Walden University

College of Health Sciences and Public Policy

This is to certify that the doctoral dissertation by

Shurnett Arnella Barrett

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. David Segal, Committee Chairperson, Public Health Faculty
Dr. Michael Schwab, Committee Member, Public Health Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2023

Abstract

Lived Experiences Involving Self-Efficacy Among African American Women Receiving Cardiac Peer Support

by

Shurnett Arnella Barrett

MPH, Walden University, 2008

BAS, York University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

August 2023

Abstract

Cardiovascular disease (CVD) is the leading cause of death among African American (AA) women in the United States. While there have been advances and more widespread use of peer-to-peer (P2P) support strategies to improve self-management skills among CVD patients, these approaches have not affected AA women, who continue to die from heart disease at significantly high rates. The purpose of this study was to examine real-life experiences of AA women with hypertensive heart disease who receive P2P support and the effect of that support on self-efficacy and cardiac health. The health belief model and social cognitive learning theory were the theoretical framework for the study. A qualitative phenomenological approach with semi-structured recorded video conference interviews was used to explore lived experiences and perceptions of a purposeful sample of AA women between 20 and 61 with hypertensive heart disease who have participated in online peer support groups. Thematic analysis revealed AA women welcomed and appreciated P2P support groups, felt empowered due to benefits obtained from these groups, perceived a reduction in cardiac episodes and hospital admissions with the addition of P2P support, and received guidance from primary care providers that supplemented benefits from P2P support groups. These findings indicate that P2P support groups for AA women suffering from CVD may help improve their self-care management and lead to positive social change for this population. Recommendations include more P2P support, both in person and online formats, with guidance from primary care and mental health providers to positively affect lives of AA women afflicted with CVD.

Lived Experiences Involving Self-Efficacy Among African American Women Receiving Cardiac Peer Support

by

Shurnett Arnella Barrett

MPH, Walden University, 2008

BAS, York University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

August 2023

Dedication

I dedicate this dissertation to my family and close friends. Your unconditional love, support, and patience throughout this long journey have meant the world to me. Your belief in my abilities was unwavering and helped to push me towards completion, even when I had many doubtful moments. I am most grateful for your support. To my siblings and close friends who were always there to listen, prayed constantly, and lifted me when I most needed it. Thanks for helping me toward the finish line. To my parents, Carmel and Bradley Bent, who remained prayerful, supportive, and encouraging throughout my journey, which I can report is now complete. Most importantly, I give all the Glory to God who kept me sane and safe with his grace and mercies. Thanks be to God.

Acknowledgments

I want to thank and acknowledge some exceptional individuals who have assisted toward the completion of my work. To Dr. David Segal, my dissertation Chairperson, I can't thank you enough for guiding me through the travails of this challenging qualitative research project. Your expertise, patience, and support were appreciated. To Dr. Michael Schwab, my committee member, thank you for your kindness, encouragement, and all your support, and expertise on a very long journey. Also, thanks to Dr. Schumaker, my URR, who provided valuable feedback and expertise for my scholarly journey and learning process. Thanks to everyone at Walden University who has assisted and guided me with this doctoral program. Your comments and feedback were greatly appreciated. I also wish to acknowledge my nursing and healthcare colleagues and mentors who provided support and encouragement in various forms during this journey. Lastly, to the participants, who volunteered their time and were willing to share their experiences and stories with heart disease and peer-to-peer support so graciously, thanks so much for your voices and contribution to this valuable research study.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Heart disease or cardiovascular disease (CVD) is a major cause of death for Americans, and the African American (AA) population is disproportionately affected by the disease (American Heart Association [AHA], 2023; Centers for Disease Control and Prevention [CDC], 2021, CDC, 2022). Specifically, AA women face disproportionately higher risk of death and disability due to heart disease compared to other groups (AHA, 2023; Carnethon et al., 2017; CDC, 2022). Hypertensive heart disease is a frequent complication among hypertensive African Americans because of inadequate high blood pressure control in this group (National Institutes for Health [NIH], 2021), which can lead to weakening and failure of the heart's function over time. Hypertensive heart disease refers to heart conditions caused by high blood pressure and includes heart failure, thickening of the heart muscle (cardiomyopathy), and coronary artery disease, (NIH, 2021). It is the leading cause of illness and death from high blood pressure (NIH, 2021), and AAs have the highest incidence and prevalence of high blood pressure and heart failure when compared with other races and ethnic groups. AAs also show the worst clinical outcomes with CVD and heart failure (NIH, 2021). The AHA (2019) reported cardiovascular (CV) diseases kill nearly 50,000 AA women annually, most over 20 years of age, and 49% of this population is afflicted and high blood pressure is a significant contributor to heart disease, which results in this population developing CVD earlier in life compared to Whites. Peer support can be further evaluated to determine its benefits in terms of developing the most effective means for optimal CV health care. More AA women die of heart disease than White women (20% more in 2017), as well as women from other racial/ethnic groups (CDC, 2020; Green, 2017). AA women in the U.S. also have the highest prevalence rate of hypertension (HTN) and are 60% more likely to have it than non-Hispanic whites (U.S. Department of Health and Human Services [DHHS], 2020), as well as higher rates of obesity (Abel et al., 2018), which is a significant contributor to higher risk and rates of CVD, organ damage, morbidity, and mortality.

