the high rate of CHD in AAW.

Instrumentation

Three instruments developed to collect data were the following: (a) pilot study, (b) Socioeconomic Questionnaire Survey, and (c) the interview protocol. I customized all of the instruments designed particularly for this study and reviewed them before implementation in order to make the necessary revisions. Member checking was also implemented during the interview process with the study participants for validity and appropriateness.

The pilot sstudy, which is a process to test the instruments to be used in the main study, had several purposes. First, since the objective and focus on this study was to describe the perceived environmental, socioeconomic status and cultural values effects on AAW’s health outcomes relating to CHD illness, the pilot study was a “field test” consisting of the same questions that were used for the main study and were tested with two participants. The pilot study ensured that the steps taken during the proposed study were comprehensible. In addition, the pilot study was also used to make sure that the wording of the survey and interview questions were easily understood and that there were no misleading, inappropriate, or redundant questions.

To verify the inclusion criteria for the study, the Socioeconomic Survey Questionnaire was self-administered by the participants. The survey questionnaire assisted me in collecting data on the demographics and characteristics for all participants. In addition, the survey consisted of data such as age, employment status, income, medical insurance coverage, family composition, education, religion, social interactions, and other information referenced in the review of literature.

Lastly, the Interview Protocol focused on the three broad topics covered under the study: the environmental, socioeconomic status, and cultural belief. Several questions pertaining to each of the topics related to this research study helped me facilitate the interview process. All the study participants were presented the same questions in the same order and given equal opportunity and time duration to respond to the questions during the interview session.

Data Collection

Qualitative findings evolve from three kinds of data collection: (a) in-depth, open-ended interviews; (b) direct observation; and (c) written documents (Patton, 2002). For this study, demographic information of each participant was collected. The interviews were face-to-face in depth and semi-structured in a private location such as participant’s homes or anywhere else they felt protected. The interview duration was no more than 60 minutes.

The initial phase of the data collection process required each participant to complete the Consent to Participate in a Research Project form. After which, the participants completed the Socioeconomic Survey Questionnaire, which I reviewed with each participant and made changes if needed. The Socioeconomic Survey Questionnaire was used to verify that study participants were qualified for the study. Followed by the second phase of the data collection was the one-on-one, semi-structured, face-to-face interview with each participant regarding the issue under study. I wrote down verbatim each of the participant’s responses and a reflective journal that were kept, transcribed and typed into Microsoft Word document and stored on a hard drive. In addition, the interviews were audio-recorded and notations of interview dates, locations, and time duration with the participants' approval were kept. From these interviews, emerging themes and questions were coded, analyzed, and summarized for data analysis with the use of Microsoft Word and NVivo software.

Data Analysis

Data analysis in qualitative research dwells in preparing and organizing of collected data and information (Creswell, 2007). In qualitative analysis, the researcher is the instrument for analysis (Starks &Trinidad, 2007). The objective of data analysis is to make sense of the textual data (Creswell, 2003). For this study, the verbal statements and actions of the participants were analyzed for meaningful interpretation through the use of several approaches for monitoring, documenting, and evaluating the analytical process. These analysis approaches helped in understanding the thoughts, feelings, and experiences of the participants' CHD condition and the effects of the environment, socioeconomic status, and cultural values on their overall health.

As noted by Creswell (2007), information collected during an interview comprises of information such as transcript data or image data such as photographs. As such, for this study, interview transcripts and documents were analyzed. The main categorizing strategy in qualitative research is coding (Maxwell, 2005). There are several steps in the coding process that enabled me to describe, classify, and interpret the data collected from the interview. As explained by Creswell a researcher develops categories and sorts the data according to text or visual images. Secondly, the researcher can begin with a short list called “lean coding,” which are five to six categories or themes with shorthand labels or codes that will later be expanded as the review proceeds and lastly will be transcribed into a narrative. All these steps helped me in describing and interpreting the participants' lived experiences and perception on the contributing factors of CHD mortality in AAW.

Furthermore, in qualitative research, the main objective and principle of coding is embedded in the separation of the data and rearranged into categories that facilitate comparison between things that are similar and assist in the evolution of theory concepts (Maxwell, 2005). Another significant purpose of categorizing analysis involves data organization development leading to broader themes and issues (Maxwell, 2005).

Use of Computer Software

Computer programs helps researchers store, code, and organize qualitative data (Creswell, 2007). The computer programs help locate text or image, provide a visual picture of codes and themes and also can be used to develop or create a template for coding data in qualitative research (Creswell, 2007). NVivo computer software program was used to analyze the data and documents obtained from the participants during the interview. According to Weitzman and Miles (1995), qualitative computer programs have been in existence since the late 1980s and ever since then, they have been improved to help computerize the process of data analysis, text, and image data. The text or image segment used in frequent passages pertained to two or more code labels aided in the comparison among code labels. Lastly the NVivo software assisted in providing the capacity to write memos and store them as codes (Creswell, 2007).

As noted by Creswell (2007), there were several advantages and disadvantages of using computer programs. The computer program can also help with locating and finding materials easily, which eliminated the need to cut and paste materials onto file cards and sort and resort the cards according to themes which could have been time consuming (Creswell, 2007). Several other advantages include the researcher being motivated to look closely at the data through the use of computer programs rather than casually reading the text or transcripts that can sometime make it difficult for the researcher to carefully analyze the ideas and information presented (Creswell, 2007).

Coding

Coding is defined as the systematic process in which specific statements are analyzed and categorized into clusters of meaning that represent the phenomenon or issue of interest (Creswell, 1997). It is through the writing and rewriting process of data analysis that the researcher can distill meaning (Starks &Trinidad, 2007). During the coding process, the researcher is required to analyze textual data individually and collectively across cases (Ayres et al., 2003). Even though coding is meant to reduce the data into sets of meaningful and manageable categories for further analysis, coding enabled me to produce a system to identify, organize, analyze, and recover the data (Weitzman & Miles, 1995). I initiated coding by color coding each repetitive word or theme in the transcripts and jotting down notes on the side margins. This helped me in the organization, analyzing, and retrieving of collected data. The data were placed in categories which assisted me with organizing the data as it reappeared in the text.

Themes

After making sense of the data through coding by a notional aspect and linking, the coded data received was then simplified to the formation of themes. Theme identification was a key step in analyzing data (Ryan & Bernard, 2003). The importance of any theme is dependent on how visible it appears (Ryan & Bernard, 2003). A theme was identified when I could answer the question or simply identify an expression of an example. Themes also appeared in many shapes and sizes; they were either focused or linked with very specific expressions or were broad and had many different kinds of expressions (Ryan & Bernard, 2003). The connection between expressions and themes are related and placed on specific incidence, events, and other instances of phenomena (Strauss & Corbin, 1990).

According to Ryan and Bernard (2003), there are several steps to be taken when analyzing text or data collected: (a) the researcher must discover the themes and subthemes, (b) decide which themes are important and make the selection to a number that is manageable, (c) develop a hierarchy of the themes, and lastly (d) link or connect the themes into theoretical models. For this study, these steps assisted me in identifying and understanding the phenomena by selecting the commonly used words expressed by the participants to quantify their perspective and experiences of AAW pertaining to their CHD status.

Sandelowski (1995) advised that proofreading written materials and underlining key words and phrases is required in conducting data analysis. Bogdan and Biklen (1982) also suggested that reading over the text more than twice helps the researcher in locating the themes. Researchers locate themes by identifying similarities, differences, missing data, looking for repetitions, indigenous typologies or categories, metaphors and analogies, transitions, and theory-related materials (Ryan & Bernard, 2003). Similarly, for this study, I identified the themes within the data by repetition, and identified the words or phrases that occurred and reoccurred that evolved from the interviewee's responses to the research questions.

Ethical Considerations

It is important to understand that this study focused on environmental and social disparities affecting AAW's overall health status. Due to these facts, one of the significant objectives of this study was to ascertain that the participants in the study were treated with fairness and protected against any discrimination. To ensure that each of the participant's interest wasprotected, I obtained approval from the Walden IRB before conducting the study (approval # 01-03-14-0194320).

I made use of informed consent to ensure ethical research, for each study participant (Groenewald, 2004). The informed consent agreement was developed through the recommended items specified from Bailey (1996) to establish that the participants understand the purpose of the study and obligations of the research study. The recommendations were as follows: (a) that they are participating in research, (b) the purpose of the research, (c) the procedures of the research, (d) the risk and benefits of the research, (e) the voluntary nature of research participation, (f) the subject's (informant's) right to stop the research at any time, and (g) the procedures used to protect confidentiality (Smith, 2000). Each of these methods were included in the consent form used for this research.

I made it necessary that each study participant read the consent form and I answered any questions posed by the participants. I gave a copy of the signed consent to the participant and I retained a copy for myself. Participation was voluntary and each AAW could at any time request to end the interview. Information obtained from the study participants will be kept confidential. All copies of personal data and information pertaining to each participant has been secured in a locked cabinet and all electronic documents have been secured through the use of protected hard drive software, which are only be available to the principal investigator. However, all data will be destroyed and electronic files will be deleted after the required five year period of data retention as specified by Walden University. The data will be erased from the hard drive rather than deleted because data are stored on a computer's hard drive, and this information may be re-created by experts even after the data have been deleted. Therefore, programs that can be used to wipe the entire hard drive will be used to destroy the personal documents belonging to the participants.

For security reasons, each participant was assigned an alphabetical character that is only be known by me. No personal information of any of the individual will be disclosed to any other participant. I am the only one with knowledge of the security assigned alphabetical character system, which will be kept confidential. All data obtained from the Participant Prequalification Questionnaire and the Socioeconomic Demographical Data Survey will be computed into a protected electronic database secured by a password also only known by me. No conflict of interest was present in this study because no outside party such as an organization or community research partner contributed any financial or resources for the research study.

Summary

My dissertation study was a qualitative inquiry involving human subjects which can be challenging. However, the interview process of the one-on-one interview process helped to decrease the vagueness and help clarify the understanding of the AAW's experiences and beliefs of the influence of socioeconomic and environmental factors on CHD conditions.

The focus of the qualitative approach to the research enabled me to capture the experiences of the shared information provided by the participants in the study. This effort helped to address the deep-seeded social problems disfavoring these AAW and may awaken policy makers on the need to initiate community health programs to address racial and ethnic disparities in early CHD detection. Lastly, the findings from my research may aid in the development and educating of public health policymakers as they relate to policy implementations geared towards preventive methods and a need for a more culturally competent health care system for health promotion and prevention programs of CHD to help AAW with gaining knowledge, understanding, and prevention of CHD.

In Chapter 4, I present a brief summary of the pilot study, the setting of the main study, and a field background that describes the demographics of the study participants. I also present a brief description of the interview method used for the study. Further, I present a description of the content and method of the interview process, and describe how thematic analyses were implemented to address credibility and dependability, and lastly present the analyzed results by theme.

Chapter 4: Results

Introduction

CHD is a serious health issue affecting all people from various socioeconomic statuses and ethnic groups across the United States and globally (Walker & Mouton, 2008). According to the Behavioral Risk Factor Surveillance System 2010 report as cited within CDC (2010), the CHD prevalence report showed that AAW had the lowest improvement in CHD compared to other ethnic groups between 2006 and 2010. AAW's change was +2.7% compared to White (-12.7%), Hispanic (-14.3%), Asian or Native Hawaiian (-30.6%), and American Indian women (-8.5%; CDC, 2010). This slow improvement in AAW within the 4-year period compared to other groups of women further explains the need for a more culturally competent health care system for health promotion and prevention programs of CHD to help AAW with gaining knowledge, understanding, and prevention of CHD.

AAW continue to die at a much higher rate than African American men and other women from other races (NHLB, 2012). For this reason, I sought in this phenomenological qualitative study to investigate the public policy aspect of CHD awareness and the need to address the deep-rooted factors and the lack of awareness of CHD in AAW. It was estimated by the CDC that by 2020 CHD will be the leading cause of death throughout the world (Heart Foundation, 2014). The purpose of this qualitative research study on AAW with CHD ($N = 10$) was to address several research questions as described in Chapters 1 and 3. I sought knowledge concerning the AAW's perceived environmental, socioeconomic, and cultural factors related to their diagnosis of CHD that may be negatively related to their health status.

In Chapter 4, I include a brief summary of the pilot study (*n* = 2), the setting of the main study, a field background that describes the demographics of the study participants (*N* = 10), a brief description of the interview questions, details on the interviewing method used to collect data, as well as description of the location, duration, frequency, and recording methods used for the study. In Chapter 4, I also present a description of the content: how the interviews were conducted, recorded, transcribed, member checked, then uploaded to be coded using NVivo software, and finally grouped into themes and patterns. I also describe how thematic analyses were implemented, address credibility and dependability, and lastly, present the analyzed results by theme, with a comprehensive detailed summary.

My qualitative study addressed several research questions concerning the nature of the relationship between certain independent factors (environmental, socioeconomic, and cultural) and the dependent variable, form of CHD in the sample. My hope is to generalize the findings from this research sample to a wider population of AAW with CHD and with further recommended research to expose certain individual risk factors, deficiencies in health promotion, and perception of health among the participants that can be used with a broader sample of AAW with CHD. In addition, my hope is to identify certain policies that can positively help contribute to the improvement in the implementation of health promotion as well as resources needed for CHD awareness and prevention, particularly in AAW.

Pilot Study

Prior to collecting the full data set, I conducted a pilot study (*n* = 2) in January 2014. Neither of these two women's information was included in the final data analysis; rather the point was to test the comprehensibility of the instructions, questionnaires, and interviews that were to be administered during the full study. After verifying that the inclusion criteria were met, and obtaining informed consent from both participants, both pilot study interviewees were administered the survey and interviewed with Walden University’s IRB approval. The IRB is an independent ethical review board appointed by Walden University to approve, monitor, and review any research that involves human participants, in order to protect their safety, welfare, and rights to privacy.

The implementation of the pilot study (*n* = 2) allowed me to test the adequacy and understandability of the instructions and questionnaires that were administered during the full study (*N* = 10). The findings from the pilot study also ensured that the steps taken during the full study were valid. The results of the pilot study showed that there was no need to adjust any of the instruments. These pilot results also assured me that the time frame allocated for the interviews of about 60 minutes was reasonable and sufficient to collect and record detailed responses from the participants.

Recruitment and Procedure Method

After the completion of the pilot study, a purposeful sample of convenience (*N* = 10) of AAW with CHD were recruited from community centers, hospitals, and by word-of-mouth between January and March 2014. Flyers (Appendix A) expounding the study requirements for participation in the study was posted in several public facilities in the local area. The use of the snowball- and chain-referral sampling techniques also aided in recruiting additional participants for the study. Seventy percent (70%) of the sample came directly from the posted fliers and 30% from the other recruiting techniques. Although all of the original six volunteer women were pre-screened and qualified to participate in the study, only five of them were eventually interviewed. Three other women were referred by other study participants and two additional study participants were referred by individuals who became aware of the study through the posted flyer, for a total of 10 participants (*N* = 10).

Once eligibility for participation was established, each participant was contacted by telephone. I scheduled an appointment based on her chosen date, time, and location of interview preference. This method was initiated in order to allow each participant comfort and convenience. At the initial meeting with each participant, she was asked to complete the Consent to Participate form (Appendix B) and then the Socioeconomic Data Survey (SDC; Appendix C). The survey questionnaire was used to gather preliminary information about each participant’s age, family income level, educational background, and family composition, social interactions, type of CHD illness, and lifestyle choices. I also signed the consent form and mailed a copy to each participant.

Setting

Interviews were conducted at the participant’s home or at a public library based on where she chose to be interviewed; in the Chicago, Illinois vicinity. Although all the interviews were initially planned to be conducted at a public library, some of the women preferred to be interviewed at their homes. Of the 10 interviews, seven (70%) were conducted in a private conference room at a local public library and three (30%) at the participant's home using the Interview Protocol (Appendix D).

At the participants' homes, the interviews were conducted at the dining table or living room with comfortable chairs and soft lightning and with minimal interruptions from family members. There were a few instances during the interview that a family member walked in and interrupted the flow of the interview session, which distracted the participants. In contrast, the library had no distractions making it easier to gather more detailed information during the interview session. The interviews conducted in a designated conference room in the library ($n = 7$) had bright lighting and a long square table surrounded by comfortable black chairs. The interviews at the library were very quiet and were more structured. Regardless of where the interviews were conducted, all the women were asked the same questions in the same order and they all appeared to respond in an honest and reliable manner.

Interviewees' Profiles

As noted in Chapter 1, the study was limited to a sample of 10 AAW with CHD between 21and 55 years old that reside in the Chicago, Illinois area, proficient in the English language and are natural born U.S. citizens. The participants have been diagnosed with different types of CHD within the last 6 months or longer with severity ranging from least to most serious by the use of the BMI calculation result as a rough indicator of their overall health.

The BMI results were used as an indicator to determine the severity of the type of CHD diagnosis for each participant. Participant F, diagnosed with congestive heart failure, has a BMI of 17.8 (underweight). Participant D, diagnosed with heart murmur and irregular heartbeat, has a BMI of 18.0; underweight. Participant H has been diagnosed with heart murmur and irregular heartbeat and has a BMI of 31.9; obese. Participant B has been diagnosed with inflammatory heart disease with a BMI of 37.1; obese. Participant C also has inflammatory heart disease a BMI of 39.1, obese. Participant J has been diagnosed with inflammatory heart disease and an enlarged heart with a BMI of 39.1; obese. Participant J has a BMI of 39.8, obese, and has hypertensive CHD. Participant I has a BMI of 40.4, morbidly obese, and has coronary artery disease. Participant A has a BMI of 41.2, morbidity obese, and has hypertensive CHD. Lastly, participant G has the highest BMI at 45.9, morbidly obese, and has Ischemic CHD. The types of CHD are ranked from least to most serious according to BMI result generated for each participant and type of CHD they have been diagnosed.

All the women were able to express themselves and recall their experiences with their CHD condition. The women described their daily living conditions, type of CHD, economic, social interactions, and cultural beliefs that together may have played a role in their behavioral patterns, lifestyle choices, and perceptions of their own CHD. To protect the identity of these women, each of them was assigned an alphabetical code.

All ten women had some form of current health insurance coverage at the time of their CHD diagnosis; three of them had medical health insurance through their employer while the others were on Medicare or Medicaid. Medicaid is a federally funded health insurance program that provides health insurance coverage for low-income for people, families and children, pregnant, and people with disabilities. However, Medicare is the federal health insurance program for people who are 65 or older, and certain younger people with disabilities. In contrast, employee sponsored health insurance only covers employees that are currently employed. The employee sponsored insurance is operated by private insurance companies and are partially paid for by the employer.

In addition to being insured, all the women had some form of income. Half of the women were either employed full time or part-time, while the other half (50%) were either retired or unemployed, and all of them earn less than $50,000/year compared to the median household income in Illinois between the years 2011 – 2012 of $51,716 (USC, 2013). Table 1 depicts the demographic characteristics of the participants.

Table 1

Demographic Characteristics of the Participants (*N = 10*)

Age range (years)	Frequency (%)
20 – 25	0
26 - 35	10
36 - 45	40
46-55	50
Marital status	
Single	(60%)
Married	(0%)
Divorced	(10%)
Widowed	(20%)
Separated	(10%)
Employment Status	
Employed	(50%)
Unemployed	(50%)
Annual Income Levels ($1,000s)	
21- 30	(60%)
31 - 40	(20%)
41 – 50	(20%)

Table 2 shows the personal characteristics of each participant's educational attainment, employment status, and health insurance coverage.

Table 2

Personal Characteristics of Participants

Participant character code	Employment Status	Type of Health Insurance	Educational Attainment
A	Employed Full Time Office Associate	Employer	Associate's Degree
B	Unemployed	Medicaid/Medicare	High school diploma
C	Employed Security Guard	Employer	High school diploma
D	Employed Full Time Caseworker	Employer	Master's Degree
E	Unemployed	Medicaid/Medicare	Bachelor's Degree
F	Unemployed Retired teacher	Medicaid/Medicare	Bachelor's Degree
G	Employed Home care aid	Medicaid	High school diploma
H	Employed Laborer	Medicaid	High school diploma
I	Unemployed	Medicaid	Bachelor's Degree
J	Unemployed	Medicaid	High school diploma

- Participant A: 54-year-old diabetic, who has high blood pressure, was diagnosed with hypertensive heart disease in 2013. Participant A has a damaged heart that occurred from having high blood pressure; the pressure inside the blood vessels is too high and also has a thickening of the heart muscle. She lives alone and receives support from her four children. She has an associate's degree and is currently employed full time as an office associate with an annual salary of $45,000. She has health insurance coverage through her employer. Participant A maintains her health by walking about ½ a block daily, uses six medications, eats more fruits and vegetables, and bakes her food instead of frying it. Her support system is mainly from her children. She does not have any support directly from her community but uses the built facilities such as the parks and the bike paths for exercise.
- Participant B: 41-year-old, single mother of three children with high blood pressure and inflammatory heart disease. Participant B’s heart disease condition causes her heart muscle and/or the tissue surrounding it to be swollen. She is currently unemployed and receives social security benefits, supplemented by government assistance for medical and food stamps and her annual income of $22,000. She lives with her mother, nephew, and children. Participant B maintains her CHD condition by walking a short distance a few times during the week, uses ten medications daily, and eats less pork and red meat with more fruits and vegetables. However, she has

no community support and has not used any community resources for weight reduction such as park districts and community centers.