Background of the Study

Peer support originates from the mental health consumer movement of the 1970s (Boothroyd & Fisher, 2010; Tang, 2013). It has grown in terms of its applications to chronic disease management and diseases such as diabetes, heart disease, cancer, asthma, and HIV/AIDS, as well as substance abuse, screening and prevention with cancer, infectious diseases, and in maternal and child health (breastfeeding, nutrition, post-partum depression Boothroyd & Fisher, 2010; Tang, 2013). CVD remains the top cause of death for both males and females in the U.S. Consumers can be educated and assisted in terms of their health and wellness, yet value of these varying resources may be uncertain and depend on individual interpretations, perceptions, and preferences (Singh et al., 2019). Studies done on other chronic diseases, such as diabetes, hypertension, and cancer, can be replicated to address heart disease as well as education, information sharing, social support, and health prevention strategies and interventions. AA women are at an increased risk for diabetes and heart disease. Many in this group are unaware of this high risk (CDC, 2022). Changes in terms of cardiac profiles (blood pressure, cholesterol, body mass index, diet, and physical activity) can drastically impact daily living and quality of life (Patil et al., 2018). Additional studies continue to be recommended to further understand effects of peer support interventions on high-risk CVD factors among adults with diabetes, which remains an ongoing high-risk complication for AA women.

This proposed qualitative research study with AA women participants was intended to help to determine other significant contributing factors leading to control and reduction of heart disease in the AA female population based on their direct experiences using informational and educational guidance as well as emotional support from peers.

Dong et al. (2017) addressed racial and ethnic disparities in terms of CVD outcomes regarding provision of quality inpatient care and urgent care services. The authors noted that there remain disparities involving cardiac treatment and procedures for minority groups, with cardiac interventions such as medical imaging and specific clinical measurements such as blood pressure, being more effective in terms of best quality healthcare service provision. These are not always offered to vulnerable groups in outpatient care. Improved quality of care and service provision in outpatient settings may help to improve self-efficacy and cardiac health for AA women by reducing use of emergency services and health care costs, which are ongoing barriers and challenges for AAs. Peer support strategies can also significantly reduce progression rates and complications of heart disease.

Kingod et al. (2017) explored experiences of individuals using online peer-to-peer (P2P) support and found that helpful knowledge sharing, social support connections, and having a collective voice and awareness influenced their daily lives markedly. Online P2P communities provided a platform for support and sharing of daily self-care concerns and activities. However, traditional forms of support are not always adequate in terms of providing individuals with skills required to navigate challenges of daily life involving chronic illnesses (Kingod et al., 2017). AA women face challenges and barriers with respect to gaining and sharing knowledge, obtaining and strengthening social connections, and developing awareness of diseases and preventive strategies. These areas of concern were explored during this qualitative assessment of AA women with hypertensive heart disease.

Chronic diseases place an extraordinary burden on individual's lives due to long-term care required, and lifestyle changes necessary for adequate self-management and disease control. Cultural relevance, ongoing support, and use of advanced tools (such as electronic medical assistance with telecommunications) were identified as key for rural peer support programs to enhance self-efficacy and empowerment in terms of managing chronic diseases (Lauckner & Hutchinson, 2016). Minority populations that reside in and out of rural locations could benefit from recommended support programs to assist in easing burdens due to psychosocial pressures and unnecessary traditional care interventions, as well as understanding specific needs to enhance positive social change in terms of population health.

Okoro et al. (2018) studied 20 AAs with type 2 diabetes who said they were interested in attending support groups. Many were also interested in online message boards, support groups with medical expert facilitator, and groups with women diagnosed with the same condition (Macario et al. 2017). Similar interventions and strategies can be used to improve other chronic diseases such as heart disorders.

Evidence mapping is used to guide research, inform the setting, and help with focused evidence-based decision-making (Saran & White, 2018). Evidence-based practice and results benefit all stakeholders and help in terms of providing confidence and motivation for populations being served. In this study, evidence mapping was used with targeted goals such as establishing or maintaining normal blood pressures, normal glycemic levels in the targeted cardiac population, and positive social engagement and program compliance with other community members.

Problem Statement

Although heart disease remains a significant cause of death for Americans, AAs are disproportionately affected (AHA, 2017; CDC, 2020; CDC, 2021). AA women face extremely high risk of death and disability due to heart disease (Carnethon et al., 2017; CDC, 2018), but many in that population are unaware of the high risk. The AHA (2019) reported CVD kills nearly 50,000 African American women annually, most over 20, with about 49% of this population afflicted, and more than 40% of non-Hispanic blacks have high blood pressure, which is more severe in Blacks than Whites, develops earlier in life, and is a significant contributor to heart disease. Among public health interventions addressing CV health among minority women with chronic health conditions, peer support is one strategy that appears promising and should be further evaluated to determine benefits and most effective means for CVD care. There remains ongoing and challenging CVD morbidity and high mortality among this group (Brown et al., 2017; Carnethon et al., 2017). Literature regarding use and effect of peer support on AA women with CVD remains limited. Frequency of CVD in this group continues to be disproportionately higher and a concerning public health challenge.

Further exploration is required to understand contributing factors involved with this phenomenon. Stressors among AAs lead to high risk and prevalence of diabetes in this group (Patil et al., 2018), as well as high risk and prevalence of hypertension, obesity, high cholesterol and smoking (CDC, 2019), lack of access to adequate and higher quality health services, emergency, and medical care (Dong et al., 2017), comorbidities, social determinants involving poverty and discrimination (CDC, 2017), poor cardiac literacy, lack of social support, decreased cardiac awareness, and knowledge sharing within group members (Kingod et al., 2017).

Peer support interventions have been recommended as a promising healthcare strategy to help manage CVD (Lauckner & Hutchinson, 2016; Sokol & Fisher, 2016).Self-efficacy is based on individual belief in abilities to address and adequately manage behaviors to successfully meet set goals, including treating and controlling underlying contributing factors (such as a diet for diabetes and hypertension), reducing progression of heart disease, and managing daily living activities (Bandura, 1982). Literature has been limited and unclear in terms of benefits of and barriers to peer support for AA women who are disproportionately affected by CVD morbidity and mortality, according to the women themselves. As a result, there exists a need for a qualitative research study involving this gap in literature and determine key characteristics required for peer support assistance with this population based on their lived experiences involving CVD and self-efficacy when addressing health challenges. Individuals with lower levels of self-efficacy may experience decreased confidence in terms of making healthcare decisions, as well as actively engaging in public health programs and adjusting lifestyle behaviors (Imes et al., 2016; Xu et al., 2017). These individuals could benefit from peer support interventions and guidance that is provided via an appropriate format with a focus on improved self-care skills and behaviors, as well as gaining confidence and empowerment in order to manage their cardiovascular health.

Positive social change implications for this study include helping to raise awareness of CVD and its management through evaluating impact of lived experiences on AA women. Barriers identified as contributing to lower cardiac health and benefits due to peer and social support among AA women with chronic heart disease are explored, leading to public health opportunities.

Purpose of the Study

The purpose of this qualitative phenomenological study is to gain a realistic understanding of real-life experiences and the impact of peer support on self-efficacy among AA women with heart disease seeking improved cardiac health, self-efficacy, and better quality of life. The study involved addressing the phenomenon of ongoing challenging CVD morbidity and high mortality among this group literature regarding uses and effects of CVD on AA women remains limited. The state of CVD in this group continues to be disproportionally higher compared to all other minority populations, and this remains a concerning public health challenge. Many people in vulnerable minority groups are often alone without adequate resources and support to manage their daily lives and challenges due to chronic illnesses such as diabetes and heart disease. Persons in different stations in life likely experience peer support strategies differently and are able to share valuable information if given the opportunity. Younger and older cardiac patients, the employed and retired, and those with and without health insurance and healthcare access have different perspectives. These perspectives were addressed using a phenomenological research design. Results from this study will help in terms of planning and designing more effective peer support programs, training educators, counselors, and volunteers, and raising awareness of CVD disparities and informing providers about intervention modifications that may be used to better address female AA cardiac populations and their health preferences. The study was conducted online and involved gaining AA women's perspectives regarding peer support interventions, health beliefs, and effects on their skills, abilities, and self-care confidence that is needed to manage their diagnosed chronic heart disease. Obtaining direct responses from participants with health challenges and barriers can lead to implementing appropriate and relevant programs and strategies to assist with developing long-term sustained lifestyle change strategies and improved cardiac health.

Research Questions

RQ1: What are lived experiences of AA women with CVD who are receiving peer support?

RQ2: How do AA women with CVD experience effect of peer support on their self-care?