- Participant C: 48-year-old widow but was married for 24 years. Participant C was diagnosed in 2002 with two types of heart disease, inflammatory heart disease and cardiomegaly (enlarged heart) heart disease in addition to being diabetic. Her heart muscle and surrounding tissues are swollen and inflamed. She currently works full time as a security guard and has an annual salary of $35,000. She lives with her daughter and three grandchildren. She maintains her heart condition by walking the short distance to and from work, uses twelve medications, and eats more vegetables, fruits, nuts, and fish. She receives help with transportation from her children and other family members to grocery stores, doctor visits, and recreational activities and events. However, she has no community support and has not used any community resources for weight reduction such as park districts and community centers.
- Participant D: 50-year-old Air Force veteran who was diagnosed with Septal defects (holes in the heart) and arrhythmia (irregular heartbeats) in 1999. She lives alone, and has no children. She is currently employed with the State of Illinois with an annual salary of $50,000. She receives medical insurance coverage through her employer; Blue Cross and Blue Shield of Illinois. Participant D maintains her heart condition by walking up and down the stairs in her building and walking from the parking lot to her job,

which is about 2 blocks five times a week. She uses ten medications daily, eats in smaller portions, consumes more fruits and vegetables, and eats no red meat, with more baked or steamed food. However, she has no community support and has not used any community resources for weight reduction such as park districts and community centers.

- Participant E**:** 45-years-old divorcee with no children and lives with father. She was diagnosed with Ischemic heart disease in 2009, has diabetes, high thyroid, and sleep apnea. Participant E’s heart disease condition reduces her blood supply to the heart muscle as a result of plaque buildup inside the coronary arteries, a condition called atherosclerosis. She is unemployed and receives Medicare for medical coverage and also receives food stamps and has an annual income of $25,000. Participant E maintains her heart condition by walking four blocks, three to four times a week, takes fourteen medications daily, and eats less fried foods, more fruits and vegetables, and less carbohydrates and starchy foods. However, she has no community support and has not used any community resources for weight reduction such as park districts and community centers.
- Participant F: 55-years-old and single with no children and lives with her older sister. She was diagnosed with congenital heart defect as a child. Participant F’s heart disease condition occurred before she was born whereby her heart does not function properly and affects the normal flow

of blood through her heart. She is a retired teacher and is currently on Social Security with an annual income of $22,000. Participant F maintains her heart condition by walking short distances daily, taking eight medications, and only eating vegetables, chicken, fish, and no red meat. She receives support from her siblings and nephews and nieces.

- Participant G: 44-years-old and was diagnosed with congenital heart failure in 2013 after experiencing a heart failure caused by a stiffness of the heart muscle. Participant G’s heart condition occurred when her heart was not able to pump out enough blood. She lives with three of her children and is currently employed as a homecare aid with an annual income of $30,000. She also receives public assistance for medical and food stamps for her family. Participant G maintains her heart condition only when she feels sick. She does not take her medication as directed, or exercise at all, but maintains her diet by eating more vegetables and less fried foods. She receives support from her dad, children, and sibling. However, she has no community support and has not used any community resources for weight reduction such as park districts and community centers.
- Participant H: 50-years-old diagnosed in 2010 with Septal defects (holes in the heart) and arrhythmia (irregular heartbeats). Participant H’s heart disease condition was caused by a hole between the chambers of her heart that contributes to irregular heartbeats and heart murmur abnormality

sounds when she breathes. She lives with her child and grandchildren. She is employed as laborer at a warehouse and also receives public assistance and an annual income of $28,000. Participant H maintains her heart condition by walking a long distance every day to work and grocery shopping. Although she still eats fried food, she reported that she eats more vegetables, chicken, and fish with no pork. However, she has no community support and has not used any community resources for weight reduction such as park districts and community centers.

- Participant I: 46-years-old and was diagnosed with coronary artery disease in 2013. Her heart disease condition developed from a plaque buildup in the coronary arteries which limits the blood flow to the heart's muscle. She is on social security disability and receives food stamps and medical insurance coverage for her family. She has an annual income of $36,000. She lives with her four children and one grandchild. Participant I maintains her heart condition by cardiac rehabilitation on the treadmill in addition to walking short distances daily. She takes seven medications daily, and eats lots of fruits and vegetables, no sugary drinks, and very little salt. However, she has no community support and has not used any community resources for weight reduction such as park districts and community centers.
- Participant J: 35-years-old and was diagnosed with hypertensive heart disease in 2013. She has high blood pressure that caused her heart to

> become damaged and often experiences angina (chest pains). She is currently unemployed and receives food stamps, cash, and medical assistance for herself and family. She also receives child support for her two children and her annual income is $32,000. Participant J lives with her two children and is a single parent. She maintains her heart by walking about a mile five times a week to take her children to school, uses four medications daily, and cooks her food at home rather than eating out. She receives support in dealing with her condition from her boyfriend and parents. However, she has no community support and has not used any community resources for weight reduction such as park districts and community centers.

Figure 3 depicts the different types of CHD conditions affecting participants in the study from least severe to most severe CHD condition.

Least Severe CHD	Arrhythmia (irregular heartbeats)
	Septal defects (holes in the heart)
	Coronary Artery Disease
	Ischemic heart disease
	Cardiomegaly (enlarged heart) heart disease
	Inflammatory heart disease
	Hypertensive heart disease
Most Severe CHD	Congenital heart failure

Figure 3. The different types of CHD conditions affecting participants in the study from least severe to most severe CHD condition.

Data Collection

As described in Chapter 3, I gathered data from participants through face-to-face interviews within the Chicago, Illinois vicinity. The length of interview sessions lasted about 60 minutes. Each interview was conducted in as private a setting as possible, and audio recorded. Member checking was implemented during the interview sessions by rephrasing the questions and restating the questions for clarity and validation of feedback responses. After the completion of each interview, the data were transcribed unto Microsoft Word and saved on a secured flash drive. The interviews addressed the following research questions:

1. Is there a connection between certain environmental factors (access to food supply, unsafe public spaces, air quality, and housing conditions) that are related to urban AAW and their perceptions of their CHD status?
2. Is there a connection between certain cultural beliefs and values (language, thoughts, communication, and social groups) that are related to urban AAW and their perceptions of their CHD status?
3. Is there a connection between certain socioeconomic factors (access to health care services, personal or family income, and educational attainment) that are related to the lack of CHD screening and early detection in urban AAW and their perceptions of their CHD status?
4. Is there a connection between certain built environmental factors (outdoor exercise facilities, transportation, and walking trails) that are related to the urban AAW and their perceptions of their CHD status?
5. Is there a connection between certain barriers that urban AAW with CHD perceive when seeking medical treatment and how do these perceptions affect their behavior?

After data collection, I printed out the interview responses and used a highlighter to mark the paragraphs that I want to code. I then uploaded the data into NVivo for coding by using the range coding for each section of the paper and selected the paragraphs I want to code. The range coding allowed me to quickly code the paragraphs and the responses from the interview because the paragraphs were already structured by themes**.** To keep track of the data collected and emerging themes during the interview sessions, I used interview guides took field notes to record any observations about the interview site (only when conducted at the participant’s home, which included interference from family members), body language, and mood. From my observation, the participants felt more comfortable in their homes, but information obtained from interviews conducted at the library were similar in nature. All the study participants were open and communicated freely towards to me, and indicated that they were glad someone was willing to listen to them. The study participants were not hesitant with the use of the audio recording during the interview. At the end of the interview, after establishing some rapport with them, $10 compensation for their time or commute was given to each participant regardless of the interview location. In the following section I provide details on the data analysis and findings.

Data Storage

The digital recordings of the interviews were transferred from the recorder to a computer hard drive where they were stored as voice files. The computer program Microsoft Word helped with the storage and organization of the face to face; interview data collection technique. The interviews were manually transcribed into Microsoft Word and then circled and color coded by reading and reviewing each participant's responses several times before they were uploaded to NVivo. Different words and phrases appeared as codes and themes as the transcripts were reviewed several times. NVivo software was used for further coding and analysis by uploading the interviews and searching for specific keywords, classifications, and phrases within the paragraphs. The data analysis was then classified into themes and relationships with the help for the Nvivo. Validation was performed through member checking during the interview sessions.

All data obtained and copies of field notes pertaining to each participant are kept confidential and secured in a locked cabinet accessible only to me and all electronic documents are password protected. According to Walden University's requirements for data storage and disposal, all data will be destroyed and electronic files will be deleted after the required time frame of five at which time I will erase them from my hard drive. No personal information of any of the individuals will be disclosed to anyone.

Data Verification

The verification process was implemented both during the interviews and after the transcription and analysis. The collected data were verified during the interviews through several member checking techniques by either restating the research questions, summarizing responses, and or asking follow up questions. The use of rich, thick descriptions of the note taking technique during the interview was also transcribed unto Microsoft Word. The voice digital recorder was used to record each participant's interview session for clarification and validation. These tools provided support to capture the participant's expressions, responses, and body language during the interviews.

I encountered a challenge with the use of the Phillips Speech Voice to Text recorder. I initially used another recorder for the main study, however, and my plan was to use the Phillips Speech Voice to Text recorder to transcribe the data verbatim but it kept transcribing the information incorrectly. At that point, I decided to listen to each of the interview recordings and manually typed them into Microsoft Word. Although each of the participants shared her individual story as it related to her CHD, certain similarities emerged amongst them. According to Banks-Wallace (1994), it is critical to establish boundaries in stories told by a speaker, which was established by being unbiased and viewing each of participant as unique individual. These boundaries assisted me in separating one story from another and allowed me to focus on what the participants communicated. Discovery regarding the women's personal understanding and experiences further developed into recurring themes and subthemes that I then summarized and categorized under each of the three major themes: environmental, socioeconomic, and cultural factors contributing to CHD in these women.

Qualitative Findings

The review and feedback gathered from the interviews conducted with the ten woman participants and analyses of the data revealed several similarities among them. The similarities were coded, analyzed and grouped into themes under the major themes (environmental, socioeconomic status, and cultural). Subsequently, the findings were presented in three sections: (a) findings based on environmental factors, (b) findings based on socioeconomic factors, (c) findings based on cultural factors, (d) findings from question 4 are categorized under the environmental factors, and (e) findings from question 5 are categorized under the social, environmental, and cultural factors. Figure 4 shows the three major themes focused in this study as a contributing factor to CHD development in study participants.

Figure 4. Three major themes mentioned by participants as contributing factors to CHD.

Environmental Factors

1. Only eight of the ten women (80%) mentioned walking as a form of exercise. One of the women (10%) participated in weekly cardiac rehabilitation exercise on the treadmill and one woman (10%) did no form of exercise. Although eight of the women did some form of exercise, most of them did it for short distances ranging from one half block to two blocks and not daily .
2. Smoking was also considered a factor in the CHD development. Only 50% of the women smoked in the past or still smokes. Participant D reported smoking at least four cigarettes daily for the last 25 years. Similarly, Participant I smokes 7-8 cigarettes a day and has done so for the past 30 years and explained that it is a habit that is hard to stop.
3. The women had no community support with dealing with CHD. Community did not impact them positively with losing weight. Findings revealed that (70%) of the women perceived their neighborhood was safe, (20%) felt neutral, and (10%) felt unsafe. Although all the neighborhoods were considered safe, many of the women did not take advantage of the built environment resources available to them such as park districts, walk ways, and bike paths in their neighborhoods.
4. Ninety percent (90%) of the women expressed that accessibility to grocery stores was not a problem and as such there was no problem finding healthy food within reasonable distance to their home. Ten percent (10%)

of them stressed the need to travel by driving to get to a grocery store. Food desert was not an issue for these women because of the accessibility of grocery stores within reasonable distance from their homes.

Socioeconomic Factors

1. Financial issues also impacted the type of food purchased by some of the women participants. Forty percent of the women reported that they purchased less healthy foods because of the affordability.
2. All the women acknowledged that they were not aware of signs and symptoms of CHD prior to their diagnoses. They had no prior knowledge of CHD.
3. Stress was considered another most prevalent cause of developing CHD condition over time. Stress contributed to excessive weight gain and unhealthy eating habits and patterns .
4. Seventy percent (70%) of the women do not have a good relationship with their physician due to past experiences. Communication was an issue addressed by most of the women as being a problem with doctors and other health care professionals. The women reported that they did not feel their doctors listened to and fully understood them.

Cultural Factors

1. Eighty percent (80%) of the women viewed themselves as “Strong Women” and as such took up the responsibility of taking care of others while neglecting themselves.

2. All the women perceived their heart condition not as a disease but rather a heart that was not functioning properly. Cultural perception of CHD played a role in the way the women seek medical attention and maintained their health.
3. Genetics was seen to be a minor determinant of CHD illness and they often compared themselves to other family members and felt they had better health conditions.
4. Spirituality was another determinant of mainlining health and coping skills. All the women noted that faith in God was one main motivation that empowered them to stay strong. However, religious faith in God did not impact seeking medical treatment.

Data Analysis

Thematic analysis is used in examining, pinpointing, and recording patterns mainly in qualitative analysis (Banks-Wallace & Parks, 2001) and is derived from the process of coding in six steps: familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report (Braun & Clarke, 2006). For this research study, thematic analysis occurred in several steps after the data collection to ensure saturation. I implemented the six process of coding by first immersing myself in the collected data by listening to the audio-recorded interviews, reviewing each of the ten several times, reading the field notes gathered, converting the recorded data by typing them into Microsoft Word document, identifying codes within the transcripts by circling and color coding the recurring words, uploading the data into NVivo from Microsoft Word while using the range coding in NVivo to find and code each section according to the structured themes within paragraphs and lastly, filtering the data in order to get results by using word frequency query to find the reoccurring words.

First, I immersed myself in the collected data by listening to the audio-recorded interviews one at a time. Second, I reviewed each of the ten interviews several times, reading the field notes gathered. Third, I then converted the recorded data by typing them into Microsoft Word Document. Fourth, I read and identified codes within the transcripts by circling and color coding the recurring words and short phrases in each transcript, while also noting possible themes. Fifth, I uploaded the data into NVivo from Microsoft Word, then used the range coding technique to code in the sections consisting of the three main themes (environmental, socioeconomic, and cultural) within paragraphs. The range coding was implemented to allow me transition easily from the broad view of the retrieved data to more specific words and phrases that recurred within the paragraphs.

Lastly, I moved inductively from ranging coding paragraphs and pages of the transcript to querying the data. This coding and querying of data allowed me to transition easily form coding to querying the data for final results. I then looked at word frequency patterns and categorized them by the participant's experiences and perception of CHD under the three main themes as it appeared. Certain codes were generated into themes and the study participant's relevant stories pertaining to each theme formation. "Word Frequency Query" was also used to search for reoccurring words and possible themes in the transcript. For example the most frequently used words within the transcripts such as *bad heart* was selected and I did a query to gather all content coded under the main theme *culture.* I then selected the Word Frequency query and searched in textual content from the transcript. The ten word triggers that were generated from query search under the three main theme,; environmental, socioeconomic, and cultural factors, were *bad heart*, *stress*, *diet*, *smoking*, *faith*, *obesity*, *communication*, *medication*, *coping skills*, and *family* and *friends support*. Table 3 depicts the top ten words and frequency with which each word or phrase was found in the transcript using the query search feature.

Table 3

Codes and Number of Frequency (Top 10 From Most to Least Frequent)

Codes	# of Frequency
Bad heart	28
Stress	23
Diet	19
Obesity	17
Medication	13
Coping Skills	12
Communication	10
Support System	8
Faith	7
Smoking	6

Findings Based on Environmental Factors

Environments in which people live, work, and engage in activity for enjoyment has huge impact on their individual health (CDC, 2010). The neighborhood in which people reside affects their physical safety, exposure to pollutants, access to basic amenities and routine physical activity, all of which impact one's ability to maintain health (Bullard, 2007). As such, the women in this study shared some stories about everyday living conditions and their perception regarding the development of CHD. The main themes developed through data analysis under environmental factors are weight, exercise, and smoking. These modifiable risk factors of CHD can be changed by an individual to improve their quality of life and health outcome.

Weight

Numerous studies have indicated that AAW are more satisfied with their body image than White women (Chithambo & Huey, 2012). This idea of AAW being okay with their body image links to their cultural values and beliefs that it is okay to have a higher body mass compared to White women. Engaging in some form of physical activity regularly on most days of the week can help reduce or prevent the risk of developing or dying from some of the leading causes of chronic illnesses such as CHDs and cancer (CDC, 2009). Although eight ($N=8$) of the women participants were advised to lose weight, only three of them ($n=3$) had actually lost some weight within the last 5 years. Participant E lost 110 pounds through a recommended weight loss programs ($n=1$) and Participant C and D lost some weight through a surgical procedure ($n = 2$). Participant C indicated that she did the gastric bypass surgery in 2010 and lost 215 pounds and

Participant D reported that the gastric banding surgical procedure helped her in 2011 with the weight loss reduction of 180 pounds. Unfortunately, AAW's cultural belief that it is okay to have higher body mass than White women becomes a problem and affects AAW's overall health and health outcome.

According to NIH (2014), the standard weight status categories associated with BMI ranges for adults are BMI below 18.5; underweight, 18.5- 24.9; normal, 25.0- 29.9; overweight, 30.0 and above; obese and 40.4, morbidly obese. For this study, the women participants' self-reported height and weight was used to determine the BMI for each individual and an average for the total participant (*n* =10). Results from the study showed that women's weights ranged from 110 pounds (Participant F) to 320 pounds (Participant E), with a range of heights from 5'2" inches (Participants G and J) to 5'10" inches (Participant E). The results from the data indicated that 80% of the women in this sample were (BMI > 30; *n =8*) obese and 20% of the women were (BMI < 18.5; *n=2*) underweight. Only two of the ten women (*n=2*), who were underweight were told to gain a few pounds but they both reported still being underweight because of the inability to eat due to other medical conditions. BMI was high in 80% of the women participants who were either obese or morbidly obese. These findings showed that there is a connection between CHD risk and high BMI due to lack of physical activity level. Table 4 shows the actual height and weight of all ten participants and their calculated BMI and classification of diagnosis.

Table 4

Actual Height and Weight of Participants (N =10)

Participant	Height (")	Weight (lbs.)	BMI	Diagnosis
F	66	110	17.8	Underweight
D	67	115	18.0	Underweight
H	68	210	31.9	Obese
B	68	244	37.1	Obese
C	69	265	39.1	Obese
J	62	216	39.5	Obese
I	67	258	40.4	Morbidly Obese
A	64	240	41.2	Morbidly Obese
G	62	232	42.4	Morbidly Obese
E	70	320	45.9	Morbidly Obese

Note. Depicting calculated Body Mass Index (BMI) and Average BMI for all participant. BMI Formula: BMI = (weight in pounds x 703) ÷ (height in inches x your height in inches) Formula Adapted from American Cancer Society (2014). Average BMI of All Women Participant (*N=10*) = 35.

Exercise

AAW tend to engage in less physical activity level compared to their White counterparts. Although some of the women participants mentioned walking as the most form of exercise that was incorporated either daily or several times during the week, they did not engage in the minimum required exercise level to maintain health. The most common physical activity was waking. Only half of the women in the sample (*n=5*) reported exercising regularly in order to improve their heart. Forty percent (*n=4*) of the women admitted no daily exercise due to their inability to perform the way they used to because of other medical conditions. These medical conditions often result in excessive tiredness and fatigue especially when walking long distance more than ½ a block from their homes. One of the women did not exercise at all because she barely could walk from her bedroom to the bathroom without being excessively tired. She further indicated that she was too scared of walking alone because she might collapse walking outside alone.

Nine of the women (90%) walked either daily or sometime during the week when going to work or simply out to buy grocery or doctor visits. Four of the women (40%) explained that they do not walk as much as they used to because of the pain from their legs and standing too long was unbearable. In contrast, five of the women described exercise as something necessary and regardless of the pain, and exercised daily by walking at least several blocks. These women did not let their pain, tiredness, and arthritis symptoms interfere with daily exercise routine. Participant G was the only participant who reported no form of exercise. She explained having problems such as shortness of breath even when walking from her bedroom to the bathroom.

Most of the women did not engage in any other form of exercise except infrequently walking short distances. The women's inability to exercise as instructed by their doctors was due to other chronic illnesses that they viewed as more serious conditions than their CHD. These women also experienced severe leg pain after standing for a period of time. Participant E mentioned that she was losing cartilage in both of her knees and that she has bursitis on her right knee and left shoulder. She expressed concerns of being morbidity obese. In her words:

I am hypo thyroid; I have high blood pressure, diabetes type 2 and sleep apnea. I have an inhaler that I use when I walk because I have problems walking distances more than half a block.

Participant I was the only participant that mentioned she participated three times a week exercising at the cardiac rehabilitation facility in addition to her walking exercise. She described the exercise as the “New Step Machine” which helped with endurance and speed of exercise. She explained that the machines help the heart to pump better and faster. In addition, she is weighed weekly after the exercise sessions and reported that she has lost several pounds.

Participant J mentioned that she is planning on using the services when the weather warms up in the summer. She did not indicate that she felt unsafe in her neighborhood because she has been there all her life. She explained that she could not walk around her neighborhood because of medical condition and not due to safety issues. She expressed frustration of not being able to exercise as she wanted to do. She further stated that some parts of her life had been taken away by her CHD and she could not do certain things anymore like jumping rope. “Since I have been sick, I have lost the ability to do what I loved to do. I don’t leave the house unless I am going to the doctor or grocery stores.” Similarly, Participant G explained that she cannot exercise because she is tired a lot. She expressed her concern that she wasn’t sure if the stent that was inserted in her heart contributed to her lack of energy. “I am not motivated to walk up and down the street.” These findings showed that there is a strong connection between built environment and AAW women CHD risks. The women participants did not make use of the built environment within their communities for exercise and as such did not engage in the minimum required amount of exercise per week for health maintenance.

Smoking

There is a strong correlation that cigarette smoking is a major modifiable risk factor linked to the development of CHD. As indicated by the DHHS (2011), environmental smoking either by direct smoking or second hand smoking does lead to many chronic illnesses such as lung cancer and CHD. Smoking is a modifiable risk factor of CHD and all the women reported being advised by their doctor of the risk of smoking and its impact on CHD. Although, the women did not mention any other kind of air pollution problems, smoking was an issue indicated as air pollution problem. Fifty percent (50%) (*n*= 5) of the ten women reported either smoked or still smokes. Forty percent 40% (*n* = 4) of them still smoke cigarettes despite their CHD condition. These four women indicated that since a family member smoked, it was hard for them to stop smoking even though they knew it was bad for their health.

Results showed that although the women were aware of the dangers of smoking and secondhand smoking and its impact on CHD development as informed by their physician, some of them continued to smoke. Participant D reported that she smokes at least 4 cigarettes daily since the past 25 years. Similarly, Participant I smokes 7 - 8 cigarettes a day and has done so for the past 30 years: she explained that it is a habit that is hard to stop. In the next section I detail the socioeconomic factors mentioned by participants relative to their CHD. Results also showed that the women do not fully understand the impact and health consequences of smoking and involuntary exposure to tobacco smoke (second hand smoking) on health and health outcome.

Findings Based on Socioeconomic Factors

Several socioeconomic factors such as education, income, health insurance, race/ethnicity, transportation, age, and gender are linked increased rates of CHD and other health issues in AAW (Kaplan & Keil, 1993). In my review of the collected data, the study participants expressed their concerns with certain socioeconomic situations that were related to their CHD and coping methods of the illness. In this section I will discuss the women participant's responses to several socioeconomic statuses such as education, income, and stress.

Health Literacy

Awareness of CHD was a key determinant factor of CHD development in these women. Not all the women were knowledgeable about the signs and symptoms of CHD and they failed to recognize at the time that they were developing a heart condition. During the interview none of women mentioned that she knew the signs and symptoms of a heart attack or heart failure prior to her diagnosis. Ninety percent (90%) of the women noted that chest pain, fatigue, dizziness, and gas were some of many other side effects experienced before and during her CHD. Participant A recalled the day of her heart failure as a normal day that she came to work and was not aware of the severity of her condition. Participant E explained that as she felt something in her left side and was not totally paralyzed but still had less use of her side while going to sleep on night. "It was a squeezing at my heart. I went to sleep and didn't think much of it. I didn't see the doctor till six months after because I didn't feel it was life threatening." Likewise, participant G explained that she was experiencing chest pains that felt very uncomfortable for about a day and thought it was gas. She used some home remedies such as pain killers but the pain from her chest was too much. She described it as a squeezing of her heart with no release. Participant I experienced a severe chest pain and couldn’t walk without having a chest pain. She waited a few days and then went to the doctor for checkup and when she took a stress test, she failed it because she collapsed during the test and was diagnosed with a heart problem.

Communication between physician-patient was a theme that was generated from data analysis. The women mentioned how they interacted and communicated with doctors and health care providers. Two of the women did not mention anything about their doctors. However, the other eight women were willing and expressive with the communication and treatment received from their health care providers. Some of the women mentioned that the doctors and nurses sometimes do not listen, which made them unconformable.

Participant D felt strongly about her interaction with her doctor. She stated that her doctor at one time during a visit told her to do a treadmill test and asked her to run and she told him she couldn’t do it. I can’t walk on treadmill but I can only walk at my own pace.” Participant G expressed frustration with communicating with her doctors. “I don’t understand the words they use. I tell the doctor to show me a picture. If doctors don’t recommend something, I don’t ask.” Participant J compared one doctor’s office to another:

> My personal experience with health care services was poor because of the hospital I was first taken to when I had my heart failure. The staff members were not

> professional or knowledgeable but then the second half of my experience was at a different hospital were the staffs were totally professional.

Likewise, Participant E discussed how being on Medicaid had a negative impact on her receiving adequate treatment at the hospital:

> The doctors discharged me at University of Chicago Hospital without making sure I was stabilized the first time. I can remember them saying take nitroglycerin 3 times a day and I collapsed. They let me go home that day. I was going to refuse but I left anyway. Now I believe I am getting good care from the same hospital because they remember that they had discharged me before in pain. I am going to change my primary care physician soon. I want the doctor's medical opinion not her physical opinion. I can be on the bus or outside walking; anyone can tell me I need to lose weight. I know I need to lose weight, it's physical in nature. I don't need a doctor to tell me that I need to lose weight when I ask a question about improving my health. I need a doctor to give me the medical advice and information that I can't get on my own and that is why they are doctors and get paid for medicine.

Participant C was the only one that expressed a strong and positive relationship with her doctors. She describes her doctors as the "Four Women Dream Team." She mentioned their names and that stated she frequently goes to the doctor. For example:

> The kidney doctor talks to the cardiologist. They are all under the same network. I have to see my cardiologist every 3 months, foot doctor because my nails grow so long and under due to my diabetes, my eye doctor because of my cataracts,

> defibrillator check-up one a year and primary care physician every two months. Participant C further stated, “The only thing I don’t like about going to the hospital is that when I am doing well in one thing, something else is going wrong and that’s because I have several medical conditions.”

Participant J explained that the Medicaid and Medicare she receives provide the “Well care advantage” and it is mainly for people who have a disability and need extra help. The advantage part also helps pay for membership to the health club and swimming for exercise and rehabilitation but the participant has not yet used the services.

Income

Financial considerations were a subtheme mentioned as a primary cause of stress. Some of the women expressed certain circumstances that contributed to their stressful mindset. They expressed their concerns of not being able to pay for prescriptions or hospital co-pays. Other financial stress was due to not having enough money to cover monthly expenses such as rent, electricity and gas bills. An example was when Participant H discussed that she often worries about her family being okay but she tells them not to worry about her. Now, she worries about my daughter in college, she owes $1500 on her tuition and that needs to be paid before she can obtain a copy of her transcript but the money has to be paid and there is no way she can afford to with her income. She noted “that’s the type of thing that worries me.”

Participant H further mentioned “the doctors want to monitor my blood pressure monthly, each time I go they find something else. I only go to the doctor when I feel bad. I can’t do afford anything outside my insurance coverage.” Similarly, Participant G has to pay co-pays each time she goes to the doctor. “I pay a co-pay of $25 for my primary physician and $55 for the specialist and sometimes it can be a lot of money.”

Medication compliance and affordability and the need to take prescriptions daily arouse as one of the important factors regarding CHD maintenance. The code “medication” later formed into the theme “medication compliance and side effects.” All the women were prescribed medication, which was a common theme. All the women complained about the side effects experienced after taking the medications. However, a few of the women complained about the cost of filling or refilling the medications, lack of trust in taking of some medication, and the frequent changing of medications by physicians. The number of the medication prescribed and taken by each woman varied from six to fifteen per day. Some of the many named medication mentioned by all the women were water pills, iron pills, aspirin, cholesterol medication, and beta blockers.

Aside from the side effects experienced by the women, a couple of them mentioned that lack of money also affected being able to fill or refill their prescription, which resulted in underuse of the required daily medication intake. They do not have enough income each month to pay for co-pay for medication because of the number of the medications taken daily. Another issue with complying with medication intake was the lack of trust in medication. This issue of compliance to medication intake was due to not knowing how it functions in the body especially because of the different types of medications they took daily. The side effects of the medication also resulted in a lack of trust and contributed to the reduction in dosage intake and sometimes an overall discontinuing usage of some of the medication by a few of the women.

The issue of frequent change in medication by physician was both an inconvenience and expensive for the women. In the case of Participant G, due to her unstable high blood pressure, the doctor prescribed her a new type of high blood pressure prescription, resulting in the waste of the old medication and a waste of money**.**

Participant D reported taking certain medication that caused side effects such as extreme tiredness when taken together. Participant H concurs that she only takes her medication when she feels sick. In contrast, Participant B cannot miss a day of the required 14 medication she takes each day.

Participant B expressed her medication intake and how important it is to her:

> I take my inhaler for breathing for emergency purposes. I take 14 pills per day. I can't miss my medication for various circumstances. If miss my medication, I will get so depressed that I think of suicide. I had a mental break down after my divorce and every time I went to the doctor and different test were ran, I had more and more medical issues.

On the other hand, Participant I acknowledged that her doctors played around with the mixes of medication. They (doctors) increased her milligrams and the type of medication that will help with the serious pains experienced. In contrast, Participant H expressed her feeling towards daily medication intake. Although she has to take seven medications every day; two blood pressure medications, heart medicine, acid reflux, blood clot, iron pills, and aspirin as prescribed by the doctor she does not take them at all**.** She shared her opinion about daily medication intake. She explained that there is no need to take the medication if she is not feeling bad. “I haven’t taken my medicines in the last 3 months, when I take it am fine, when I don’t take it am fine too.”

Stress

Stress was another socioeconomic code derived from the interviews and was mentioned has one of the causes of having a bad heart. The code “stress” then formed the theme “Strong Black Woman.” A significant cultural aspect that was mentioned by all the women was that of being a “Strong Black Woman.” Most of the women participants were single mothers and the head of the household. They were responsible for taking care of their children, elderly parents, and sometimes other family members. The women reported being stressed out some point in time in their lives. Collectively, the women expressed their constant feeling of discomfort, tiredness, not being able to sleep apnea, and worrying. Some factors that were mostly mentioned as the main cause of developing a bad heart were: financial problems, caring for a dying relative, being the head of the household, and incidents of violence to family members. The women were perceived as being strong because they were the head of the family. Being the head of household or a single parent also contributed to their weak heart. As the head of household, most of these women were responsible for taking care of everyone else and as a result, they had to deal with many uncontrollable circumstances and situations.

Seven of the women mentioned being the head of household or single parent had a great impact on their overall health. Participant A is a single; divorcee with four grown children. Participant B is a single mother with 3 children. Participant C is a widow with 4 children. Participant G is a single mother of 4 children. Participant H is a single mother with 5 children. Participant has been separated from her husband for six years and has 4 children and a granddaughter. Although, Participant E does not have any children, she was responsible for taken care of her sick grandmother. She explained that she took care of her grandmother before she died in 2012 for many years. Even though she was also ill, she was the primary care taker of her grandmother who died of a heart attack. Being the care taker and also been viewed as young and strong, she could not mention to her grandmother that she was very sick too.

Keeping things inside was another recurring subtheme that was mentioned by most of the women which is linked to being a strong woman. Some of the women reported that they did not share with family and friends about how sick they were. Participant E in particular noted that she couldn’t really express herself to her husband because he just didn’t understand. Also her grandmother was so sick and she couldn’t let her know how serious her sickness was too:

> At that time I was taken care of my grandmother and I couldn’t let her know that I was as sick as much I was. I have the ability to…Sometimes it gets me too. I push a lot of things to the back burner so that I can function. It’s still has to get done, if you don’t do it, it still has to be done. My husband on the other hand was too selfish as I can say; he helped me financially but couldn’t understand that I needed help around the house because of my sickness. I couldn’t really tell them all how sick I was because everyone depended on me.

Worrying became another subtheme under stress. A majority of the women worried about their health because family members were worried about them. Some of the women also worried about a roof over their head and how bills were going to be paid if they lost their jobs due to health conditions. Participant C explained that stressful events in her life were due to family and relatives primarily within her environment such as violence and trauma to family and friends, loss of work, worrying about paying bills, and caring for a sick relative. "I am worried and concerned about what is going to happen when I move from here in 2018 and I feel am paying too much rent for this size of an apartment."

Participant D revealed her experience with stress as contributing factor to her CHD condition. Her heart condition developed when she was losing her house, working too hard, and also going to school full time. "The job itself became a strain." Lucy mentioned that her heart condition became very serious in 2012 when she had to move to a new apartment in July, lost her job in August, and did not have any means of paying her bills in September.

> I make sure my bills are paid. I get very worried when I don't know what to do. I want to make sure my children don't lack anything they need. I have a 25 year old son that is always in and out of jail and I have to constantly take him back.

Participant E described her living condition from 2008 to 2010 where she helped her homeless girlfriend with two children, her divorced mother, and sick grandmother. During this time period, she also got married:

> I was taking care of the whole house, my girlfriend's two kids, granny and myself. At the time the kids were 4 and 8 years old. The kids were there at my house for 10 months. My mother also came to live with me. I got married in 2008 to 2010. He just one day backed his bag and left. The problem was that he didn't

> understand I still need help doing this and that. I had no one helping me cook, clean, do laundry. It was enough already. I couldn't do it anymore. I needed to get my head back in the game and get. I am doing everything with no assistance. It was beyond financial, I needed some physical help. He decided he was going to leave home. He wasn't helping me do anything else. I felt I couldn't deal with anymore so I filed a divorce I had to get my mind back in the game.

Participant H believed that her overall health is controlled by medication. In the past, she did not use her medication and it resulted in her blocked arteries. Karen described her experience with skipping her medication:

> I stopped taken it because I didn't pick it up. It wasn't that I couldn't afford it; I just couldn't go pick it up. I was busy taking care of everything and everyone else. As a result of not taken the medication, I gained 13 pounds per week and accumulated fluids which resulted in cardiac injury. Now I take 10 medications per day for my heart condition, arthritis, and diabetes.

Figure 5 depicts the coping skills mentioned by participants as methods that were mostly used to maintain their CHD condition. Table 5 shows the recurring themes that were generated through coding of the interview transcripts.

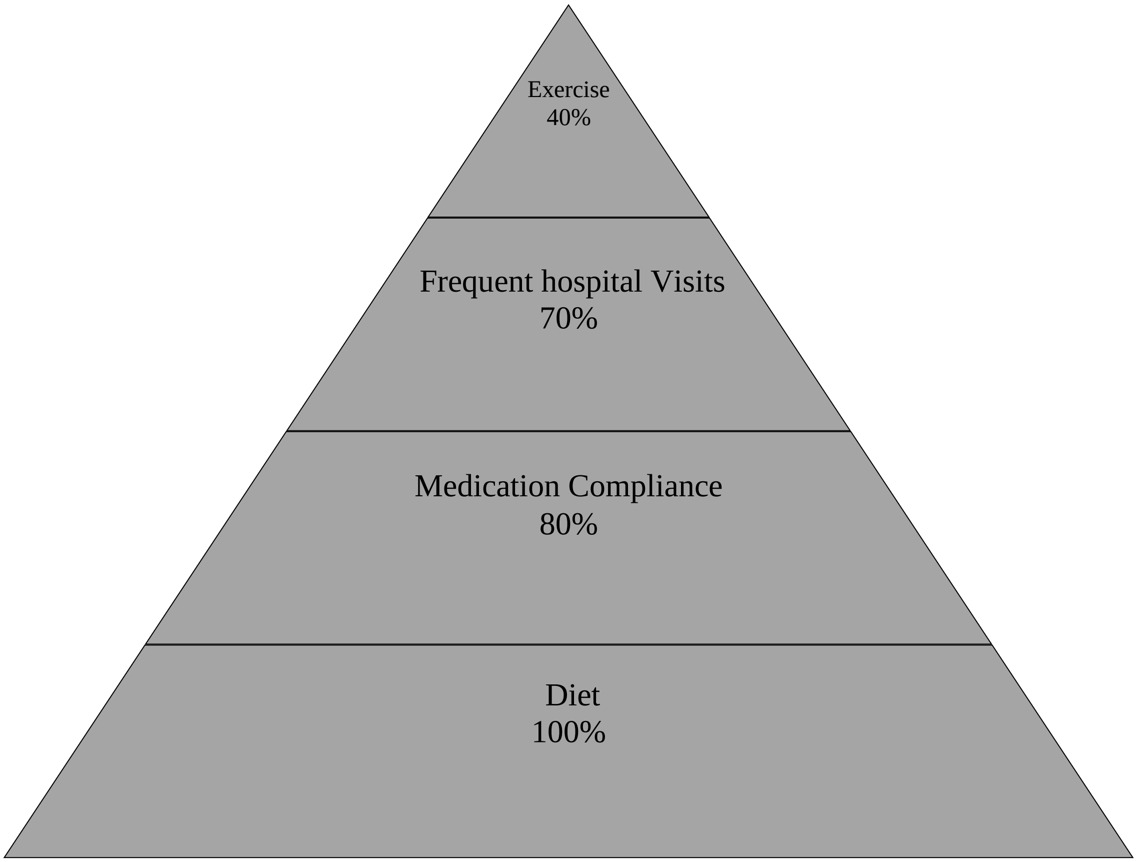

Figure 5. Coping skills mentioned by participants used to maintain CHD condition from bottom to top depicting the most used method.

Table 5

Theme Formation and Crossover from the Three Major Themes

.

Thematic Formation	Environmental	Socioeconomic	Cultural
Perception of Heart Health	X	X	X
Physical Activity Level	X	X	
Air Pollution	X		X
Family and Social Support	X		X
Runs in the family	X	X	X
Strong Faith in God			X
Unhealthy Eating	X	X	X
Strong Black Woman	X	X	X
Medication Compliance and Side Effects		X	
Other Self-Care Practices	X	X	X
Physician –Patient Relationship	X	X	

Note. Recurring themes generated through coding interview transcripts.

Findings Based on Culture/Social Influences

As previously discussed in Chapter 2, AAW's perception of health is greatly influenced by their culture. As stated by Moulton (2009), one of the common health perceptions of African Americans was feeling well and getting better without the use medication. Unfortunately, the health perception assuming good health eventually damages the internal body organs (Moulton, 2009). The cultural themes that emerged under the cultural factors are: perception of heart health, family and community support. The next section details the cultural factors mentioned by the women. The themes that emerged from the coding of the interviews under culture were perception of health, eating behaviors and cooking patterns, and family and community support.

Perception of Health

Cultural issues around behavior and perceptions were more significant. Cultural values and beliefs impacted the behavior and perception of the women towards their CHD and health in general. Having a “bad heart” became a recurring code throughout the interviews. All the women referred to their heart condition as “bad heart.” The code “bad heart” was mentioned under the three major themes (environmental, socioeconomic, and cultural factors) and formed a theme “Perception of Health”. Cultural factors especially of the three themes influenced the women’s perception of health and CHD maintenance and their overall health condition. According to Fleury and Lee (2006) a person’s potential behavior change is influenced by the social context in which the person associates such as family, friends, work, neighborhood associates, and community organizations. I aimed to use the term or language they chose, especially for the follow up questions. The follow up questions were customized to each study participant and used to allow them express themselves freely and convey their feelings and emotions regarding their personal experiences. As noted by Miles and Huberman (1994), the use of follow up questions are needed to contribute to knowledge base borrowed from previous studies. A critical aspect of a bad heart was that the women had a cardiac event that they experienced alongside and type of certain type of symptoms.

Participant A was diagnosed with congestive heart failure in 2013. She is also diabetic and has high blood pressure. She recalls the day of her heart failure event as a normal day that she came to work and was not aware of the severity of her condition. She mentioned that her heart failure was caused by a bad viral infection by and because of having all other illnesses her body was not strong enough to fight the infection. “My body was not being up to par, for example: It’s like having a glass of water, if the water is liquid, it’s easy to pour out whatever but if you take the same glass of water and freeze it and put it in another state then it’s hard to destroy. The body is the same way; you have a weak state and a strong state. And right now my body is in a weak state.”

Likewise, Participant E has a plaque buildup and a family history of CHD. She explained being diagnosed with thyroid as a child and mentioned having pictures where she looked like a round football player at the age of two. “They (doctors) never tested for thyroid back then in the early 70's. I have stomach issue of intestinal reflux, which I am taking the “protonix” for. It was something I grew up with. It was the way I ate as a child.”

In October 2004, Participant E suffered a stroke but it was not diagnosed as having an ischemic CHD. She explained that as she was going to sleep that day, she felt something in her left side and was not totally paralyzed but still had less use of her side. “It was a squeezing at my heart. I went to sleep and didn’t think much of it. I didn’t see the doctor till six months after because I didn’t feel it was life threatening.” Six months later at her visit to the doctor for a checkup an MRI test was done and it showed that she had experienced a heart attack. She described it has something squeezing on her chest. “From a scale from 1-10 it was like a 3. My left side was harder to move.” She indicated that she didn’t feel it was life threatening at the time but now she knows better. Again in December 2013, she was told by her physician that she had cholesterol plaque buildup and was prescribed aspirin for a blood thinner in addition to other medications.