Theoretical Framework

The health belief model (HBM) and social learning theory (or social cognitive theory) served as theoretical framework for this study. These frameworks informed and guided my research and helped to direct study design decisions. The HBM is a model that is used to explain and predict health-related behaviors, with cues to action and self-efficacy as major elements driving behaviors, especially when relating to provision of health services (Rosenstock, 1974). The HBM suggests that individuals change behaviors if they receive appreciate information and guidance targeting perceived threats, barriers, benefits, and self-efficacy related to their health challenges and quality of life (Jones et al., 2015). Based on the HBM, perceptions involving participants' lived experiences were identified. Motivation to act and participate in peer support interventions involves social engagements, educational sessions, lifestyle changes with diet, exercise, and medication adherence when a threat due to disease is perceived and health benefits are identified (LaMorte, 2019). Additionally, female victim of heart disease may develop confidence in their ability to maintain quality of life after receiving cardiac health education, lifestyle skills training, social engagement, and self-management training via peer support programs and interventions. Also, perceived susceptibility to disease, perceived severity of disease, perceived benefits of behavior change, perceived barriers to acting, and self-efficacy are important factors used to provide an understanding of participants' experiences involving peer support strategies.

Since knowledge, skills, and confidence obtained via peer support increase self-efficacy, asking about behavior choices, making decisions about treatment strategies, coping mechanisms, and expected outcomes and goals will help in terms of providing an understanding of level of self-efficacy among individual using peer-support. Jones et al. (2015) demonstrated the HBM can be used as an effective tool in terms of communicating prevention and modifying behavior that perceived benefits, threats and self-efficacy may influence in individuals and communities within the context of peer support programs. Also, this model can be helpful in terms of prescribing strategies for educating and empowering individuals and enhancing social change among populations.

The social learning theory or social cognitive theory is one of the most influential theories of learning and human development. People can learn new information and behaviors from observing, imitating, and modeling others (LaMorte, 2019). The theory was introduced in the 1960s by Albert Bandura and developed into the social cognitive theory in 1986. It is sometimes referred to as the social cognitive learning theory. It posits that learning occurs in a social context with dynamic and reciprocal interaction involving people, their environment, and their behaviors. The unique feature of the social learning/cognitive theory is its emphasis on social influence as well as external and internal social reinforcement (LaMorte, 2019). The theory involves emphasizing learning from social environment in direct (personal experiences with differential reinforcement) and indirect (modeling of others) forms, with dynamic and reciprocal interactions between individual, environments, and behaviors (LaMorte, 2019). People can learn and perform behaviors from observing and sharing with others, which is consistent with the concept of peer support. Receiving and giving support, guidance, education, rewards, encouragement, and reinforcement from family members, friends, teachers, healthcare professionals, and communities at large can lead to rewards for those seeking guidance. Moreover, as part of the learning process, individuals evaluate effects of behaviors they have observed and shared with others. Specifically, A positive consequence resulting from a learned behavior may encourage one to model it, whereas a negative consequence or outcome resulting from that behavior may lead to the refusal to model (Hunter-Reel, 2013). Additionally, level of self-efficacy is an essential consideration in terms of this model of observational learning since social relationships can significantly affect physical health and psychological wellbeing, which in-turn may affect self-efficacy (Macario et al., 2017; Wright, 2016). Such social relationships, formed and nurtured in the social environment of a peer support group, can provide rich learning and non-threatening spaces for receiving and accepting new information related to health and wellbeing.

In this study, participants learned about healthy behaviors that were facilitated via cultural, social, educational, and emotional connections shared during peer support engagements. These social connections and relationships that were established and maintained via peer support programs assisted in promoting effective health behavior changes that were motivated by perceived disease threats and benefits.

Nature of the Study

Data for this study was collected from participants' direct statements and responses to interview questions based on the HBM and on elements based on self-efficacy (such as having comfort with self-care and particular skills). I conducted interviews following approval by the Walden University Institutional Review Board (IRB). Self-efficacy questions involved presence or absence of confidence that participants had in the ability of others such as family, friends and peers to help with solutions to health-related problems, identifying the presence or absence of confidence that they could locate friends or family members to confide in when they felt lonely or depressed, identify the presence or absence of confidence that friends, family, or peers would be able to help with medical care when needed, presence or absence of confidence they could handle health problems as well as others, presence or absence of confidence that participants have in others' ability to provide them with advice. AA women cardiac patients in community groups, primary care clinics, local churches, and online networking women heart groups, as well as individuals with cardiac and health providers in online communities were interviewed to obtain their lived experiences involving coping with heart disease and using peer support to enhance beliefs, thoughts, and confidence in themselves, leading towards better self-care and cardiac health. Informed consent was obtained for participation in interviews. Participants received details regarding the proposed study, as well as knowledge about their rights. Primary data were obtained from direct interviews via Zoom and telephone interviews. Interviews were tape-recorded, and open-ended interview prompts were used to allow participants to feel comfortable with the process so they could be empowered to share their issues of interest, point of views, and experiences.

Definitions of Terms

Cardiovascular Disease (CVD): Disorder of the blood vessels of the heart that can cause a heart attack (AHA, 2019). The most common form of CVD is coronary heart disease, but it includes other circulatory system diseases. Diseases that have been classified as CVD include high blood pressure, coronary heart disease, heart attack, angina pectoris/chest pain, heart failure, arrhythmia (heart rhythm disorders), heart valve problems, and stroke (AHA, 2020).