Similarly, Participant G described how she found out about her CHD condition on Thanksgiving Day. She explained that she was experiencing chest pains that felt very uncomfortable on a day before. “I thought it was gas and I took some home remedies like pain killers. The pain from my heart was something you can’t imagine; it was a squeezing of my heart with no release.” She then went to the doctor on Thanksgiving Day and found out that she had a 90% blockage in her heart and had experienced a heart attack and was diagnosed with congestive CHD.

Participant I’s heart symptoms were similar to that of Participant G. In October 2013 she experienced a severe chest pain and couldn’t walk a city block or five stairs without having a chest pain as she described it. She waited a few days and then went to the doctor for checkup. She took a stress test and failed because she collapsed during the test. The doctors then performed an Angiogram procedure on her to check her heart's blood vessels. The results from the test showed that she had a 90% blockage in her arteries and was diagnosed with congestive artery disease. She mentioned that ironically whenever she an Electrocardiography (EKG) test; an electrical activity of the heart done it always came back normal but her blood work test showed there was a problem with her heart. In February of this year; 2014 she also experienced cardiac heart injury. “My bad heart affected my work because I couldn’t work anymore, but more with my vision. I have fluids lick age in the back of my retinal.” The doctor told her it was glaucoma due to her diabetes. She explained that it has also affected her ability to walk. “Too much stress on me with the relationship I had with my children’s father. He was the jealous type.”

Similarly to Participant A, Participant F did not experience any chest pains even as a child. She recalled just putting her head down on her desk in class and falling to the ground. During the interview, she told me to feel her chest and explained that because since she is so thin, I can actually feel the pacemaker. The defibrillator is implanted under her skin near her collarbone. She described the defibrillator as a machine to monitors her heartbeat. “It shocks my heart and potentially corrects any fatal heart arrhythmia. On the other hand, the pacemaker helps keep my heart up to speed if it happens to slow down.”

Participant C was diagnosed with inflammatory CHD which makes her muscle and tissue swell up. She mentioned the inability to walk when she was first diagnosed because of the swelling of her feet and the excruciating pain that was involved. She also has an enlarged heart and is diabetic. Participant C described her illness has something she has to live with and maintain. She states, “My diabetes is now affecting my eyes and when I get injured or have a cut myself, it takes a while for it to heal.”

Interviews revealed that all the participants did not perceive their heart condition as a disease but rather a heart that was not functioning properly. One of the participants was confused when I referred to her condition as CHD. She explained that she never saw her condition as a disease but just a problem that can be cured. She said the doctors always said heart condition or heart problem. I explained to her that anything that has to do with a heart not functioning properly is considered a form of CHD and is a bad heart. Most of the women differed in their use of clinical terminology when referring to their CHD condition. They mostly used fewer medical terms to describe their condition; however, the more educated participants used medical terms and clinical terminology to explain their condition and heart problem.

To gain more insight regarding the women’s understanding and perception of their heart condition, I asked them what the term illness meant to them. This method of member checking technique enabled me to restate the research questions to gain more clarity and understanding of the women’s views on overall heart health. With exception of two women, eight of the women described an illness as a weak body and not being able to do the activities they used to anymore. All participants did not view their CHD as an illness but rather condition they can control.

Participant I indicated that illness is someone that can’t move and do anything for themselves. “I don’t see myself as being ill.” Participant E described illness as “being really sick enough that you can’t function on a healthy level.” She explained that she can’t do seat ups exercise every once in a while they way she did before. “To me, certain things in my life have been taken away such as the loss of ability to do certain things that I was able to do. I am more conscious of the activities that I do. I had friends that have walked away from me because they can’t deal with me. At first it was hurting but now, I realize am moving to another stage of life and you let go. “

Participant G noted that CHD is a strong word. “I don’t think CHD is a disease; it’s something that can be treated, I don’t consider it a disease. Eventually we are all going to die and our heart will stop.” Likewise, Participant F defined an illness as cancer. “CHD is not an illness, it’s something a person can control through diet and exercise up to a certain point. CHD is something I have control over.”

The issue of genetic was often mentioned during the interviews by the women. The code “genetics” later created the theme “runs in the family.” The term “runs in the family” was a subtheme that was mentioned under the issue of family. All but one woman explained that they had CHD in their family and it was heredity. The women often described it as something passed down from one generation to the next. They often mentioned grandparents, parents, uncles, and aunts from both paternal and maternal side of the family. Some of the women mentioned that the side of and symptoms experienced by women and men were different Many of these women’s relatives died of heart attacks, strokes, or congestive heart failure that was ignored by those with the condition as they described.

A good example will be the interview with Participants A, B, E, J. All these women had a mother that died of CHD condition; congestive heart failure or heart attack.

They often used the word “runs in the family” to describe the heredity and genetics of having seeing someone with heart problems as a child growing up. Most women described their heart condition as being minimal compared to other family members. They often compared their condition as being not serious, as a reassurance that it wasn’t as worse as the other women in their family.

Participant B compared herself to other relatives such as her mother, aunts, and sisters. She explained that her grandmother had suffered heart attack and was on lots of medication. As a younger lady, she said she had promised herself not to live and suffer from an illness like her grandmother but unfortunately, she finds herself in the same situation like her grandmother. The other women made an interconnection between what occurred to a family member and the unavoidable occurrence of developing a form of CHD condition.

Participant E explained that she has a family history of CHD in the feminine side. She mentioned that her great grandmother, grandmother, mother, and aunts all have some form of CHD. She now goes to the doctor once a month to every three months. Currently, she has problems standing because of the anemia severely to the point that she is always in pain and can’t stand for a long period of time. She lost her grandmother at the age of 93. Participant E further described the incident of her grandmother’s death as pneumonia with other medical issues. “She was chocking and it was inside her lungs. I was holding her hand when she transitioned. I don’t talk about that one very much. It is something I live with every day because most people don’t understand. Granny was like mom, I was closer to her than my mother and her husband was like my father before he died. When granny passed, I wasn't able to discuss that with anyone." She stressed the issue of family members not showing up the way they were supposed to for the funeral and burial arrangements. "They didn't step up to the plate the way they should have. She noted that her grandmother died of CHD and clogged arteries. "From the stand point, that wasn't her main issue, she had chronic COP and liquid in her lungs. Her father died the same way when I was 12 years old."

Participant I shared that her father died at the age of 42 years old with a massive heart attack. "It runs in my family…..all of us are trying to lose weight. My older sister has diabetes and CHD. My mom has high blood pressure and thyroid. My 12 year old son was born with congenital heart defect. He is called a "Miracle Baby." He has Ventricular Septal Defect (VCD)." She explained that the left side of the heart only pumps blood to the body, and the heart's right side only pumps blood to the lungs. The blood as they (doctor) described it can travel across the hole from the left pumping chamber to the right pumping chamber and out into the lung arteries. It makes his heart and lungs work harder and the lungs can become congested.

Diet

Another cultural theme that emerged that was mostly mentioned by all the women was food choices, eating behaviors, and cooking patterns. The code "diet" formed the theme "eating behaviors and cooking patterns." Eating behaviors and cooking patterns were mentioned as one of the key determinant of having a bad heart. Eighty percent (80%) of the women reported that being obese was a result of overall attitude towards food and eating patterns. They discussed the kind of foods they ate as a child and how they believe it might have contributed to their bad heart. Some general factors reported by the participants were the type of food consumed and cultural perception towards food. Many of them preferred eating high fat content foods and high calorie foods that contained sugar and starch. A cultural pattern was frying of food during food preparation that included oil, chitterlings, and salt. Many of them ate sugary foods, pig feet, macaroni and cheese, and variety of baked cakes and ice cream as children. They believed it was a way of life, which later influenced their food behavior. They mentioned the urge to eat "soul food." or "fast food" that contained a small percentage of vegetables. Some of the women indicated that even now with their health condition, they sometimes eat snack foods, eating large portions of food at buffets and other social events which is mainly influenced by family and friends.

Another contributing factor towards food was eating habits and cooking patterns that were influenced by family and friends in relation to social activities. Most of these women reported that they often participated in social activities such as family reunions, birthday parties, weddings, backyard barbecues, and house parties. During these events, there are availability of large amounts and unhealthy foods. Eighty percent (80%) of them mentioned that during these events they tend to pile food on their plates and eat continuously. They also drink excessive amounts of alcohol. All 8 women also mentioned that family and friends impact them negatively this way because of the cultural norms and values towards of food and the need to eat fried, sugary, and high starched foods which shows an unwillingness to stop the cultural traditions towards food choices and preparation of foods.

The type of food consumed was also a factor mentioned as the cause of CHD. Most of the women expressed the importance of food preparation as one of the determinant of preventing CHD. Participant B stated that it is “not what you eat” but rather “how it is cooked” that makes a difference. She noted that she can still eat the food she likes but she prepares it in healthier ways such as baking pork rather than frying it. Ninety percent (90%) of the women mentioned that it was the type of food they grew up eating that later affected their heart health. Most of them grew up eating pork, sugary foods, fatty oils, and red meat. In contrast, they all reported eating healthier foods such as fruits and vegetables, more fish and less red meat and pork, less sugary and salty foods, and the use olive oil rather than fatty oils to cook.

Half of the women (50%) stressed the importance of the way the food is prepared. Five of them expressed their feelings regarding the preparation of food. As mentioned by Participant E, “It is the way the food is made and not really what you eat. I can still eat pork; it’s just that it is baked and not fried.” Participant C explained that the nutritionist advised her to reduce her salt intake, eat more vegetables and stay away from red meat and pork. She further explains that she eats more vegetables, less meat and port and in smaller portions. Participant H mentioned that she loved steak. “I used to eat it every other night, but I don’t eat it like that anymore.” Participant J noted that she knows she needs to exercise because she is out of shape. “When you get to a point and you can’t take a deep breath then you need to seek medical attention.”

Participant A expressed her feelings about her condition and choice of food:

Over a long period of time it depends on your social structure because you have someone in my age that has never had anything wrong with them. It's the type of food that certain people are raised up on; fatty food and sugar and all that. That's the type of food I grew up on. You know it wasn't good for the body, they didn't think about it, they feed it to kids. But now as a society, we know better. So then the type of food I grew up on, I do not feed my kids. I took out saturated fat, high sugar, carbohydrates. Now I tend to boil and bake my food, instead of frying it in cooking oil. I tried to buy whole food. You can still eat the things you enjoy; it's how you prepare them.

Participant E mentioned that she gets worried that her weight had caught up to her and that she was going to die. She described the type of food she grew up eating as Southern Foods. Her family was from Mississippi and Louisiana. I asked her to give an example of her daily meal intake as a child. She stated could eat for breakfast bacon, egg, toast, biscuits, then for lunch as a child she might have smothered rice, fried chicken and biscuit and for dinner, it could be steak and potatoes with desert. "You will seat there and just eat. There was a lot of food. I used to eat till I fell of the chair. You were always told as a child to eat of all the food in your plate because somewhere there is a child starving somewhere else." She mentioned that as an adult she stopped eating large meals. "I now eat small meals. As I grew older, I started eating more fruits and vegetables, less fast food." She mentioned that she often buys more frozen vegetables and eat about 3 ounces of meat per week." However she does not eat fish:

I don't have a taste for it. I don't eat breakfast food because of the smell, it makes me nauseous unless its cereal or toast. Southern Cooking was one of the best cooking.

> We used to eat pig feet because it more fat than meat and the meat will be in the tendons with hot sauce and candy yams.

Participant E further described the food she ate as a child as having heavy gravy and a lot of butter, pot roast and 16 oz. Pepsi and colas and juices. Anything that she could imagine of wanting to eat was at her grandmother's house. It was just the way the food was fix; they literally had so much fat in it. For example, when her grandmother will cook greens she will put fat back in it. "Big mama was always cooking if no one else cooked. "Big mama will put a half a stick of butter and a one and half cup of sugar but when I cook it now I put a fourth of a cup of brown sugar and quarter and half of butter." She noted that in her family people must have some kind of meat in everything they eat. She explained that if a person travels south to Mississippi, they will be invited to their homes and food will literally be spread all over the table even till today."

In contrast, Participant J acknowledged eating healthy as a child. She noted that although her mother used to go to the farm and prepared fresh vegetables for her and her siblings as a child, they still ate fried food. She stressed the way the food is prepared as an important factor. Now as an adult she has improved on her food preparation:

> I have changed my way of preparing food. I do less frying, much more baking. I make smoothies with spinach, ginger and flax seed. I have done research on protein flax seed. The vegetables I don't prepare, I put it in my smoothie. I also eat more fish and chicken.

In Figure 6, there is a pattern regarding the participant's food behavioral habits with ratings from poor, good, or improved in relation to the participant's responses to income level.

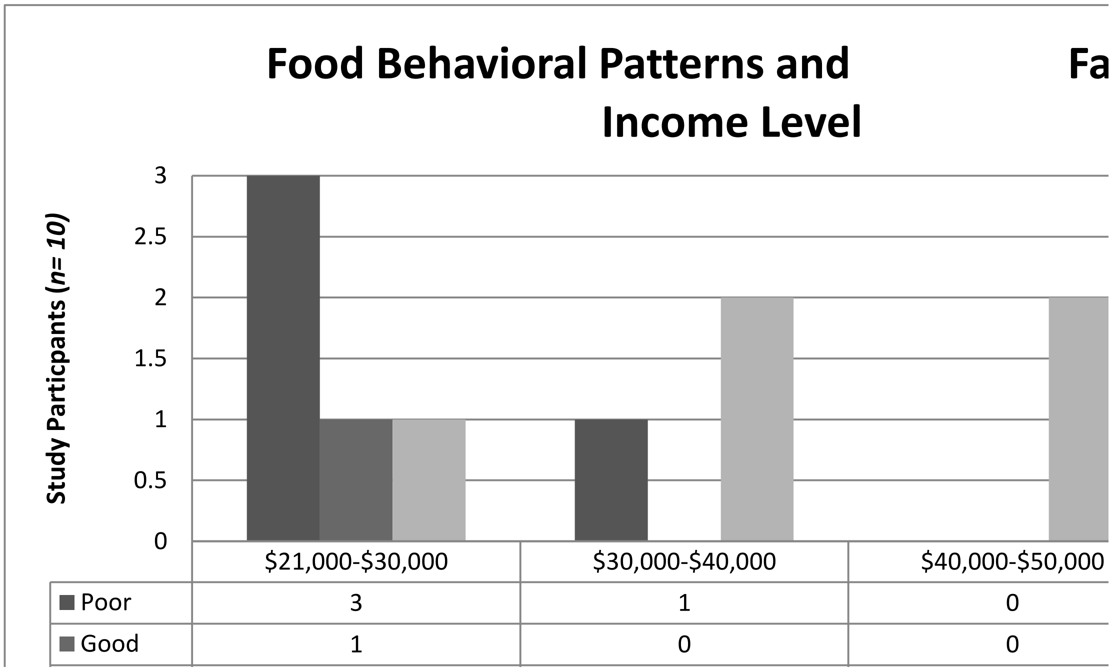

Figure 6. Participant's Food behavioral patterns and habits by Family Income Level (*N* = 10).

Family and Community Support

All the women had close and intimate relationships with family members for support and coping with CHD condition. However, they did not report having any community support to maintain their heart condition. Participant A receives support from children, participant B receives support from children, nephew, and mother, participant C receives support from children and grandchildren, participant D receives support from family members and co-workers, participant E receives support from father and friends, participant F receives support from sisters and nephews, participant G receives support from children and sister, participant H receives support from children and friends, participant I receives support from children and sisters, and participant J receives support from boyfriend and parent.

Coping methods was another code generated from the interview. The women mentioned several ways that they maintained their CHD condition daily. The code “support system was later categories under the theme “family and community support.” “coping methods” generated into the theme “other self-care practices” as a recurring theme associated with socioeconomic status. Other-self-care practices of maintaining their heart condition included making and keeping doctor’s appointments, preparing food in healthier ways, medication intake, stress management, and responding to symptoms on a timely basis.

The women’s self-care practice and coping with CHD was directly linked to support from family and friends. Many of the women received help and assistance from close family members and friends. They acknowledged the importance of family for assistance but referred to it as stressful at times because of the role of fixing everyone’s problems within the family and friends. A common practice that was repetitive and often mentioned was the need to make and keep doctor appointments. All the women no longer ignored any symptoms they experienced and seek immediate medical attention when necessary. A common self-care practice for all the women but one was going to their doctor appointments.

As Participant C explained:

> I make sure I keep all my appointments.... I have to see the doctor every month." and "I'm supposed to see the doctor to make sure everything is fine with me.” Ensuring doctor’s appointments are kept was clearly mentioned and important over other activities with most of the participants. However, she explained she only goes to the doctor once a year and only when she feels sick.

Participant A expressed her feelings towards getting better as a thing that she used to do that she can’t do anymore. She mentioned that she gets tired very quickly and her social skills have changed. For example she can’t party like she used to. To maintain her CHD condition she takes her medication, eat the right food, and exercise daily. An example of a breakfast meal intake- Oatmeal, whole wheat, a piece of fruit, some juice, maybe coffee or tea, a piece of bread- breakfast. For lunch she can have some soup, sandwich, or a salad. For dinner every now and then, she eats herself with something not as healthy as she stated like a hamburger but sometimes she eats something baked like chicken or fish. “I try to stay away from red meat and I eat a lot of vegetables too”

Participant C described how she maintains her heart as taking her medication daily, watching the type of food she eats and the way it’s prepared and cooked. She explained she eats food with antioxidants and bakes her chicken than frying. She stressed that the way she eats now is totally different from how she ate as a child. Figure 3 depicts the four most mentioned coping skills mentioned by the women participants to maintain CHD condition. Figure 8 depicts the coping skills mentioned by participants to maintain CHD condition with the most mentioned method used from top to bottom.

Participant G’s sons, sisters, and father often assisted her with getting to the hospital for doctor appointments. She reported that her family advised her on ways to maintain her health by eating right, walking, and taking medication daily. Participant J reported that her dad or girlfriends help her. She explained that she get scared of going to places by herself because of the fear of falling and not having anybody to help her. “The reason I can’t exercise the way I want is the other medical issues I have. I was getting shots from the doctor three times a year in both arms. The Hypo thyroid I am stuck with for life. If I can get off 200 pounds, diabetes might leave me; my blood pressure may go down completely without medication.” Table 7 depicts the responses provided from participants regarding their support system.

Physical support from family members was also a key to coping with CHD mentioned by the women. Transportation was the most mentioned form of help the women received from family and friends. Transportation to the clinic for doctor's appointments, medication pick-up, grocery shopping, and attending church and social events was an important positive aspect of family support for most of the women. Some of the women did not travel or could not because of their medical condition. Only four of the ten women drove regularly and were confident to drive themselves. The other eight women either took the public transportation such as buses and trains or simply were driven by family or friends**.** Participant A stated she drives herself back and forth to and from work and stated she does not problems getting around. In contrast, Participants C, J, F, G, H, uses public transportation such as the Chicago Transit Authority (CTA) bus or trains to commute since they lived in the city. On the other hand, Participant E uses the

APA transit to get around. She explained that her dad is getting older and his 63 years old and 10 years from now he might not be able to drive her around.

Emotional support was another factor that the women mentioned as support from family and friends. Emotional support was complicated and was similar in certain ways. For most of the women, they were viewed by family members as the strong woman who kept everything in the family together. As such, it was difficult as they mentioned during the interview to talk about their health with family members. They did not want to appear sick and did not want family members to worry. The phrase of "strong woman" who took care of everyone else was often viewed as a crucial part of a woman's sense of identity, even though it interfered with getting one's emotional needs met and could increase stress.

The meaning and use of spirituality among AAW with CHD and other chronic illness is linked with cultural beliefs and values. All the women in the study mentioned that they had strong faith in God and often were motivated by family members with words of encouragement. Most of the women addressed the importance of having faith in God. Trusting and believing in God was mentioned by nine of the ten women. The code “faith” generated into the theme “strong faith in God.” The issue of faith in a higher being had a significant impact on the women’s ability to cope and deal with their heart condition. Although most of the women did not attend church regularly, they believed God has the final say. Spirituality Support was significant positive magnesium used by the women to accept and cope with their CHD condition.

All the women in this study indicated that they had some form of church affiliations such as Baptist, Jehovah Witness, Catholic, and Non-Denominational. For example Participant F is a catholic and goes to church at least twice a month. She expressed herself and how her spirituality helped her to accept her limitation. She explained that since she was born with a heart condition, she has always accepted it has something God has put on her. “It is His Choice for me,” “Nothing happens without His consent.” Participant F in her own words:

“My faith is at the center of everything I am and what I want to do. It is the core of our being and our soul. I am Catholic and the most important part of us is our soul after our physical being dies. Our soul lives on and that what we need to nurture. What is important to me is my soul.” This connection between healing and faith in God influences AAW’s behavior towards recovery and maintaining health.

Similarly, Participant E stated that she has always believed that God is the reason why we have doctors. However, if its time, its time, its time. I want to lose weight so I can get rid of the diabetes and high blood pressure. Participant E mentioned that her spirituality did not influence her lifestyle choice and seeking medical treatment. I believe with God, I don’t fear anything. I think I will be here till I am at least 80 years old, which is about 40 more years to go. Participant I explained that she is Jehovah Witness. “I do not do any blood transfusion because of my religion but I seek medical treatment because God put the doctors there for a reason and gave them the ability and knowledge to perform.