Comorbid: The presence of one or more additional conditions occurring with a primary condition, having two or more diseases at the same time (National Cancer Institute, 2023).

Heart Attack (Myocardial Infarction): Death of the heart muscle (myocardium) caused by a blockage and loss of blood supply (Mayo Clinic, 2020)

Heart Failure: This is sometimes called congestive heart failure (CHF) and occurs when the myocardium fails to pump blood effectively (Mayo Clinic, 2019). Conditions such as narrowed arteries (coronary artery disease) and high blood pressure may leave the heart too weak or stiff to fill and pump efficiently (Mayo Clinic, 2019).

High Blood Pressure (Hypertension): State of having force of blood flowing through the arteries being consistently high (AHA, 2020).

Obesity: Excessive fat accumulation up to the point of which a person's body mass index (BMI), which is the parameter used to indicate the level of overweight and obesity in adults, is 30 or greater (World Health Organization, 2020).

Overweight: BMI of 25 or greater. It is also considered a precursor to obesity (World Health Organization, 2020).

Peer Support: Peer support involves activities and interactions between people who share similar conditions and experiences. People with a common illness can share knowledge and experiences. Peer support can take many forms, including phone calls, text messaging, group meetings, home visits, going for walks together, and grocery shopping (Tang, 2013).

Self-Efficacy: Belief in one's capabilities to organize and execute courses of action required to manage and succeed situations (Bandura, 1977).

Assumptions

One assumption of this study is that participants had the desire to enhance health, wellness, and quality of their lives as well as those who they could positively influence. Likewise, I assumed participants learned how to prevent or reduce cardiovascular risks such as high blood pressure through making lifestyle changes, such as changing diets, exercising more, and adhering to medications. Participants can also enhance their CVD prevention skills by getting their blood pressure checked frequently to detect and respond to cardiac events early and know what actions to take if blood pressure readings are high. I also assumed participants were able to recall their participation in peer support programs to the best of their ability to enhance public health programs and healthcare. Also, I assumed participants were able to share and respond to research prompts in the

English language, with varying abilities and capabilities for recall as unbiased and reliable data were gathered. Lastly, since the study involved relying on sharing details and responding to my prompts, I assumed participants provided honest and truthful responses.

Scope and Delimitations

Data was collected from participants' responses to interview questions based on questions related to self-efficacy. I conducted interviews following Walden University Institutional Review Board (IRB) approval. This was done to explore the phenomenon of ongoing poor and substandard CV health among AA women despite peer support strategies. The phenomenological research design was used to description firsthand directly lived experiences and stories of participants. In qualitative phenomenological studies, experiences involving thoughts, perceptions, memories, imaginations, and emotion are described for researchers to address participants with an open mind and without bias (Rodriquez & Smith, 2018). Self-efficacy-related questions were asked. AA women who were as cardiac patients associated with local community groups, local churches, online networking women heart groups, and associated cardiac and health providers in an online setting were interviewed to obtain their lived experiences involving living with hypertensive heart disease and using peer support to enhance beliefs, thoughts, and confidence in themselves in terms of better cardiac health. Informed consent was obtained for participation in interviews, indicating participants received full details regarding the proposed study, and knowledge of their rights. Primary data were obtained from Zoom or telephone interviews with participants.

Participation was limited to AA women who were 20 and older. The study was conducted online and may also be relevant to AA women in other locations in the U.S. who have shared similar experiences and diagnoses.

Limitations

Possible limitations, challenges, and barriers included the following: Only women of AA descent who reported a diagnosis of heart disease using peer-to-peer support were interviewed, and therefore generalizations involving results for all Americans AA or other cultural groups in the U.S. cannot be made. Conducting interviews at the convenience of participants was time-consuming and difficult. Volume of data collected required laborious work for transcription and analysis. Also convenient date and times for both interviewer and participants required much flexibility and consideration.

The recruitment process was initially aimed at a vast pool of participants from different areas of the northeastern U.S., then focused on online peer interactions due to COVID-19 to provide a large enough population sample, wider diversity of AA women of various ages, income levels, marital status, employment status, family responsibilities, and educational backgrounds.

Researchers must learn skills to address personal biases perceptions (Patton, 2015). Maintaining a balance between avoiding biases and being empathetic towards participants should be a goal. As a healthcare professional with knowledge of chronic diseases, I was careful not to influence the interview process unduly.

Significance of the Study

This study will help fill a gap involving higher incidence of heart disease among AA communities compared to other groups. This study may be significance in terms of self-care and control of chronic diseases among AA women, health promotion and preventive care, self-efficacy involving heart disease, and continued public health interventions which promote positive cardiac care and outcomes. Data from participants were used to inform public health providers about their experience involving peer support and heart health, as well as relevant empirical evidence-based interventions which involve incorporating peer support and best strategies that can be most helpful in terms of improving CVD outcomes in this minority group. This could lead to increased use of peer support programs in minority communities and overall improvement of CVD outcomes including improved quality of life and decreases in rates of cardiac morbidity and mortality. The study will lead to positive social change and help promote use of targeted peer support interventions among AA women and minority women groups.

Implications for Positive Social Change

Insights gained from this study will be used to inform healthcare and public health professionals about gaps involving current clinical plans of care and guidelines, thus promoting positive social change in the form of practice recommendations. Social change implications from this research study may include increasing awareness and understanding regarding cardiac care and peer support needs of AA women that could be used to improve culturally appropriate program interventions. These findings may also serve to enhance self-efficacy and self-care in terms of managing chronic diseases among this population. It may also provide significant data that could help in terms of developing a culturally relevant process for addressing healthcare needs of AA women with heart disease, especially those who may not be able to access medical and healthcare services. The study could also equip clinicians and public health providers serving minority women with culturally effective education and supportive tools and highlight perspectives of this group involving heart disease and unhealthy cultural practices.

Summary

Use of P2P to enhance and sustain treatment and control chronic diseases in the U.S. has become popular and recommended by public health practitioners; however, there are issues mainly for minority populations with increased morbidity and mortality due to chronic disorders such as heart disease. Peer support involves enhancing emotional, educational, and healthcare assistance as well as managing specific situations such as chronic diseases (Munce et al., 2017). Heart disease remains the leading cause of death for women globally, with minority groups such as AA women more likely to have chronic diseases, which are complicated by additional challenges and daily stressors, as well as financial, educational, and social disparities. In this research, I reviewed information concerning heart disease and use of peer support to enhance self-efficacy and self-care in terms of improved cardiac and health literacy and reduced morbidity and mortality due to heart disease, especially for AA women. Understanding specific beliefs, attitudes, perceptions, and opinions related to peer support and its impact on self-efficacy regarding heart disease will lead to prepare health providers and community care workers understanding real-life experiences and cardiac care needs, as well as delivering optimal support to cardiac-afflicted individuals.

In this study, I aimed to record information, listen to participants about their real-life experiences, and identify culture-specific perceptions, attitudes, beliefs, and opinions among this inclusive minority group involving hypertensive heart disease. The HBM and social cognitive learning theory were the theoretical framework for this qualitative phenomenological research study involving peer support and its effect on AA women with heart disease. This study includes information about culture-specific perceptions relating to this topic via personal experiences and opinions regarding use of P2P support in self-managing heart disease and improving self-efficacy to achieve optimal cardiac health in AA females.

Chapter 2: Literature Review

This literature review includes information about serious chronic disease of the heart and blood vessels that affects AA women in a disproportionate way. This group is affected by challenges stemming from complications of heart disease and heart failure and may benefit from peer support. This is a versatile care intervention strategy which can provide patients with guidance and disease control strategies to improve self-efficacy, self-care, and self-management. Via a phenomenological research design, data for this study were collected using semi-structured interviews and analyzed using qualitative techniques to derive insights involving improving public health.

Heart disease is the most prevalent cause of death for both males and females in the U.S. (CDC, 2020). It is also a challenging medical issue globally. Due to historical, social, and cultural factors, minority populations in the U.S. such as AA are particularly vulnerable to this disease and its associated challenges. Specifically, AA women experience higher morbidity and mortality due to heart disease than any other ethnic or gender group (Office of Minority Health, 2017; Zhao et al., 2019). In addition to managing heart disease while maintaining multiple responsibilities, they face multiple comorbidities. The chronicity of the disease and daily requirements of self-care demand additional resources and social support to make a difference in terms of management and quality of life that can be realistically expected and accomplished.

AA women experience cultural, behavioral, educational, health provider, environmental, and systemic health disparities (Shepherd et al., 2018). Since access to public health resources has been less than expected for ethnic minorities, advocacy from public health researchers and practitioners is needed to ensure these resources are effectively directed toward the health and welfare of these underserved communities. This proposed research study involved recording and reporting perceptions, beliefs, and experiences of AA women living with heart disease who use P2P support. Findings from this study include insights about peer support in terms of participants' quality of life as well as motivation for self-care and self-efficacy regarding daily challenges brought on by disease-related complications.

Chapter 2 includes the literature search strategy, theoretical and conceptual frameworks related to use of P2P treatment with heart disease, current information on peer support interventions involving chronic diseases, past and current literature available on peer support among women in the U.S. as well as AA women with heart disease, rising costs and other barriers associated with managing heart disease among minority groups, and implications for future care in terms of peer support and social engagement and networking.