Built environment is significant to the increased level of physical fitness and exercise performed by an individual (CDC, 2010). The issue of community support was another key issue mentioned by the women. Although, the women reported getting many support from family and friends, none of the women reported receiving support from the community in which she lived. There was lack of community support with resources for reducing weight and community programs for health awareness. Even though they all mentioned having park districts, walk, and bike paths in their community, none of the women took advantage of the exercise, swimming, and other resources in their community. A few of them stated it was because of the lack of togetherness and danger of staying out too long around the neighborhood due to gun violence. They also reported that lack of community awareness of CHD and availability of resources overtime contributed to the lack of CHD health awareness in black neighborhoods that could otherwise might have helped increase the knowledge of CHD.

Participant A lives in a South Suburban area of Calumet City and indicated that her neighborhood was nice and safe. She described a quiet place with no activity with older people and few children. “When they come out they get in their car, they go where they want to go and come back and go in.” Participant A stressed that her community is safe also because she lives near the police station and sometimes takes a walk around the park and the bike path. She sometimes uses the built environment in her community such as the park district, bike, and walking paths and she sometimes uses it for track and walking. In contrast, Participant D lives on the southeast side of Chicago. She described her neighborhood as being unsafe and an area with different type of people that are on crack; low- income to moderate income people as a result the fear of being unsafe has negatively impacted her ability to walk and exercise. Table 6 shows the support system mentioned by each participant.

Table 6

Family, Friend, and Community Support Environmental, Socioeconomic, and Cultural

Participant (*N* = 10)	Support System	Number of People
A	Children	4
B	Children, nephew, and mother	5
C	Children and grandchildren	4
D	Family and coworkers	3
E	Father and friends	3
F	Sisters and nephews	4
G	Children and sister	5
H	Children and friends	7
I	Children and sister	4
J	Boyfriend and parents	3

Note. The table above depicts the Participants' Support System.

Evidence of Trustworthiness

As described in Chapter 3, credibility, or qualitative internal validity, for this research validation depended on the use of the pilot study and member-checking techniques. The credibility of this research was enhanced by initial implementation of the pilot study and member-checking technique. Secondly, the implementation of the pilot study prior to the actual addressed a number of logistical issues such as to ensuring that the instructions given to the participants are comprehensible, that the wording of the survey was easily understood, and check the reliability and validity of results. To check for validity, the pilot study was used to test and ensure that there were no misleading, inappropriate, or redundant questions.

For each interview a reflexive journal was kept to dissimulate and document the thoughts, observation, words, and interactions to the data collected. According to Lincoln and Guba (1985), credibility of interpretation can be demonstrated through approval of the findings by the participants, which are also referred to as member checking. To better address the research questions and for credibility of data collected, member checking was used during the interview session by probing any unclear responses that was provided by the participants. The probing method was added in order to obtain a clear understanding and to obtain rich information of collected data.

This study denotes credibility bona fide by having lengthy interview time with study participants through a minimum of about 60 minute interview sessions. All the 10 women were interviewed a single time and were given enough time to answer the questions and customized follow up questions to fully express themselves. Secondly, member checking was conducted informally during the interview sessions with each woman by either restating the research questions, summarizing responses, and asking follow up questions from participants to determine accuracy.

During the interviews, several emotions arose from the participants; some of the women cried and others became teary eyed while describing their experiences with CHD. Some spontaneous topics included child bearing, family members, clothing, beauty, faith, relationships, and marriage. This approach of open communication during the interview process strived to build rapport in order to obtain honest and open responses. In addition, whenever the participants needed clarification on a question or comment, I restated the questions. All the women were either asked a follow up question for clarification on the previous response, or to summarize their responses whenever it seemed vague and unclear. Most importantly, all the women were given a chance to express themselves freely at the end of the interview session.

The credibility of this research was enhanced by the pilot study and member-checking techniques. High credibility was also produced due to Walden University peer review process of the Walden dissertation committee comprised of the Chair, Member, and URR as required by the university. The university requirement of the content and methodological aspects of this research fit into the committee’s stated areas of expertise. Also, the research study process itself had several points at which validation was required including the Prospectus, the Dissertation Proposal, (with oral defense), IRB approval, and the completed Dissertation (also with oral defense). The implementation of the purposeful sampling, pilot study, and member checking techniques, and guidelines and procedures from Walden University established conformability of the total research study.

Reasons for Participation

The women did not generally feel that participating in the research had changed how they viewed their heart problems. All the participants were comfortable with sharing their personal life stories with me. Most of the women expressed a sense of relief and mentioned they were glad that someone was listening and cared. Most of the women were very detailed in their responses, while a few of them were evasive in responding to a couple of personal questions.

Participant E's motivation for participating in the research was to help other African American men and women. Most of the women closed the interviews with a word of advice Participant A indicated that people should be careful what they put in their body. No one woman's body is the same. "Be mindful of what you're doing to you Participant F advised that people have to be responsible for their own health. You need to ask questions when in doubt. People shouldn't accept anything being said to them unless understood**."** Participant E noted that people need to learn how to cook their one food in healthier ways and incorporate fruits and vegetables. Participant G mentioned that people should stop stressing. "Learn to let go. The number causes of CHD are stress and food intake." Participant I expressed that a lot of women don't listen to their bodies. "AAW should listen to their first voice. "Ourselves" and "Act on it."

Benefits of Participation

In conclusion, the women described several benefits of participating in the research in details. The interview was viewed as an opportunity to share personal experiences that were often difficult for them to share with others. The women expressed their participation in the study as an emotional relief and that it was somewhat therapeutic. They viewed it as a chance to help other Black women become aware of symptoms that can lead to CHD. Most of mentioned the need to seek immediate medical treatment whenever possible and stressed the importance of not ignoring any medical advice and treatment provided by a health care professional or physician. All the women expressed enjoying the interview and being able to communicate freely about themselves. Most importantly, all the women were glad to have a chance to be heard. Some women gained some useful knowledge that they said empowered and encouraged them to maintain their heart conditions and seek immediate medical treatment when needed.

Summary of Findings

In summary, a review of the responses of the interview questions and an analysis of the data revealed that the women's cultural issues greatly impacted their overall behavioral patterns and perceptions towards health and health outcomes. The women viewed their CHD status as a condition rather than an illness. They all felt that a disease is something that cannot be controlled by the person experiencing it but in the case of CHD, they are able to control it with certain lifestyle choices and improved health behaviors. It is also important to note that despite the need to perform daily physical exercise, some of the women only exercised minimally and it seemed from my observation that they were not exercising as much as they should despite the issue of obesity and the need to keep the heart pumping.

The study findings also indicated that there is a need for CHD awareness. All the women were not aware of symptoms of CHD prior to their heart failure or heart attack occurrence. Although the women described having a feeling of fatigue, tiredness, and tightening of the chest, they failed to realize the seriousness of CHD and as such viewed it as a condition they can control with little medical attention. Most of the women also did not seek immediate medical treatment and as a result delayed medical attention because of the lack of knowledge of preventive methods needed to stop an occurrence of heart failure or heart attack.

Financial considerations were a factor that impacted the participant's affordability of healthy foods, though the cultural connections to cooking and eating were a greater impediment. Unhealthy eating habits and patterns were one of the strongest measures for

CHD development. The women continuously described the type of food they grew up eating and the reason why some of them purchased less expensive food such as pork rather than beef. These examples show that the socioeconomic factor of education and income has adversely affected food choices and consumption in this sample group. Financial issues were one of the determinants of purchasing healthier foods and some of the women could not afford it because of their large family size and low income level.

Although most of the women reported engaging in some form of exercise; mainly waking short distances, they did not perform the minimum required exercise. The recommended physical activity is engaging in at least 30 minutes of modest activity on most, preferably all, days of the week. These activities can be modest in nature and consists of either brisk walking, swimming, or cycling for people with CHD (NIH, 2014).

Furthermore, all findings exemplified during the analysis of the interviews as themes emerged in the area (a) Physical Activity Level, (b) Stress and Strong Woman (c) Unhealthy Eating, (d) Strong faith in God, (e) Strong Black Woman, (f) Runs in the family, (g) Physician-patient relationship, (h) Family and Friends Support, (i) Air Pollution (j) Other Self-Care Practices, and (k) Medication Compliance and Side Effects. Findings in this study suggests that stress ($N = 10$) was the strongest factor related to CHD, followed by unhealthy eating ($n = 9$) and physical activity level ($n = 9$) with smoking ($n = 5$) has the lowest relationship with CHD.

Finally, all findings obtained from these women were believed to have contributed to their CHD illness and health outcomes. Findings from this study have also shown that there is a strong connection between key external factors such as smoking, poor nutrition and infrequent exercise with the development of CHD. The findings also revealed that financial considerations although a factor, did not impact medical treatment because all participants had access to private or public insurance plans. However, financial but was an impediment with the affordability of healthy foods. Other significant barriers included the ability to schedule appointments with physicians around work and home commitments. Lastly, cultural issues were perceived to have impacted their overall behavioral patterns and perceptions towards health and health outcomes.

In Chapter 5, I provide an interpretation of the findings, implication for positive social change, and recommendations for future research study. Lastly, I conclude the chapter with a discussion on the relevance of the research study.

Chapter 5: Discussions, Conclusions, Implications, and Recommendation

This research was driven by the need to examine the reason that the number of reported deaths of AAW with CHD is much higher compared to women from other ethnic groups. It was essential to understand how AAW's lived experiences and culture impacted their behavior and perception of health together with the implementation of the framework and methodology used in this study. Using the SES as a conceptual framework, the primary research question for this study focused on the AAW's perceptions about their environment, socioeconomic status, and cultural factors and their impact on CHD conditions and prevention. The implementation of the SES conceptual framework although predictive prior to the findings, identified that there is a connection between certain environmental, socioeconomic, and cultural factors and AAW's health behavior, perception of health, and the development of CHD. It also revealed that there is a need for a more culturally competent health care system that involves people at various levels of awareness and stages along the cultural competence continuum.

I conducted face-to-face, semi-structured interviews with 10 AAW between the ages of 21 and 55 with different forms of CHD to elucidate the phenomenological model of the illness as it relates to certain factors. This study revealed that there is a strong connection between environmental, socioeconomic, and cultural factors impacting the awareness, development, and maintenance of CHD in AAW. It is also imperative to note that all 10 participants indicated that they had a preconceived belief that influenced health behavior, habits, and perception towards their everyday living conditions. Based on these findings, it is, therefore, concluded that there a need for a more culturally competent health care system geared specially towards AAW for prevention, promotion, and coping of CHD condition.

In Chapter 5, I present the findings of thematic analysis for the research questions identified in Chapter 4. In this chapter I also present an interpretation of the study findings, the limitations of the study, recommendations, and implications for social change in AAW with CHD condition, and summary of the outcomes derived from the study.

Interpretation of the Findings

The main research question and five research sub questions were examined to address the multiple levels of SES and how it can positively impact AAW’s experiences of environmental, socioeconomic, and cultural factors towards health promotion programs in urban AAW. In comparing this study to previously reported studies, it is clear that the findings in this study showed that AAWs' perceived environmental, socioeconomic, and cultural factors experienced by the women in this study contributed to development of CHD, perception towards health, and health outcomes. This section discusses and evaluates the three main themes for this study (environmental, socioeconomic, and cultural) as they relate to the main research question and five sub research questions. This study identified and addressed the significance of the connection between a person’s environment, income level, physician support, and health perception and the development of CHD. This study actively identified the connections of these variables and awareness of CHD development as an act to reduce the continuous disparity among AAW who are seriously at risk of CHD.

Findings from this study concur with those of CDC (2011) by identifying similar factors that contributed to behavioral patterns to diet, physical activity level, stress development, awareness, and perception of CHD among AAW in this study. According to CDC (2011), there are many environmental, socioeconomic status, and cultural factors that influence and contribute to the incidence of CVD in low-income minority populations. CDC (2011) also noted that women especially are at a higher risk than men due to certain lifestyle choices and medical conditions such as obesity, poor nutrition, smoking, diabetes, high blood pressure, cholesterol, and physical inactivity. This study indicated similar results that the women experienced certain external factors that influenced their health behavior patterns and resulted in CHD conditions.

Evaluating Environmental Factors

The influence of environmental factors on CHD development concurred with some of past research while disagreeing with others**.** Main Research question: is there a connection between certain environmental factors (access to food supply, unsafe public spaces, air quality, and housing conditions) that are related to urban AAW and their perceptions of their CHD status? Findings in this study indicated that there is a connection between certain environmental factors and CHD development.

Findings in this study concurred with those of Bullard (2007) that offered a reasonable explanation as to how factors such as physical safety, exposure to pollutants, and access to basic amenities like water and sewer services, social support, and opportunities for routine physical activity affect residents in neighborhood health and health outcome. The women in this study indicated that a contributing factor to overweight and obesity was the issue of neighborhood safety and fear of violence that adversely impacted the need to use community resources. Even though most of the women indicated that they felt safe within their neighborhoods, they had no community support towards health promotion that could have provided and motivated them to use the community facilities such as the park districts fitness centers for weight loss and increase of physical activity.

Access to Healthy Food

Findings in this study revealed that food availability was not an issue and thus did not contribute to the development of CHD in these women. This finding is contrary to the findings of Thomas (2010) that the structuring of food retail stores moving to suburban areas negatively contributes to the consequences that inner city populations experience with the distance from accessing certain food. My findings also disagree with Ploeg (2010) who reported that some neighborhoods in the United States, especially low-income areas, have been labeled as a *food desert* because of the lack of supermarkets that provide affordable and nutritious foods to residents and, as a result, these residents do not purchase healthy food, which usually costs more.

In this study, nine of the 10 participants indicated that they had several grocery stores within a reasonable distance from their homes and as such they did not experience a food desert. However, during the interviews, one of the women mentioned that she has to travel long distances to get to a grocery store in order to buy fresh fruits and vegetables. She mentioned that most of the stores in her neighborhood were corner stores and the Dominick food store in her neighborhood closed down and other stores did not have variety of food choices. The issue of food availability was rather linked to the type of food purchased, preparation of food, and food consumption. Results from this study therefore showed that these AAW had access to healthy food.

Smoking

Although 50% of the women reported ever smoking, only three of these women still smoke. Smoking is associated with the development of CHD. This study agree with that of Helsing, Sandler, Comstock, and Chee (1988) that even a small amount of inhaled second hand smoke or passive smoking can be risk factors of CHD. Although most of the women are nonsmokers, they have family members and friends who smoke and the presence of smoke in the environment was considered to have contributed to the development of CHD.

Physical Activity Level

Findings in this study showed that the built environment has an impact on the modifiable risk factors of CHD in AAW**.** Is there a connection between certain built environmental factors (outdoor exercise facilities, transportation, and walking trails) that are related to the urban AAW and their perceptions of their CHD status? My findings demonstrated that certain perceived environmental factors contributed to the participants' CHD development. Factors such as lack of community support and resources over time contributed to increase weight and obesity. Although their neighborhoods had park districts, walk, and bike paths, all the women reported that they have not used any of the indoor or outdoor facilities for weight reduction.

Physical Activity level was directly linked to the development of CHD in these women. This study confirms those of Banks-Wallace (2002) who reported that the role as a caretaker plays a big part in the time allocated for physical activity and noted that AAW took on so many responsibilities as caretakers for family and friends that adversely contributes to and impedes them from regular physical activities and exercise. Similarly, the participants in this study indicated that taking care of everyone in the family and being the head of household with no support, impacted and contributed to their lack of physical activity level and motivation to exercise which later resulted in overweight and obesity contributing to CHD.

Access to Health Care Services

Transportation may not have influenced and contributed to the development of CHD. Contrary to the findings of Esser-Stuart & Lyons (2002) that reported that one of many variables that may help to explain differences in the health care status is the issue of transportation. However, the participants in this study mentioned that they had access to the hospital and clinic with the support of family and friends and sometimes through public transportation or healthcare transportation services. They indicated they had no problem getting to medical facilities. However, the issue of medical and treatment delay was linked to individual behavioral factors.

The findings from this study disagree with those from Richardson (2010) that access to health care services is mostly affected by health care insurance, a primary care provider and an existing source of care. The findings from this study point out that health care service are mostly affected by appointment scheduling and doctor’s office availability. The women did not have any problem with health care insurance coverage. They reported that they were all covered by medical insurance during the onset of their heart disease condition either by government assistance or employer. Some of the women mentioned that they had problems scheduling timely doctor appointments. They felt that because of their critical medical conditions, it is necessary to be scheduled an immediate office visit when needed. However, findings in this study demonstrated the lack of availability of hospital appointments with chronic illness patients.

Evaluating Socioeconomic Status

The influence of perceived socioeconomic status on CHD development was consistent with other research. The socioeconomic factors of education, income, health insurance, type of employment were often mentioned by the participants in this study. Is there a connection between certain socioeconomic factors (access to health care services, personal or family income, and educational attainment) that are related to the lack of CHD screening and early detection in urban AAW and their perceptions of their CHD status? Findings in this study indicated that there is a connection between certain socioeconomic status and the development of CHD.

Income

The women reported that they purchased less expensive foods such as pork and sugary drinks compared to fruits and vegetables because of several factors. Some of them mentioned they purchased less expensive food such as pork versus beef because the price for pork was relatively less than that of beef. In another example, the women purchased canned vegetables versus fresh vegetables because of price and cooking for a large family, which relates back to the issue of financial affordability of foods.

Health Literacy

Communication with health care providers and physician may have contributed to the development of CHD in these women. The findings from my study concur with those of Bullard (2007) that even though nutrition has been researched and labeled as a matter of individual choice, many health related illnesses are linked to poor diet has been perceived as being related to health education. This study agree with that of Bullard with the fact that most of the study participants mentioned that they were not aware of CHD signs and symptoms prior to their heart condition episode. All the 10 women ($N = 10$) noted that they had no prior knowledge of the causes, signs, and symptoms of CHD. Eighty percent (80%) of them mentioned that unhealthy eating habits and lack of physical fitness overtime resulted in the development of CHD.

Stress

Stress was an integral part of CHD development over time that was mostly mentioned by the women in this study. Stress was considered one of the most prevalent causes of developing heart disease condition. Although, it is a modifiable risk factor of CHD, most of the women indicated stress development was due to several external factors. The issue of stress was linked to all three main themes of these study; environmental, socioeconomic, and cultural factors. Stress contributed to excessive weight gain and unhealthy eating habits and patterns. Stress was also mentioned by several participants as a factor experienced during period of tragic incidents and events relating to self and family members or friends.

During the interviews, four of the participants reported having to take care of a sick or elderly family member, which in turn resulted in excessive amounts of stress overtime. One of the participant also indicated that she experienced intense stressors with the type of job she had with the Amtrak rail company and having to travel long distance which contributed to her unhealthy eating habits of snacks, sugary, and starch foods, lack of physical fitness, and development of symptoms of heart disease such as chest pain and tiredness. The participant noted that she rarely had time for herself because she worked all the time because of the need to take care of the family.

Evaluating Cultural/Social Influences

Cultural influence of family, friends, and religion was an important factor that was examined in this study. African American culture greatly impacted their behavior and perception towards health and health outcomes. The main research question examined was: Is there a connection between certain cultural beliefs and values (language, thoughts, communication, and social groups) that are related to urban AAW and their perceptions of their CHD status? Yes, there was a connection between the women's cultural values and beliefs. All the women received some form of support from family and friends in coping and dealing with CHD.

This support system was concordant with the findings from Moulton (2009) that one of the common health perceptions of African Americans was feeling well and getting better without the use medication. This fact was disclosed by one of the study participants. She indicated that she did not use her medication or visit the doctor as required because of the feeling that she was okay.

Diet

There was a connection between cultural factors and dietary patterns and food preferences in the AAW in this study. There was a link between the women participant’s preconceived belief on the type of food such as fried, salty, and in large quantity. The participants also indicated that they were influenced by family and friends by engaging in social gatherings and events that encouraged large unhealthy meals, smoking, and alcohol.

Perception of Health

The participant further noted that the only time she visited the doctor and used her medication was when she felt sick. The issue of perception was also displayed in the finding with the 10 participants. They perceived and viewed CHD as a condition rather than an illness and compared it to Cancer. They all perceived their heart condition as a disease but rather a heart that was not functioning properly and a condition they can control. During the interview, one of the participants was confused when I referred to her condition as heart disease and mentioned she never viewed it as a disease. As such, the perception of CHD not being a disease but rather a condition influenced by these African American women adversely impacted their perception on the seriousness of CHD.

The findings from my study also concur with those of Ratner et al. (2006) that ethnicity and culture could play an important role in symptom awareness. It is well demonstrated in this study that ethnicity and culture impacted the participant’s awareness and knowledge of CHD. Although the participants experienced common symptoms of CHD such as (a) chest pain, (b) shortness of breath, (c) faintness, (e) pain to the jaw, neck, shoulders or back, (h) sleeplessness, (g) difficulty breathing, and (h) indigestion, they were not aware of the symptoms and signs of CHD prior to their attacks.