Literature Research Strategy

A thorough research of databases was conducted using the following databases: PubMed, EBSCOH, Google Scholar, CINAHL, and ProQuest. An estimated 300 peer-reviewed articles were reviewed relating to hypertensive heart disease, CVD, heart disease in women, peer support, CVD disparity, the HBM, social learning/cognitive model, social support model, self-efficacy and qualitative phenomenological research design. Multiple Government and private organization websites were also explored. These organizations include but were not limited to the AHA, APA, American College of Cardiology, CDC, USDHHS, and NIH. Based on results from this initial exploration, a targeted search was conducted using these keywords: *heart disease and peer support,* *peer-to-peer support and heart disease, heart disease in women, heart disease in minority women, heart disease in African American women, heart disease in African Americans, peer support in minority groups, heart disease disparity, peer support with heart disease, peer support and self-efficacy, health belief model and self-efficacy, social support and social network concepts, and self-efficacy in disease management.* Most selected review articles were directly related to the topics of peer support and heart disease among AA women. Reviews, research articles, and case reports were dated between 2015 and 2022. The Walden University Library was extensively used on an ongoing basis.

Theoretical Framework

A theoretical framework helps in terms of understanding and obtaining guidance for a research project in a particular field of study (McGaghie et al., 2001). It is used to identify key concepts or variables that influence the phenomenon in question. The HBM and social cognitive learning theory were the theoretical frameworks for this study. Concepts informed and guided research and helped direct study design decisions.

HBM

The HBM was used to identify perceptions and lived experiences of participants. Self-efficacy refers to confidence in one's ability to behave in a way to produce desirable outcome (Bandura, 1977). Self-efficacy makes a difference in terms of how people feel, think, and act (LaMorte, 2019), and may determine eventual disease control and state of morbidity. Low levels of self-efficacy are directly associated with depression and anxiety, which is 20% higher in the AA community compared to other groups (Association of America [ADAA], 2018). An average or higher level of self-efficacy indicates better ability to handle uncertainty, distress, and conflict (LaMorte, 2019). In terms of cognition, having a sense of self-management capability and a higher level of self-efficacy, will facilitate better creative thinking and faster decision-making processes involving disease control, in the face of demands imposed by related lifestyle changes (Bandura, 1977). Self-efficacy, perceived susceptibility to ill-health, perceived severity of disease, perceived benefits of behavior change, and perceived barriers to acting are critical elements of the HBM and were used to provide an understanding of participants' experiences involving peer support strategies.

When there is a perceived disease threat and possible health benefits are identified, participants may become motivated to act and engage in peer support interventions such as socioeducational sessions involving exchange of information about diet and exercise or other practical information (LaMorte, 2016). These may help participants maintain motivation and dedication required for ongoing empowerment-based activities that are needed to cope with their chronic disease.

In the context of patients living with CVD, level of cardiac self-efficacy can help determine impact of the disease and its associated complications on health-related quality of life factors. Barham et al. (2019) found lower levels of self-efficacy and poorer patient-provider interactions are predictors of poor health-related quality of life. Since quality of patient-provider interactions depends on both frequency of access and content of interactions, political and social isolation can have a significant impact on patients' health-related quality of life. Specifically, AA women's health needs may not be sufficiently addressed by the U.S. public health system due to election of key government decision-makers voting on key public health policy decisions. Political isolation can have a direct negative impact on their health-related quality of life. Also, AA women can become socially isolated due to a disproportionate share of family and professional responsibilities in the absence of a social support system.

The HBM can also help health professionals devise strategies for educating and empowering individuals, as well as promoting social change in a wide variety of populations (Jones et al., 2015). Patients' empowerment and self-efficacy have shown a positive association with the restoration of functionality in the acute sense, especially during the rehabilitation period following a cardiac event (Kohler et al., 2018). However, there is a lack of research on the role of patient empowerment in heart disease management in the chronic sense such as in the case of those living with coronary heart disease (Kohler et al., 2018). This is even though self-efficacy appears to be a universal construct that has a positive impact on health behaviors intended to address risk factors such as those included in Life's Simple 7 Habits (AHA, 2020) and other factors directly affecting heart disease. The proposed qualitative phenomenological study aimed to contribute to closing the gap in research on factors impacting behavior change in AA women as they participate in cardiac peer support intervention.