The findings from my study agree with Shaw et al., (2009) that reported that cultural differences also play a role in the communication between patients and physicians which as directly contributes to the misunderstanding that arises with chronic illness management, health status, and treatment methods (Shaw et al., 2009). Some the study participant mentioned that they were often misunderstood and ignored by their physicians. They reported that they sometimes felt the doctors did not want to listen to them especially when discussing about medication side effects and the need to try something else. Two of the participants mentioned that they had to change doctors because they were ignored and often stereotyped.

Family and Social Support

According to Parankape and Kaslow (2010), the two distinct cultural factors protecting African American survivors from chronic illnesses are social support levels and spirituality. The findings from this study support those of Parankape and Kaslow (2010) in that all the study participants reported they had strong family ties and close friendships. Most of them lived with children or other family members and noted they were supported emotionally and spiritually. Many of the participants were assisted with transportation to the hospital when needed by family members or friends. They also mentioned that family was one of the motivation and encouragement to stay positive.

Faith in God

Spirituality was another determinant of cultural factors that was mentioned by women in this study. Although, most of the women did not attend church regularly, they were all affiliated with a certain church denomination. The women reported that they had strong religious value that was linked to the cultural beliefs. Faith in God influenced their ability to cope with their heart condition. In an interview with one of the participants, she expressed how her spirituality level has helped her to accept her limitation. She indicated that her strong faith in God has enabled her to accept heart disease has something God has put on her. “It is His Choice for me,” “Nothing happens without His consent.”

Conclusion

It is estimated that about 81.1 (33%) million American adults in the United States have been diagnosed with one or more cardiovascular diseases (CDC, 2010). Several research studies have indicated that heart disease is a silent killer and decreases life expectancy. Many factors such as weight gain, smoking, unhealthy eating, stress, and lack of awareness have contributed negatively to the higher incidence of people suffering from CHD, with AAW leading the way (CDC, 2010). This dissertation study examined and confirmed that several factors were perceived to influence and contribute to the CHD development in the study participants. These perceived variables included some key elements of (a) environmental factors; (b) socioeconomic status; and (c) cultural/social factors. The findings revealed that cultural issues around behavior and perceptions were more significant. The women participants identified certain behaviors and perceptions that contributed to their development of CHD, health conditions, and health outcomes.

The study's findings indicated that environmental factors such as lack of physical activity level contributed to overweight and obesity. Study participants mentioned the inability to do the amount of exercise advised by physicians and health care providers. AAW expressed their inability to walk long distances and perform other type of exercises because of symptoms of CHD and other chronic conditions. Although many of the AAW reported being overweight and/or obese, they acknowledged the need to lose weight, but still cannot perform the daily recommended exercise.

Garcia and Shelton, (1990) focused on language barriers from a socioeconomic level. They found that language barrier is amongst the three listed obstacles impeding minorities and the poor from receiving adequate health care. Among other factors such as health insurance, literacy, having a regular provider, and socioeconomic status, patients with LED report fewer visits to their physician and lower use of preventive care after controlling (Smith, 2010). Language barriers also affect patient comprehension and understanding of instruction pertaining to medical information (Smith, 2010).

Secondly, this study focused on socioeconomic characteristics of medical insurance, employment status, income level, age, education, marital status, knowledge of CHD, and transportation statutes. All the women indicated that they had medical insurance coverage during their diagnosis and medical treatment of CHD. This study indicated that none of the women had some knowledge about the symptoms and signs of CHD and as a result did not seek immediate medical treatment. Relatively, a review of the participant’s ages that were recruited between 35 and 55 years old also showed that age did not matter; they were not familiar with signs and symptoms of CHD and they all experienced similar symptoms before and after being diagnosed with CHD.

Another financial considerations revealed in the findings was the affordability of healthy foods. Even though the cultural connections to cooking and eating were a greater impediment, participants mentioned the lack of financial resources to purchase healthier foods. Although more than half of the participants were on food stamps, they mentioned that they couldn’t afford to buy enough fruits and vegetables. Due to large family size, many healthy foods were substituted for less healthier ones such as the substitution of beef and fish for pork. However, the participants that were employed indicated that they improved and changed the type of food they eat. Findings also showed that more fruits and vegetables were consumed and some of them indicated that can now afford purchase healthier meals. The difference in income status between the employed and unemployed in the study confirms that socioeconomic status of income level does have an impact on choice of food purchased. The results obtained from the study further revealed that culture beliefs play a huge role in the influence of behavior and perception of African American women.

Furthermore, the cultural characteristics that were mentioned by participants were perception of self and CHD condition, faith in God, coping skills, and genetics. The similarities in perception of CHD condition were another important factor that was obtained during the study. Interestingly, although the older women had more education and more household income, they were impacted by cultural beliefs as their counterparts did . They all indicated that they did not perceive CHD as an illness and compared it to cancer. The presence of strong family bonds ties connects with participants believes that they are responsible for others within their families. All the women with children were single parents and head of household. They were divorced, separated, widowed, or single parents and to take care of their children alone. In addition to that, some of them had other family members living with them. Most of the women perceived themselves as strong and responsible for others. They used the phrase “Strong Woman” to describe and define themselves and expectations from others. They compared themselves to family and friends with CHD and mentioned that they in better situation than another family or friend with CHD.

Other cultural factor was the issue of faith in God. All of the women were affiliated with a church and believed in a higher being. The study indicated that the women’s faith also influenced their perception of CHD. The findings suggested that because of their strong faith in God, the women perceived CHD as a condition rather than an illness. They compared CHD to cancer and stated that CHD can be controlled by lifestyle choices and strong faith but an illness like cancer is different and is something uncontrollable by lifestyle and habits.

Finally, the results supported the conclusion that certain environmental factors, socioeconomic status, and cultural beliefs do contribute to CHD in African American women. The study confirmed that there is need for CHD awareness in regards to signs, symptoms, and education of heart disease in AAW. Many of the study participants did not have any previous knowledge of CHD and did not realize that they were experiencing a heart disease condition. Based on the findings that these factors were significant element in the lives of study participants, the study concludes that awareness of CHD through health educational programs should be developed within health care facilities, communities, and school systems.

Implications for Social Change

This study identified the perceived connection between environmental, socioeconomic, and cultural factors and the health outcomes of AAW with CHD. First, this study's findings revealed that a person’s health condition is shaped by their cultural beliefs and experiences which together influence the ability to identify and label symptoms as well as seeking medical treatment. Secondly, a person’s environment and available resources contributes to health outcomes. Finally, a person’s socioeconomic status such as income, education, and knowledge affects awareness of risk factors that could otherwise have been prevented.

This study was designed to ensure that AAW receive the adequate amount of CHD knowledge and resources needed to alleviate the prevalence of CHD development in this population group. As a researcher and an analyst, I plan to contribute positively to the importance of health promotion strategies and creation of a more culturally competent health care system geared towards AAW with CHD condition. To recapitulate, it is important to understand the effects of culture on AAW’s perception towards health and health outcomes. For example, African Americans and Whites experience different referral for cardiac procedures because of race and ethnicity (Anderson et al., 2003). Race and ethnic differential amongst people should be considered in the utilization and treatment process.

Healthcare providers should be educated and trained to be cultural competent. The initiation of a culturally competent health care system will aid in potential improvement of CHD health promotion, increase in efficiency of clinical and support staff sensitivity to treatment and care, and result in a positive health outcome in AAW with CHD and reduction in AAW with CHD.

Study Limitations

This study had several limitations. The study was limited to the use of a purposive and snowball sampling. Purposive sampling is a non-random selection of participants for a specific purpose (Groenewald, 2004). This sampling technique was used to recruit the bulk of the study participants. Although Bowling (1997) suggested that qualitative research methods have advantages over quantitative methods because of preexisting knowledge, the researcher’s perceptions can influence the findings which can hinder both objectivity and the possibility of study replication which ultimately can weaken the reliability of the qualitative research method (Ulin, et al., 2005). The second limitation of the study was the sample population was restricted to a small percentage of urban AAW who live in the Cook County area, which is unlikely to represent the total African American female population in the United States. Lastly, the transferability of the findings is limited to the targeted population of urban AAW living in the Cook County Illinois area due to the sampling strategy.

Recommendation for Action

This result in this study unraveled that there is a gap in effective communication between AAW with CHD and their health care providers. For this reason, there is a need for a more culturally competent healthcare system in the United States**.** Bryant, Lande, and Moshavi (2012) suggested that physicians and patients need to focus on the time before, during, and after a visit. Prior to visits, patients were advised to manage and record symptoms experienced while complying with designed treatment plan. During and after the visit to the physician, patients and physicians are encouraged to communicate their knowledge about the conditions and status of a treatment plan while allowing patients to assist and be a part of the plans needed to manage and control the disease. However, minorities especially AAW with CHD continue to experience higher rates of diseases and deaths.

I recommend that physicians and healthcare providers become more culturally and linguistic competent. Being culturally aware of the differences in racial and ethnic groups will enable medical experts to respond effectively to patient's specific needs and enable them to understand the language and psychological needs of patients. It will allow hospitals to develop a system in which integration of information and data about individuals and all ethnic groups can be incorporated into clinical standards, skills, policies, and approaches align with the individual patient or ethnic group's culture which can increase the access to health care, quality of care, and health outcomes. In addition, creating and maintaining culturally competent health care systems can help with communication barriers that may impede appropriate diagnosis, treatment, and follow-up. As such, cultural competence is essential in health care systems and health outcome in patients.

Incorporating a culturally competent health care system is also important to fill the gap in communication between physicians and patients as derived from the findings of this study. It is important to note that health care professionals and their personnel and staff are at various levels of awareness and stages along the cultural competence continuum. For this reason, they should be trained to be proficient in the systematic incorporation of a culturally competent environment. This training will ensure that they have the knowledge of the principles and practices to develop policies, administrative, and service delivery required to be more sensitive to individual patient needs.

Furthermore, the implementation of the cultural competence system can be implemented by ensuring that the organization's mission statement commits to cultural competence as an integral component of all of its activities. First, the organization should convene a cultural competence committee and the group should have representation from policy making, administration, service delivery and consumer levels and reflect the diversity within the organization and the community at large. The group can serve as the primary body for planning, implementing and evaluating organizational cultural competence initiatives. Second, the organization should determine the racially, ethnically, culturally and linguistically diverse groups they serve. Third, they should determine what percentage of the population that resides in the geographic locale they serve is affected by the health disparity. Fourth, they should seek resources from federally and privately funded centers that provide informative brochures on cultural and linguistic competence that are specific to racial health care disparity issues. Lastly, they should network with advocacy organizations concerned with specific health care, social and economic issues impacting racially, ethnically, culturally and linguistically diverse communities related to health care delivery and services.

Recommendation for Future Studies

As a result of the prevalence of CHD particularly in AAW and increased number of deaths in this population group, future research increasing the number of AAW participating in clinical studies is critical. As much as possible, researchers and health care providers should include AAW in research studies and clinical studies. Targeting interventions of AAW with the increase of the number of this population in clinical studies may increase knowledge of CHD in this population and may assist healthcare professionals in understanding how and why AAW preconceived beliefs, environmental, socioeconomic, and cultural factors impact and affect their perception towards illness and health. Also this approach will assist health care professionals to accurately diagnose, treat, and communicate effectively with AAW in reducing CHD. This approach may also increase AAW awareness and understanding of chronic illnesses and positively impact their lifestyle choices, behavioral patterns, and perception of health in general.

Conclusion

The purpose of this study was to determine if there was a connection between perceived environment, socioeconomic, and cultural factors on CHD development in AAW. The theoretical foundation of the study was the SES, which focused on various levels of interaction of society for the need for individual change and the impact of attitudes on daily living. Results from the study found that there is a connection between certain environmental, socioeconomic, and cultural factors in the development of CHD in

AAW. The results confirmed an expected connection between CHD and key external factors such as smoking, poor nutrition and infrequent exercise. The findings also indicated that although financial considerations were a factor, it only impacted the affordability of healthy foods rather than the access to health care. Barriers to medical treatment were rather linked to the inability to schedule appointments with physicians around work and home commitments. AAW's perception towards health was linked to their cultural beliefs and values. Cultural connections to cooking and eating were a greater impediment. Certain environmental factors and socioeconomic factors that they experienced over time also contributed and impacted their development of CHD. Information from the current research can be used to promote public health awareness that will ultimately reduce heart disease in AAW, positively change public policy health laws and implementations, and contribute to positive social change by providing insight into the need for public policy that encourages a more culturally competent health care system to better educate people about CHD, amend AAW's perceptions on CHD, and aid in the possible reduction of CHD.

References

Adams, T. (1998). The discursive construction of dementia care: Implications for mental health nursing. *Journal of Advanced Nursing*, *28*(3), 614-621. doi:10.1046/j.1365-2648.1998.00693.x

Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, 36(1), 1-10. Retrieved from http://globalhealth.stanford.edu/resources/Revisiting_Behavioral_Model_and_Access.pdf

Anderson, L. M., Scrimshaw, S. C., Fullilove, M. T., Fielding, J. E., & Normand, J. (2003). Culturally competent healthcare systems: A systematic review. *American Journal of Preventive Medicine*, *24*(3), 68-79. doi:10.1016/S0749-3797(02)00657-8

American Cancer Society (2014). *Body weight and cancer risk. Excess body weight: A major health issue in America.* Retrieved from http://www.cancer.org/cancer/cancercauses/dietandphysicalactivity/bodyweightandcancerrisk/body-weight-and-cancer-risk-adult-bmi

American Heart Association (2014). *Coronary heart disease in African American women.* Retrieved from https://www.goredforwomen.org/about-heart-disease/facts_about_heart_disease_in_women-sub-category/african-american-women/

American Lung Association (2011). *Trends in tobacco use*. Washington, DC: American Lung Association. Retrieved from http://www.lung.org/finding-cures/our-research/trend-reports/Tobacco-Trend-Report.pdf

Austin, M. A., Hutter, C. M., Zimmern, R. L., & Humphries, S. E. (2004). Familial hypercholesterolemia and coronary heart disease: A huge association review. *American Journal of Epidemiology*, *160*(5), 421-429. doi:10.1093/aje/kwh237

Ayres, L., Kavanaugh, K., & Knafl, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research, 13*(6), 871-883. doi:10.1177/1049732303255359

Babbie, E. R. (2007). *The practice of social research* (11th ed.). Belmont, CA: Thomson Wadsworth.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*(1), 1-26. doi:10.1146/annurev.psych.52.1.1

Banks-Wallace, J. & Conn, V. (2002). Interventions to promote physical activity among African American Women. *Public Health Nursing, 19*(5), 321–335. doi:10.1046/j.1525-1446.2002.19502.x

Bell, J. (2010). Building healthy communities through equitable food access. Retrieved from http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/article-bell-standish.pdf

Bowling, A. (1997). *Research methods in health - investigating health and health services.* Buckingham, PA: Open University Press, Buckingham.

Braun, V., & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psycholog*y, *3*(2), 93. doi:10.1191/1478088706qp063oa

Bryant, S., Lande, G., & Moshavi, D. (2012). Knowledge-based view of improving the physician-patient relationship. *Academy of Health Care Management Journal, 8*. Retrieved from http://www.readperiodicals.com/201201/2751578561.html

Bullard, R. D. (Ed.). (2007). *Growing smarter: Achieving livable communities, environmental justice, and regional equity*. Cambridge, MA: Massachusetts Institute of Technology Press.

Capewell, S., Ford, E. S., Croft, J. B., Critchley, J. A., Greenlund, K. J., & Labarthe, D. R. (2010). Cardiovascular risk factor trends and potential for reducing coronary mortality in the United States of America. *Bulletin of the World Health Organization, 88*(2), 120-130. doi:10.2471/BLT.08.057885

Carson, A. P., Rose, K. M., Catellier, D. J., Diez-Roux, A. V., Muntaner, C., & Wyatt, S. B. (2009). Employment status, coronary heart disease, and stroke among women. *Annals of epidemiology, 19* (9), 630-636. doi:10.1016/j.annepidem.2009.04.008

Centers for Disease Control and Prevention. (2009). *Recommended community strategies and measurements to prevent obesity in the United States.* Retrieved from http://www.cdc.gov/obesity/downloads/community_strategies_guide.pdf

Centers for Disease Control and Prevention. (2010). *Guide to fruits and vegetable strategies to increase access, availability and consumption.* Retrieved from http://www.cdph.ca.gov/SiteCollectionDocuments/StratstoIncreaseFruitVegConsumption.pdf

Centers for Disease and Control Prevention. (2011a). *Heart disease and stroke prevention: Addressing the nation's killers at a glance 2011*. Retrieved from http://www.cdc.gov/chronicdisease/resources/publications/aag/dhdsp.htm

Centers for Disease and Control Prevention. (2011b). *National Center for Health Statistics.* Retrieved from http://www.cdc.gov/nchs/data/series/sr_10/sr10_260.pdf.

Centers for Disease Control and Prevention. (2011c). *The community guide*. Retrieved from http://www.thecommunityguide.org/obesity/provider.html

Centers for Disease Control and Prevention. (2011d). *Chronic disease prevention and health promotion: Addressing the nation's leading killers, at a glance 2011*. Retrieved from http://www.cdc.gov/chronicdisease/resources/publications/aag/dhdsp_text.htm

Centers for Disease Control and Prevention. (2014). *Minority health*. Retrieved from http://www.cdc.gov/minorityhealth/populations/remp/black.html

Champagne, C. M., Casey, P. H., Connell, C. L., Stuff, J. E., Gossett, J. M., Harsha, D. W., & Bogle, M. L. (2007). Poverty and food intake in rural America: Diet quality is lower in food insecure adults in the Mississippi Delta. *Journal of the American Dietetic Association, 107*(11), 1886-1894. doi.org/10.1016/j.jada.2007.08.003

Cheek, J. (2004). At the margins? Discourse analysis and qualitative research. *Qualitative Health Research, 14*(8). doi:10.1177/1049732304266820 PMid:1

Chithambo, T., & Huey, S. (2013). Black/White differences in perceived weight and attractiveness among overweight women. *Journal of Obesity*. doi:10.1155/2013/320326

Choi Wan, C., Violeta, L., & Joanne WY, C. (2011). A qualitative study of the perceptions of coronary heart disease among Hong Kong Chinese people. *Journal of Clinical Nursing*, *20*(7/8), 1151-1159. doi:10.1111/j.1365-2702.2010.03526.x

Collins, K. S., Hughes, D. L., Doty, M. M., Ives, B. L., Edwards, J. N., & Tenney, K. (2002). Diverse communities, common concerns: assessing health care quality for minority Americans. New York, NY: The Commonwealth Fund, 2002 March. Medical Care Research and Review, 57, 36-54. Retrieved from http://www.commonwealthfund.org/usr_doc/collins_diversecommun_523.pdf

Collins, S., Davis, K., Doty, M., Kriss, J., & Holmgren, A., (2006). Gaps in health insurance: An all American problem (Commonwealth Fund Publication No. 920). Washington, DC: Commonwealth Fund. Retrieved from http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2006/Apr/Gaps-in-Health-Insurance--An-All-American-Problem.aspx

Collins, S., Kriss, J., Doty, M., & Rustgi, S. (2008). Losing ground: How the loss of adequate health insurance is burdening working families. Retrieved from http://saluteinternazionale.info/wp-content/uploads/2009/01/sanitausa_documenti2_maciocco.pdf

Conway-Phillips, Regina. (2011). A salutogenic framework to understand disparity in breast cancer screening behavior in African American Women. Retrieved from http://search.proquest.com/docview/871222182?accountid=14872

Cook County Department of Public Health (2011). *Chronic disease resources-organization*. Retrieved from http://www.cookcountypublichealth.org/chronic-disease/organization

Creswell, J. W. (1997). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2003). *Research design qualitative, quantitative, and mixed methods approaches*. (2nd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2007). *Qualitative inquiry & research design. Choosing among five approaches*. (2nd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. (2009). *Research design-qualitative, quantitative, mixed method approach.* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Curtis, K. A.,& McClellan, S. (1995). Falling through the safety net: poverty, food assistance and shopping constraints in an American city. *Urban Anthropology 24*, 93–135. Retrieved from http://www.jstor.org/stable/40553280

D'Agostino, R., Vasan, R., Pencina, M., Wolf, P., Cobain, M., Massaro, J., & Kannel, W. (2008). General cardiovascular risk profile for use in primary care: the Framingham Heart Study. *Circulation, 117*(6), 743-753. doi:10.1161/CIRCULATIONAHA.107.699579

Daiute, C., & Lightfoot, C. (Eds.). (2004). Narrative analysis: Studying the development of individuals in society. Sage Publications. doi:10.4135/9781412985246

Esser-Stuart, J., & Lyons, M. (2002). Barriers and influences in seeking health care among lower income minority women. *Social Work In Health Care, 35(3),* 85-99. doi:10.1300/J010v35n03_06

Evaluation of the Illinois WISEWOMAN Lifestyle Intervention Curriculum: Facilitator Group Interview Results (2008). Retrieved from http://www.center-trt.org/downloads/wisewoman/tools/Illinois_WISEWOMAN_Evaluation_Report.pdf.

Fahs, P.S., Grabo, T.N., James, G.D., Neff-Smith, M., & Spencer, G.A. (2001). A comparison of the cardiovascular risks of rural, suburban, and urban women. *Journal of Rural Nursing and Health Care.* Retrieved from http://www.researchgate.net/publication/267228750_A_COMPARISON_OF_THE_CARDIOVASCULAR_RISKS_OF_RURAL_SUBURBAN_*AND_URBAN_WOMEN*

Farrimond, H., Saukko, P. M., Qureshi, N., & Evans, P. H. (2010). Making sense of being at 'high risk' of coronary heart disease within primary prevention. *Psychology & Health*, 25(3), 289-304. doi:10.1080/08870440802499382

Fitzpatrick, A. L., Powe, N. R., Cooper, L. S., Ives, D. G., & Robbins, J. A. (2004). Barriers to health care access among the elderly and who perceives them. *American Journal of Public Health*, *94*(10), 1788-1794. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448535/

Fleury, J., & Lee, S. M. (2006). The Social Ecological Model and physical activity in African American women. *American Journal of Community Psychology*, *37,* 129-140

doi:10.1007/s10464-005-9002-7

Forrest, K. Z., Hannam, S. E., & Leeds, M. J. (2011). Prevalence of coronary heart disease and it’s associated risk factors in rural residents. *American Journal of Health Studies, 26(1),* 10-17. Retrieved from http://www.biomedsearch.com/article/Prevalence-heart-disease-its-associated/308741534.html

Frankel, R. M., & Devers, K. J. (2000). Study design in qualitative research: Developing questions and assessing resource needs. *Education for Health, 13 (2),* 251-261. doi:10.1080/13576280050074534 PMid: 14742087

Furey, S.; Strugnell, C.; & McIlveen, H. (2001). "An Investigation of the potential existence of "food desert" in rural and urban areas of Northern Ireland." *Agriculture and Human Values*. doi:10.1023/A: 1015218502547

Glanz, K., Rimer, B. K., & Lewis, F. M. (2002). Health behavior and health education: Theory, research and practice. 2002. San Francisco, Calif.: JosseyqBass.

Glasgow, R.E., Klesges, L.M., Dzewaltowski, D.A., Bull, S.S., & Estabrooks, P. (2008). The future of health behavior change research: What is needed to improve 110 translation of research into health promotion practice? *Annals of behavioral Medicine,* (27) 1, 3-12. doi:10.1207/s15324796abm2701_2

Gletsu, M., & Tovin, M. (2010). African American woman and physical activity. *Physical therapy reviews, 15*(5), 405-409. doi:/10.1179/1743288X10Y.0000000011

Goldstein, P., & Wiel, E. (2005). Management of prehospital thrombolytic therapy in ST segment elevation acute coronary syndrome (<12 hours). *Minerva Anestesiologica, 71*(6), 297-302. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15886591

Goraya, T. Y., Jacobsen, S. J., Kottke, T. E., Frye, R. L., Weston, S. A., & Roger, V. L. (2003). Coronary heart disease death and sudden cardiac death: a 20-year population-based study. *American journal of epidemiology*, 157 (9), 763-770. doi:10.1093/aje/kwg057

Groenewald T. (2004). A Phenomenological Research Design Illustrated. *International Journal of Qualitative Methods, 3*(1), 1-26. Retrieved from http://uir.unisa.ac.za/bitstream/handle/10500/2573/groenewald_IJQM.pdf?sequence=1

Grover, S. A., Ho, V., Lavoie, F., Coupal, L., Zowall, H., & Pilote, L. (2003). The importance of indirect costs in primary cardiovascular disease prevention: can we save lives and money with statins? *Archives of Internal Medicine, 163*(3), 333-339. Retrieved from http://archinte.jamanetwork.com/article.aspx?articleid=215059

Harkins, C., Shaw, R., Gillies, M., Sloan, H., MacIntyre, K., Scoular, A., & Findlay, I. N. (2010). Overcoming barriers to engaging socioeconomically disadvantaged populations in coronary heart disease primary prevention: A qualitative study. *BMC Public Health,* 10391-397. doi:10.1186/1471-2458-10-391

Hausauer, A. K., Keegan, T. H., Chang, E. T., Glaser, S. L., Howe, H., & Clarke, C. A. (2009). Recent trends in breast cancer incidence in US white women by county-level urban/rural and poverty status. *BMC medicine, 7*(1), 31. doi:10.1186/1741-7015-7-31

Healthy People (2010). *Heart disease and stroke.* Retrieved from http://www.healthypeople.gov/2010/Data/midcourse/html/default.htm#FocusAreas

Healthy People (2011). *2020 topics and objectives*. Retrieved from http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21

Henderson, K. A., & Ainsworth, B. E. (2000). Sociocultural perspectives on physical activity in the lives of older African American and American Indian women: a cross cultural activity participation study. *Women & Health, 31(1),* 1-20. doi:10.1300/J013v31n01_01PMid:11005217

Hill, M. N., & Sutton, B. S. (2000). *Barriers to hypertension care and control. Current Hypertension Reports, 2,* 445-450 doi:10.1007/s11906-000-0026-y

Holloway, I. (1997). *Basic concepts for qualitative research*. Oxford: Blackwell Science.

Horton, S., & Johnson, R. J. (2010). Improving Access to Health Care for Uninsured Elderly Patients. *Public Health Nursing, 27*(4), 362-370. doi:10.1111/j.1525-1446.2010.00866.x

Hosler, A. (2009). Retail food availability, obesity, and cigarette smoking rural communities. *The Journal of Rural Health: Official Journal of the American Rural Health Association and the National Rural Health Care Association*, *25*(2), 203-210.doi:10.1111/j.1748-0361.2009.00219.x

PMid: 19785588

.Humphries, D., & Krummel, D.A. (1999). Perceived susceptibility to cardiovascular disease and dietary intake in women. *American Journal of Health Behavior, 23*(4), 250-60.

doi:10.5993/AJHB.23.4.2

Hutch D., Bouye K., Skillen, E., Lee, C., Whitehead, L., & Rashid J. (2011). Potential strategies to eliminate built environment disparities for disadvantaged and vulnerable communities. *Journal Information, 101*(4).Vol. pg. 587-95.

doi:10.2105/AJPH.2009.173872.

Hycner R. H. (1999*). Some guidelines for the phenomenological analysis of interview data.* In Bryman A. & Burgess R. G. (Eds.), Qualitative research (Vol. 3, pp. 143–164). London, UK: Sage Publications.

Illinois Department of Public Health. (2011). *Illinois heart disease and prevention program.* Retrieved from www.Idph.state.il.us/heartstroke/heartattack_fs.htm

Illinois Department of Public Health. (2011). *Illinois WISEWOMAN Program.* Retrieved from http://www.idph.state.il.us/about/womenshealth/wise.htm

Jackson, A. M., McKinstry, B., Gregory, S., Stone, J., Kovacs, A., & Doherty, S. (2011). The influence of significant others upon participation in cardiac rehabilitation and coronary heart disease self-help groups. *International Journal of Therapy & Rehabilitation, 18(8),* 450-461.doi:10.12968/ijtr.2011.18.8.450

Kaplan, G. A., & Keil, J. E. (1993). Socioeconomic factors and cardiovascular disease: a review of the literature. Circulation, *88*(4), 1973-1998. doi:10.1001/jama.1993.03500240084031.

Kimbrough, J.B. (2007). Health literacy as a contributor to immigrant health disparities. *Journal of Health Disparities, Research and Practice, 1, 93-106*. Retrieved from http://digitalscholarship.unlv.edu/jhdrp/vol1/iss2/6

Klassen, A. C., Smith, K. C., Shariff-Marco, S., & Juon, H. (2008). A healthy mistrust: How worldview relates to attitudes about breast cancer screening in a cross-sectional survey of low-income women. *International Journal for Equity in Health*, *7(5),* 1-19. doi:10.1186/1475-9276-7-

Larson N., Story M., & Nelson M. (2009). Neighborhood Environments Disparities in Access to Healthy Foods in the U. S. American journal of preventive medicine, 36(1), 74-81.doi:10.1016/j.amepre.2008.09.025

Lefler, L. L. & Bondy, K. N. (2004). Women's delay in seeking treatment with myocardial infarction. A meta-synthesis. *Journal of Cardiovascular Nursing, 19*(4), 251-268. doi:10.1111/j.0889-7204.2005.04447.x

Lewis-Moss, R. K., Paschal, A., Sly, J., Roberts, S., & Wernick, S. (2009). Assessing the health knowledge, attitudes, and behaviors of Midwestern African American adolescents. *American Journal of Health Studies*, 24(1). Retrieved from http://webs.wichita.edu/depttools/depttoolsmemberfiles/psychology/Laboratories/Lewis%20Moss/assessingthehealthknowledgepaper.pdf

Lin, G., Dudley, R. R., & Redberg, R. (2008). Why physicians favor use of percutaneous coronary intervention to medical therapy: A focus group study. JGIM: *Journal of General Internal Medicine, 23(9),* 1458-1463. doi:10.1007/s11606-008-0706-x

Lipsky, S., Bohnen, M. & Barnhart, J. (2010). The impact of sociodemographic factors on knowledge of cardiac procedures. Psychology, 1, 229-232. doi:10.4236/psych.2010.14030.

Lutfiyya, M., Cumba, M. T., McCullough, J., Barlow, E., & Lipsky, M. S. (2008). Disparities in adult African American women's knowledge of heart attack and stroke symptomatology: An analysis of 2003-2005 behavioral risk factors surveillance survey data. *Journal of Women's Health*, *17, 805-813.* doi:10.1089/jwh.2007.0599

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd Ed.). Thousand Oaks, CA: Sage Publications.

McKenzie C. & Skelly A.H. (2010). Perceptions of coronary CHD risk in African American Women 20 with type 2 diabetes: A qualitative study. *Diabetes educator, 36 (5),* pp. 766- 773. doi:10.1177/0145721710374652.

Med. Losina, E., Walensky, R., Reichmann, W., Holt, H., Gerlovin, H., Solomon, D., & Katz, J. (2011). Impact of obesity and knee osteoarthritis on morbidity and mortality in older Americans. 18. *Annals of Internal Medicine, 154(4),* 217-226. doi:10.7326/0003-4819-154-4-201102150-00001

Mini-o, A. M., Xu, J., Kochanek, K. D., & Tejada-Vera, B. (2009). Death in the United States, 2007. *NCHS data brief,* (26), *1*. Retrieved from http://www.cdc.gov/nchs/data/databriefs/db26.pdf

Molloy, G. J., Perkins-Porras, L., Strike, P. C., & Steptoe, A. (2008). Social networks and partner stress as predictors of adherence to medication, rehabilitation attendance, and quality of life following acute coronary syndrome. *Health Psychology*, *27*(1), 52-58. doi:10.1037/02786133.27.1.52

Morland, K., Wing, S., Diez-Roux, A., & Poole, C. (2002). Neighborhood characteristics associated with the location of food stores and food service places. *American Journal of Preventive Medicine*, *22*, 23–29. doi:10.1016/S0749-3797(01)00403-2

Moulton, S. (2009). Hypertension in Africa Americans and its related chronic disease. *Journal of Cultural Diversity*. Retrieved from http://www.ncib.nlm.gov/pubmed?term=moulton.

Moustakas, C. (1994). *Phenomenology research methods.* Thousand Oaks. CA: Sage Publications.

National Cancer Institute (2008). National Cancer Institute. Retrieved from http://www.cancer.gov/

National Center for Health Statistics (2012). Summary of health statistic for U.S. adults: National health interview survey 2012. Retrieved from http://www.cdc.gov/nchs/data/series/sr_10/sr10_260.pdf

National Conference of State Legislatures (2014). *Obesity statistics in the United States.* Retrieved from http://www.ncsl.org/default.aspx?tabid=14367#Rates

National Heart Lung and Blood Institute (2014*). How can coronary heart disease be prevented or delayed?* Retrieved from http://www.nhlbi.nih.gov/health/health-topics/topics/cad/prevention.html

National Institutes of Health (2011). NIH: *Turning discovery into health*. Retrieved from http://www.nih.gov/about/discovery/chronicdiseases/cardio.htm

National Network of Libraries of Medicine (2011). *Health Literacy*. Retrieved from http://nnlm.gov/outreach/consumer/hlthlit.html

Obesity Action Coalition (2011). *Understanding obesity*. Retrieved from http://www.obesityaction.org/understanding-obesity

Office of Minority Health (2014*). Heart disease and African Americans*. Retrieved from http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=19

Patel, A.I., Bogart, L.M., Uyeda, K.E., Martinez, H., Knizewski, R., Ryan, G. W., & Schuster, M. A. (2009). School site visits for community-based participatory research on healthy eating. *American journal of preventive medicine, 37(6), S300-S306.* doi.org/10.1016/j.amepre.2009.08.009

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.) Thousand Oaks, CA: Sage Publications.

Pearson, T. (2010). Cardiovascular risk in minority and underserved women in Appalachian 210-216. doi:10.1111/j.1745-7599.2010.00495.x

Petticrew, M. P., & Lee, K. (2011). The "Father of Stress" Meets "Big Tobacco": Hans Selye and 50. The Tobacco Industry. *American Journal of Public Health*, *101*(3), 411-418. PMid: 20466961 PMCid: PMC3036703 doi:10.2105/AJPH.2009.177634.

Pimenta, E., Gaddam, K.K., Oparil, S., Aban, I., Husain, S., & Dell'Italia, L.J. (2009). Effects of dietary sodium reduction on blood pressure in subjects with resistant hypertension. Hypertension, 54, 475. doi.org/10.1161/HYPERTENSIONAHA.109.131235

Ploeg, M. (2010). Access to affordable, nutritious food is limited in "Food Deserts." *Amber Waves: The economics of food, farming, Natural Resources, & Rural America, 8*(1), 20-27. Retrieved from http://ageconsearch.umn.edu/bitstream/122142/2/02FoodDeserts.pdf

Plowden, K. O., & Young, A. (2003). Sociostructural factors influencing health behaviors of urban African Americans men. *Journal of National Black Nurses Association, 14,* 45-50. PMid: 15259998. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15259998

Prochaska, J. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. Treating addictive behaviors. *Applied Clinical Psychology Volume 13.* 3-27 doi:10.1007/978-1-4613-2191-0_1

Ratner, P. A., Tzianetas, R., Tu, A., Johnson, J. L., Mackay, M., Buller, C. E. et al. (2006). Myocardial infarction symptom recognition by the lay public: The role of gender and ethnicity. *Journal of Epidemiology and Community Health,* 60, 606-615. doi:10.1136/jech.2005.037952 PMid: 16790833

Reinier, K., Thomas, E., Andrusiek, D., Aufderheide, T., Brooks, S., Callaway, C., & Chugh, S. (2011). Socioeconomic status and incidence of sudden cardiac arrest. CMAJ: *Canadian Medical Association Journal = Journal De L 'association Medicale Canadienne, 183(15),* 1705-1712. doi:10.1503/cmaj.101512

Richardson, L. (2010). Access to health and health care: How race and ethnicity matter. *Mount Sinai Journal of Medicine*. *77:166-177*. doi:10.1002/msj.20174

Robinson, T. (2008). Applying the Socio-ecological Model to improving fruits and vegetable intake among low-income African Americans. *J Community Health. 2008 Dec; 33*(6):395-406. doi:10.1007/s10900-008-9109-5.

Roof, K., & Oleru, N. (2008). Public health: Seattle and King County's push for the built environment. *Journal of environmental health*, *71*(1), 24-27. Retrieved from https://www.neha.org/pdf/land_use_planning/JEH_JulAug_08_Seattle.pdf

Rosamond, W., Flegal, K., Friday, G., Furie, K., Go, A., & Greenlund, K (2008). *Coronary heart disease and stroke statistics -2007 update:* A report from the American 158 Heart Association statistics committee and stroke statistics subcommittee. *Circulation Journal of the American Heart Association, 115*(5)*, e* 69-171. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/18086926 Retrieved from doi:10.1177/1097184X04268798

Royster M, Richmond A, Margolis L, Eng E. Hey brother how's your health? A focus group analysis of the health and health related concerns of African American men in a southern city in the United States. Men and Masculinities. 2006; 8(4):389–404. Retrieved from doi:10.1177/1097184X04268798

Ryan, G. & Bernard, R. (2003). Techniques to Identify Themes. Field Methods. Sage Publications. *Vol. 15, No. 1* doi:10.1177/1525822X02239569

Sallar, A.M., Williams, P. B., Omishakin, A.M., & Llyod, D.P. (2010) Stroke prevention: Awareness of risk factors for stroke among African American Residents in the Mississippi delta region. *Journal of the National Medical Association.* Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/20191920

Sharkey, J.; Johnson, C.; & Dean, W. (2010). Food access and perceptions of the community and household food environment as correlates of fruit and vegetable intake among rural seniors. doi:10.1186/1471-2318-10-32

Shaw, S. J., Huebner, C., Armin, J., Orzech, K., & Vivian, J. (2009). The role of culture in health literacy and chronic disease screening and management. *Journal of Immigrant and Minority Health*, *11* (6), 460-7. doi:10.1007/s10903-008-9135-5

Schmid, T. L., Pratt, M., and Howze E. (1995). Policy as intervention: environmental and policy approaches to the prevention of cardiovascular disease. *American Journal of Public Health*. Vol. 85, No. 9, pp. 1207-1211. doi:10.2105/AJPH.85.9.1207

Smith-Spangler, C., Jusola, J., Enns, E., Owens, D., & Garber, A. (2010). Population strategies to decrease sodium intake and the burden of CVD: a cost-effectiveness analysis. *Annals of Internal Medicine. 152* (8), 481. doi:10.7326/0003-4819-152-8-201004200-00212

Sokolowski, R. (2000). Introduction to phenomenology. Cambridge, United Kingdom: Cambridge University Press.

Starks, H., & Trinidad, S. B., (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research, 17(10)*, 1372-1381. doi:10.1177/1049732307307031

Stokols, D. (1996). Translating Socioecological Theory into guidelines of community health promotion. *American Journal of Health Promotion. 10 (*4), 282-298. doi.org/10.4278/0890-1171-10.4.282

Story, K.M.; & Kaphingst. (2008). Creating healthy food and eating environments: policy and environmental approaches. *Annual Review of Public Health, 29* (2008), pp. 253-272. doi:10.1146/annurev.publhealth.29.020907.090926

Summer, B., & Sommer, R. (1997). *A practical guide to behavioral research*. Tools and techniques (4th ed.). Oxford, England: Oxford University Press.

Taylor-Robinson, D., Milton, B., Lloyd-Williams, F., O'Flaherty, M., & Capewell, S. (2008). Policy-makers' attitudes to decision support models for coronary heart disease: a qualitative study. *Journal of Health Services Research & Policy*, *13*(4), 209-214. doi:10.1258/jhsrp.2008.008045

The Heart Foundation (2014). *Coronary heart disease facts*. Retrieved from http://www.theheartfoundation.org/heart-disease-facts/heart-disease-statistics/

Thomas, B. J. (2010). Food deserts and the sociology of space: Distance to food retailers and food insecurity in an urban American neighborhood. *World Academy of Science Engineering & Technology*, 6719-28. Retrieved from http://www.waset.org/publications/10864

Toloie-Eshlaghy, A., Chitsaz, S., Karimian, L., & Charkhchi, R. (2011). A classification of qualitative research methods. *Research Journal of International Studies*, *20,* 106-123. Retrieved from http://www.researchgate.net/publication/265206600_A_Classification_of_Qualitative_Research_Methods

Ulin, P.R., Robinson, E.T., & Tolley, E.E. (2005). *Qualitative methods in public health; A field guide for applied research*. San Francisco: Jossey-Bass.

United States Census Bureau (2014). *State and County Quick facts*. Retrieved from http://quickfacts.census.gov/qfd/states/17/17031.html

U.S. Department of Agriculture (2011). *Dietary guidelines for Americans.* Retrieved on January 1, 2012 from www.cnpp.usda.gov/DietaryGuidelines.htm

U.S. Department of Agriculture (2012). *Characteristics and influential factors of food desert.* Retrieved from http://www.ers.usda.gov/media/883903/err140.pdf

U. S. Department of Health and Human Services (2010). *Office of Women's Health. Minority Women's Health*. Retrieved from http://www.womenshealth.gov/minority-health/latinas/heart-disease.html

U.S. Department of Health and Human Services: *Healthy People* (2011a). Retrieved from http://www.healthypeople.gov/2020/topicsobjectives2020/default

U.S. Department of Health and Human Services (2011b). The Health Consequences of Involuntary Exposure to Tobacco Smoke: *A Report of the Surgeon General. Rockville, MD: Office of the Surgeon General, Public Health Service*. Retrieved from http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf

U.S. Department of Human Services: *U.S Drug and Food Administration* (2011c). Retrieved from http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm199058.htm

Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy.* Ontario, Canada. Suny Press.

Vander Weg, M. W., Cunningham, C. L., Howren, M. B., & Cai, X. (2011). Tobacco use and exposure in rural areas: Findings from the Behavioral Risk Factor Surveillance System. *Addictive behaviors, 36* (3), 231-236. doi:10.1016/j.addbeh.2010.11.005

Villablanca, A. C.; Beckett, L. A.; Li, Y.; Leatherwood, S.; Gill, S. K.; Giardina, E. V.; & D'Onofrio, G. (2010). Outcomes of Comprehensive Heart Care Programs in High-Risk Women. *Journal of Women's Health (15409996), 19* (7), 1313-1325. doi:10.1089/jwh.2009.1426

White, S., Bissell, P., & Anderson, C. (2010). Patients' perspectives on cardiac rehabilitation, lifestyle change and taking medicines: Implications for service development. *Journal of Health Services Research & Policy, 15* (suppl 2), 47-53. doi:10.1258/jhsrp.2009.009103

White, S. S., Bissell, P. P., & Anderson, C. C. (2011). A qualitative study of cardiac rehabilitation patients' perspectives on making dietary changes. *Journal of Human Nutrition & Dietetics*, *24*(2), 122-127. doi:10.1111/j.1365-277X.2010.01136.x

Williams, David R. & Collins, Chiquita (1995). “US Socioeconomic and racial differences in health”. *Annual Review of Sociology*. doi:10.1146/annurev.so.21.080195.002025

Williams, D. R., & Jackson, P. B. (2005). Social sources of racial disparities in health. *Health Affairs*, *24*(2), 325-334. doi:10.1377/hlthaff.24.2.325

Wiltshire, J. C., Person, S. D., Kiefe, C. I., & Allison, J. J. (2009). Disentangling the influence of socioeconomic status on differences between African American and White women in unmet medical needs. *American journal of public health, 99* (9), 1659. doi:10.2105/AJPH.2008.154088

Winham, D. M., & Jones, K. M. (2011). Knowledge of young African American adults about heart disease: a cross-sectional survey. *BMC Public Health*, *11*(1), 248-258. doi:10.1186/1471-2458-11-248

Weitzman, E. & Miles, M. (1995). *Computer Programs for Qualitative Data Analysis: An Expanded Sourcebook.* 2nd edition. Thousand Oaks, California: Sage Publications.

Wolff, T.; Miller, T.; & Ko, S. (March 2009). Aspirin for the primary prevention of cardiovascular events. Retrieved from http://www.uspreventiveservicestaskforce.org/uspstf09/aspirincvd/aspcvdart.htm

World Health Organization (2009). Global health risks: Mortality and burden of disease attributes to selected major risks. Retrieved from www/who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf

World Heart Federation (2014). Cardiovascular disease risk factors. Retrieved from http://www.world-heart-federation.org/cardiovascular-health/cardiovascular-disease-risk-factors/

Wyatt, S., Akylbekova, E., Wofford, M.., Coady, S., Walker, E., & Andrew, M. (2008). Prevalence, awareness, treatment, and control of hypertension in the Jackson. Heart Study. Hypertension, 51(3), 650-656. doi:10.1161/HYPERTENSIONAHA.107.100081

Zenk, S., Schultz, A., Israel, B., James, S., Bao, S., & Wilson, M. (2005). Neighborhood racial composition, neighborhood poverty, and the spatial accessibility of supermarkets in metropolitan Detroit. *American Journal of Public Health*, *Vol (95)*, 660-667. doi:10.2105/AJPH.2004.042150

Appendix A: Research Seeking Participants

RESEARCH SEEKING PARTICIPANTS!!!

Would you like to take part in a study about income and living conditions contributing to CHD in African American Women?

(Residing in Cook County of Illinois: North side, Southside, Westside, or the Suburban areas)

There is a need to improve the quality of health for AAW. Many studies and statistics have shown that AAW experience a higher incidence of coronary CHD compared to other racial groups. This study is seeking twelve AAW ages between ages 21 -55 years old, who have had some form of CHD condition for at least six months or longer, and are willing to participate in an interview session to share their experiences related to CHD. A pilot study will be conducted prior to the actual study with two of the women to determine whether the participants will understand the questionnaire and the interview questions as meant to be implied by the researcher. An appointment will be scheduled with the first twelve women who respond to the flyer to fill out the Consent Form, however if the individual do not meet the prescreening criteria she will not be scheduled an appointment. Qualified women will be required to complete a survey questionnaire about 15 minutes and participate in the interview session between 60-90 minutes the same day at a public library. If you are interested and would like further information, please contact Lola Sholanke at (***) ***-**** or funmilola.sholanke@waldenu.edu.

Appendix B: Consent Form

CONSENT TO PARTICIPATE IN A PILOT STUDY

You are invited to take part in a pilot study to determine if certain environmental factors, socioeconomic status, and cultural values together contribute to the higher incidence of coronary CHD in AAW. The purpose of the pilot study is to determine if the study participants can understand the survey questionnaire and interview questions as they are meant to appear for the actual study. This study is being conducted by Funmilola Sholanke, a doctoral student at Walden University in fulfillment of the requirements of the degree of doctor of Philosophy in Public Policy and Administration. You may already know the researcher as a Human Services Caseworker but this is separate from that role.

The researcher is inviting two women between the ages of 21-55 years old, African American and who reside in Cook County, Illinois. These two participants should have been diagnosed with some form of CHD condition within six months or longer. This form is part of a process called "informed consent" to allow you to understand the pilot study before deciding whether to take part. The two women will only be required to complete a brief survey no more than fifteen minutes and participate in an interview session which will be between 60-90 minutes. The survey questionnaire and the interview questions will be administered in a location convenient for the participants such as a public library. The responses to the questions will be used to determine if the survey and interview questions will be best suited to answer the research questions and conduct the actual study.

Principal Researcher:
Funmilola Sholanke

Procedures:

If you agree to participate in this study, you will be asked to:

- Participate in an interview session that will be no more than 90 minutes.
- Complete a socioeconomic survey questionnaire no more than 15 minutes.
- Consent to tape-recording of the interview session.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any results or reports of the study.

Compensation:

A token of appreciation will be given to all study participants. $10 will be given to cover transportation expense to each participant regardless of whether she completes the pilot of each instrument.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me via telephone at ***-***-****- or email at funmilola.sholanke@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with.

Statement of Consent:

____You have read the above information and I feel I understand the study well enough to make a decision about my involvement.

Date of Consent

____

Printed Name of Participant

____

Participant's signature

____

Researcher's signature

____

Appendix C: Consent to Participate in a Research Study

For
Perceived Factors Contributing to Coronary Heart Disease in African American Women

You are invited to take part in a research study on determining certain environmental and socioeconomic factors, and cultural values that together contribute to the higher incidence of coronary CHD in African American. The researcher is inviting ten women between the ages of 21- 55 years old who are African American, reside in Cook County, Illinois, and have been diagnosed with some form of CHD condition at least six months or longer. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part. This study is being conducted by Funmilola Sholanke, a doctoral student at Walden University in fulfillment of the requirements of the degree of doctor of Philosophy in Public Policy and Administration. You may already know the researcher as a Human Services Caseworker but this is separate from that role.

Principal Researcher:
Funmilola Sholanke
Funmilola.Sholanke@waldenu.edu

Procedures:

If you agree to participate in this study, you will be asked to:

- Participate in an interview session that will be no more than 60 minutes.
- Respond to questions regarding your CHD experience.
- Complete a socioeconomic survey questionnaire no more than 10 minutes.
- Consent to tape-recording of the interview session.

Here are some sample questions:

1. What does ''health'' mean to you?

2. Do you think you eat enough fruits and vegetables? Why or why not? How many do you consume daily?

3. How far is the nearest grocery store to your home?

4. Do you have access to parks, trails, and playgrounds within your community for biking, walking, and other physical activities?

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. If you decide to join the study now, you can still change your mind later. If you feel stressed during the study, you may stop at any time. You may skip any questions that you feel are too personal.

Possible Risks and Safeguards:

The study is designed to minimize as much as possible any potential physical, psychological, and social risks to you. Although, there may some risks in a research study, you are entitled to know of these risks prior to providing your consent to participate, as well as safeguards to be initiated by those who conduct the research to minimize the risks.

You understand that:

[1] The principal researcher will be the only one to know your identity and there will be no identifying information on the audiotape, in the transcript of the interview, or result summary. No one will be aware that you have participated in the study.

[2] Your responses to the questions will be coded and there will be no identifiers, such as names, addresses, employers, and related information, which might be used to identify you.

[3] The consent form will be kept separate from the data you provide, in a secured locked cabinet for five years, known only to the researcher after which it will be destroyed. Documents will also be secured through the use of protected hard drive software, which will only be available to the researcher.

[4] Data transcribed in the form of the database to be used for analysis, will be kept confidential for future research.

[5] You have the right to refuse to answer any questions asked of you.

[6] This study is voluntary. You have the right to withdraw from participation at any time for any reason without stating your reason.

[7] You have the right to participate without prejudice on the part of the principal researcher.

[8] By your consent, you understand that you are required to notify the principal researcher at any time of any serious emotional upset that may cause you to seek therapy for this upset.

[9] You will receive a copy of this signed consent form for your records.

Benefits:

You understand that your participation in this study may have possible and potential benefits.

[1] You may obtain a greater personal awareness, knowledge, and understanding of yourself, environment, and living conditions that together influence your health outcome.

[2] Through future communications and possible applications of the findings of the research, your participation may indirectly contribute to the future benefits to others with CHD condition.

[3] Your participation may enable the principal researcher and others working in the topic area to contribute to existing literature and to the body of knowledge of the effects of the environment and socioeconomic status on the increase of coronary CHD. In addition, contribute to the enhancement of social change through the development of intervention programs and environmental policies.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any results or reports of the study.

Compensation:

A token of appreciation will be given to all study participants. $10 will be given to cover transportation expense to each participant regardless of whether you complete the pilot of each instrument.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me via telephone at 708-xxx-xxxx or email at funmilola.sholanke@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University’s approval number for this study is **01-03-14-0194320** and it expires on January 2, 2015.

The researcher will give you a copy of this form to keep.

Summary Report:

Upon conclusion of this study, a summary report of the general findings will become available and will be sent to all study participants. Please provide the address to which you would like it sent (your postal address). Do not write your name; please only provide your address:

[--Postal address or email----]

____

__________ [--City, County, zip----]

Statement of Consent:

_____You have read the above information and feel you understand the study well enough to make a decision about your involvement.

Date of Consent ____

Printed Name of Participant ____

Participant's signature ____

Researcher's signature ____

Appendix D: Socioeconomic Survey Questionnaire

1. What is your age?

    a. (a)___________

2. What is your current marital status?

    a. Married _____

    b. Single _____

    c. Divorced _____

    d. Widowed _____

    e. Separated _____

3. Do you have children? If so, how many do you have?

    a. (a) Yes______
    b. (b) No ______
    c. Number of Children_____

4. Which of the following describes your highest level of educational attainment?

    a. (a) Less than high school ______
    b. (b) High school or G.E.D. ______
    c. (c) Some college ______
    d. (d) Associate Degree ______
    e. (e) Bachelor's Degree ______
    f. (f) Post Graduate Degree ______

5. What is your employment status?

  a. (a) Employed full-time _____
  b. (b) Employed part-time _____
  c. (c) Unemployed _____
  d. (d) Other, please specify ___________________

6. If you are presently not working, did you ever work before?
   (a) No
   (b) Yes
   When did you stop working? ________

7. How many months during the past five years were you without work?
   (a) Altogether_________
   (b) Does not apply

8. What is your present occupational position or (if no longer working) was your last position?

   a. Laborer
   b. Self-employed
   c. Employee
   d. Civil servant
   e. Other
   f. Does not apply

9. What is your annual household income before taxes?

   a. under $20,000 ______

   b. $20,000 - $30,000 ______

   c. $30,000 - $35,000 ______

   d. $35,001 - $40,000 ______

e. $40,001 - $50,000 ______

f. $50,001 - $60,000 ______

g. $60,001 - $75,000 ______

h. $75,001 or above ______

10. What type of health insurance coverage do you have?

11. How often do you go for medical checkup?

a. (a) Once a year ______
b. (b) Every six months ______
c. (c) Every three months ______
d. (d) Only when you feel sick ______

12. What city do you live in and how long have you lived there?

a. City:____________________, # of years _________

13. Are you an African American female?

i. Yes_________ No__________

14. With whom do you most often socialize?

1. (a) Family ______
2. (b) Friends ______
3. (c) Church Members ______
4. (d) Co-Workers ______
(e) Neighbors ______

15. How often do you attend church per year

    1. (a) Once a year ______
    2. (b) Twice a year ______
    3. (c) Monthly ______
    4. (d) Weekly ______
    5.

16. What type of air pollution (carbon dioxide, mould, smog, or

    a. wood smoke) have you been exposed to as a child or an adult?

17. How often do you eat fry food?

    a. Daily
    b. At least four times a week
    c. Twice a week

18. How far is the closet grocery store to your home?

    a. ____

19. Are there are any recreational facilities in your community?

    How often do you exercise?

    a. (a) At least once per week _____
    b. (b) At least between two to three times per week _____
    c. (c) At least four to six times per week _____
    d. (e) Daily _____

20. Is there public transportation available in your community?

Appendix E: Interview Protocol

INTERVIEW PROTOCOL

For

Perceived Factors Contributing to Coronary Heart Disease in AAW

Interviewee: Funmilola Sholanke

Location: ____

Date:_____________________________Begin Time:_________End Time:_____________

Part I

This phenomenological study will assess and understand through the obtaining of information from key participants to determine if certain environmental, social economic factors and cultural beliefs contribute to the development of coronary CHD in AAW in urban areas. Secondly, study participants will explain in details their personal experiences as it relates to their living conditions, financial status, and way of thinking that together may influence and contribute to their CHD illness. Lastly, the Socio-ecological approach implemented will help with understanding the levels social and governmental influence and its impact on health outcomes and disparities in this population group.

Part II.

Questions:

Cultural Beliefs and Values

1. Could you give me a brief history of your CHD condition from when you were first diagnosed of the illness?

2. How would you describe your health?

3. What does the term ‘illness’ mean to you? How do you define it?

4. What were your first thoughts and reactions when you began to experience

these symptoms?

5. How does your CHD condition affect your everyday life?

prompt: work, interests, and relationship

6. How do you think close relatives perceive you after your been diagnosed?

prompt: members of your family, friends? Change

7. Did your spirituality influence your lifestyle choices and seeking medical treatment? How so?

8. What are your thoughts about your future health and wellbeing?

9. What are your perceptions and views regarding the health care service you receive?

10. Has having CHD condition made a difference to how you see yourself? How would you say you have changed?

Socioeconomic Status

1. During the time that you experienced your CHD symptoms, what influence, if any, did your insurance status at that time have on you receiving treatment?

2. During the time that you experienced CHD symptoms, what influence, if

   any, did your financial or employment status at that time have on you receiving treatment? Where you concerned if going to the hospital or possibly being hospitalized might negatively affect your employment or financial situation?

3. During the time that you experienced CHD symptoms, what influence, if any, did your transportation status (having or not having a vehicle) have on you on receiving treatment?

Environmental Factors

1. What do you do to maintain your CHD condition?
2. On a day-to-day basis, describe your typical daily meal intake?
3. Please describe your neighborhood?
4. What type of grocery stores do you have in your community and how far are they from your home?
5. How will you explain safety within your community?
6. Are there any outdoor recreational facilities in your community? Describe your experience using the outdoor recreational facilities available in your community?

Appendix F: Local Community Counseling Services

External Factors Contributing to Coronary Heart Disease in African American Women

This phenomenological study in understanding the systems and environmental effects on Coronary CHD in AAW is designed to minimize as much as possible any potential physical, psychological, and social risks to you. Although, there may be some risks in a research study, you are entitled to receive a list of low or no cost local area counseling services available to any study participant who may need to seek a professional counseling organization. Below are lists of local counseling services you may contact.

1. Metropolitan Family Services
   3062 E 91st St
   Chicago, IL.
   (773) 371-2900

2. Student Counseling Service
   5737 S University Ave
   Chicago, IL.
   (773) 702-9800

3. Drexel Counseling Inc.
   936 E 93rd St
   Chicago, IL.
   (773) 731-5395

CURRICULUM VITAE

Funmilola Sholanke

Chicago, Illinois

EDUCATION

- Doctor of Philosophy in Public Policy and Administration, Walden University. Dissertation: Perceived Factors Contributing to Coronary Heart Disease in African American Women.
- Master of Science in Public Administration, Governors State University, conferred April, 2006.
- Bachelor of Science in Business Management, Emphasis in Human Resources, Northern Illinois University, conferred December 2002.

PROFESSIONAL EXPERIENCE

MANAGEMENT OPERATIONS ANALYST II

ILLINOIS DEPARTMENT OF HUMAN SERVICES - DIVISION OF MENTAL HEALTH – CHICAGO, IL
APRIL 2014 - PRESENT

- Generates Access and Excel files for use in clinical review teams (CRT) reviews for specified Department of Mental Health hospitals.
- Writing queries, analyzing data, creating cohesive succinct reports.
- Imports data collected by CRT into existing CRT data base.
- Generates reports looking at length of stay by various demographic and system variables including length of stay, admissions, discharges, units, diagnosis, and other variables in the CRT data base.
- Preparing study plans; documenting results; creating surveys, reports, charts and graphs; and preparing and presenting formal and informal briefings to staff, supervisors and senior level management.
- Updating Information on Initial Forensic Placement Evaluation Received from the Forensic Coordinators at the Mental Health Hospitals.
- Works with quality improvement department and hospital administration to create a database to track important performance indicators.
- Develops a usable data base to track and analyze deaths and recommendations regarding the DHS mortality review board.
- Develops knowledge of data elements in clinical reporting system/mainframe.
- Completes and disseminates weekly forensic reports including the recipient status report, Cook only recipient status report, and critical waiting list report.

- Technical expertise, experience and knowledge of both hardware and software including Microsoft Windows Operating Systems, Microsoft Office Applications (Access, Excel, PowerPoint, Outlook, and Word), printers, scanners.
- Usable work products are generated within time lines of request.
- Ensures that all electronic data obtained and produced by the office is kept confidential as required.

HUMAN SERVICES CASEWORKER
ILLINOIS DEPARTMENT OF HUMAN SEVICES – FAMILY COMMUNITY RESOURCE CENTER – CHICAGO, IL
JUNE 2007- MARCH 2014

- Under direction of a Human Services Casework Manager, performed professional casework activities in provided public assistance services available from DHS as well as auxiliary state, local and federal programs.
- Explained eligibility criteria and requirements for public assistance programs.
- Collected client's data and determined eligibility.
- Discussed applicant goals and participation levels.
- Assessed client's skills and evaluated client's ability to obtain and retain employment.
- Identified appropriate referrals to client for other DHS programs, state services, or local private services to ensure applicant received available benefits.

SUBSTITUTE TEACHER
COUNTRY CLUB HILLS SCHOOL DISTRICT #160 – COUNTRY CLUB HILLS, IL
JANUARY 2007- MAY 2007

- Maintained and respected confidentiality of students and school personnel information.
- Maintained discipline and classroom control that fosters a safe and positive environment for all students and staff in accordance with school and county policies.
- Ensured the adequate supervision to assure health, welfare, and safety of all students.
- Took all necessary and reasonable precautions to protect students, equipment, materials, and facilities.
- Reported to office upon arrival at school; check mailbox of absent teacher for materials requiring immediate attention; requests clarification of school rules and procedures in necessary.

LEARNING CENTER COORDINATOR
YMCA NORTH LAWNDALE- CHICAGO, IL
JUNE 2005- FEBURARY 2007

- Conducted classes in basic and intermediate computer applications for both adults and children.
- Tutored school age high-risk children on homework assignments.
- Recruited and supervised volunteers to staff the computer center during hours of operation.
- Maintained the Life Long Technology Center (LLTC) workstations.
- Installed application programs to accommodate specific training goals and objectives.
- Troubleshoot problems with computer hardware and software, lab networking, and printers.
- Assigned username and passwords to program participants.
- Planned, coordinated, and executed outreach activities (i.e. open house and orientations) to promote the Learning Center Services to the North Lawndale community members.
- Worked on special projects as needed.

PUBLIC ADMINSTRATION INTERN
YMCA NETWORK
AUGUST 2004 – APRIL 2005

- Assisted Business manager with conducting community outreach activities and maintaining effective community relations.
- Assisted Business Manager with management and coordination of grant funds.
- Assisted with various telephone and email inquiries by retrieving telephone messages and email while returning routine phone calls and email.
- Assisted with pre-screening applicants and with interviewing candidates.
- Provided assistance at department events such as job fairs and fundraising events.
- Provided administrative support to Business manager such as data entry, word processing, copying, and filing.

ADMISSIONS REPRESENTATIVE
NORTHWESTRN BUSINESS COLLEGE
APRIL 2003 - FEBRUARY 2004

- Created file and documentation for accurate information for each admitted student.
- Generated correspondence reports and prepared Power point presentation for new students.
- Interviewed and recruited prospective students for school enrollment.
- Scheduled classes and assisted with the financial aid process for admitted students.
- Ensured class retention for first quarter for new admitted students.

- Acquired strong interpersonal communication skills both oral and written including proofreading skills.
- Performed general office duties such as faxing, emailing, photocopying, and filing.

SKILLS

Technical expertise, experience and knowledge of both hardware and software including Microsoft Windows Operating Systems, Microsoft Office Applications (Access, Excel, PowerPoint, Outlook, and Word), printers, scanners.
Interviewing Skills, Database management.
Strong oral and written communication skills.