Figure 1

Overview of HBM

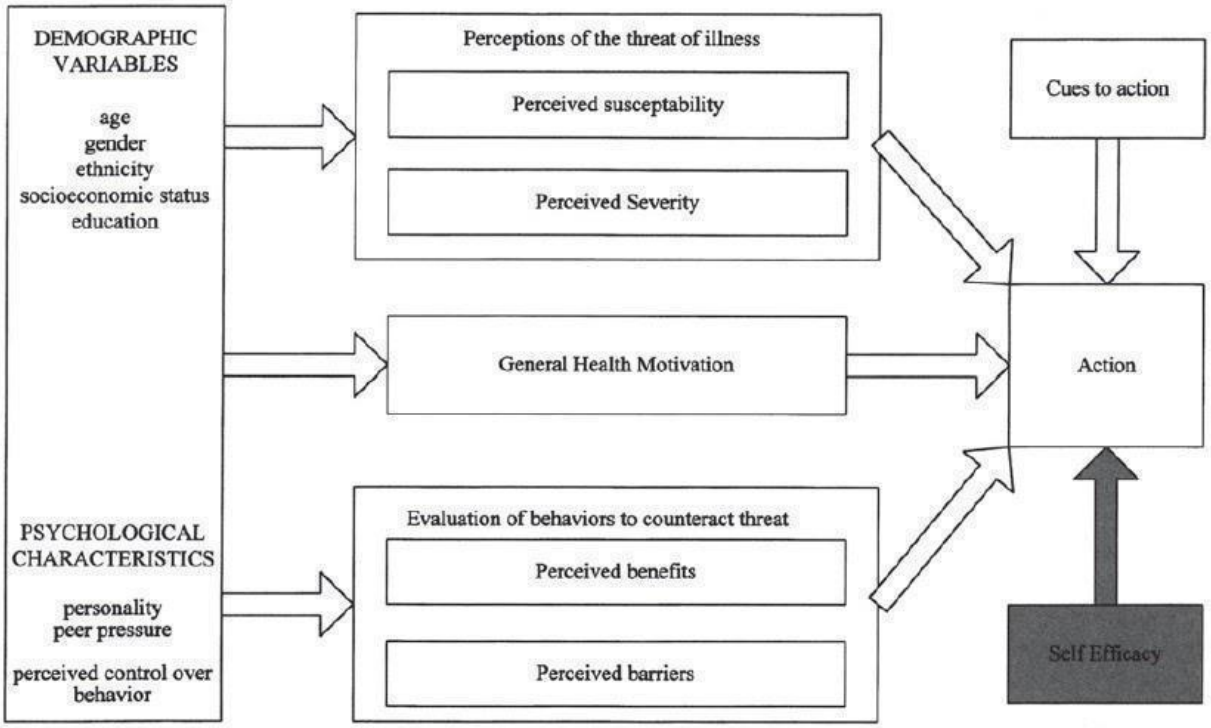


Figure 1. The health belief model [the model with self-efficacy represents the modified HBM suggested by Rosenstock et al. (1998)].

Social Learning Cognitive Theory

The social learning cognitive theory involves personal, behavioral and environmental factors, such as the safety net of family, friends, and community from whom learning, observation, imitation, and modeling of behaviors can occur (LaMorte, 2019), and have a significant impact on individuals and groups who are challenged with ill health and diseases. Since human behavior is regulated by internal factors (thoughts, feelings, motivation, actions) as well as the external environment, actual behavior change can vary in respect of timing for behavior change or gaining confident decision-making abilities to produce actual change. Peer support provides the environment in which observation, sharing, social support, lived experiences, empathy, and other similar circumstances to those of the individual with CVD can help mitigate negative effects from the disease or from other barriers such as poor patient-provider relationships. This is especially important since a poor patient-provider relationship can have a cascading negative effect as the patient's trust in the health care system, in health institutions, and in public health may deteriorate. Social connections with peers or community members will also provide the likelihood of frequent engagement with, and encouragement from others, improving motivation and avoiding isolation (Wright, 2016).

LaMorte (2019) reinforced the applicability of the social learning/cognitive theory in focusing on internal and external reinforcement, past experiences, self-efficacy, and reciprocal determinism helping to shape and be shaped by their environment for ongoing motivation and improved disease outcomes. Email messages designed to target social cognitive theory constructs of self-efficacy, goal setting, self-monitoring, and social support were used by a community walking program and evaluated by Richards and others (2020). Research findings indicated that the adoption of the program was high, with self-efficacy directly influencing interactive behavior between personal factors and the social environment (Richards et al., 2020). The program's effectiveness, reach to the community, adoption, implementation, and maintenance were assessed in a pre-post program design, with an emphasis on self-efficacy. This was seen as critical to the initiation and maintaining behavior change, with connections to both internal and external factors such as thoughts, feelings, motivation, and taking actions with an awareness of disease's impact on loved ones. Increases in self-efficacy were also maintained three months following the program during the maintenance assessment and update reviewed (LaMorte, 2019).

As a result of the knowledge, skills, and confidence gained from peer support groups with this proposed research study, a change in self-efficacy may be detected from participants' stories and interview responses. Within the framework of a semi-structured interview, study participants' behavior choices, decisions about treatment regimen, coping mechanisms, and expected outcomes and goals will provide insights into the extent of their self-efficacy in the context of peer-support involvement. Since improvement in self-efficacy can help maintain the corresponding change in behavior, theoretical frameworks that encompass health-related behavior change and self-efficacy can help better understand the role of peer-support in improving disease management. Specifically, Jones et al. (2015) found that the health belief framework can be used as an effective tool in understanding the patient's health-related decisions from diagnosis to disease management that encompasses perceived benefits, threats, and self-efficacy in the context of peer-support.

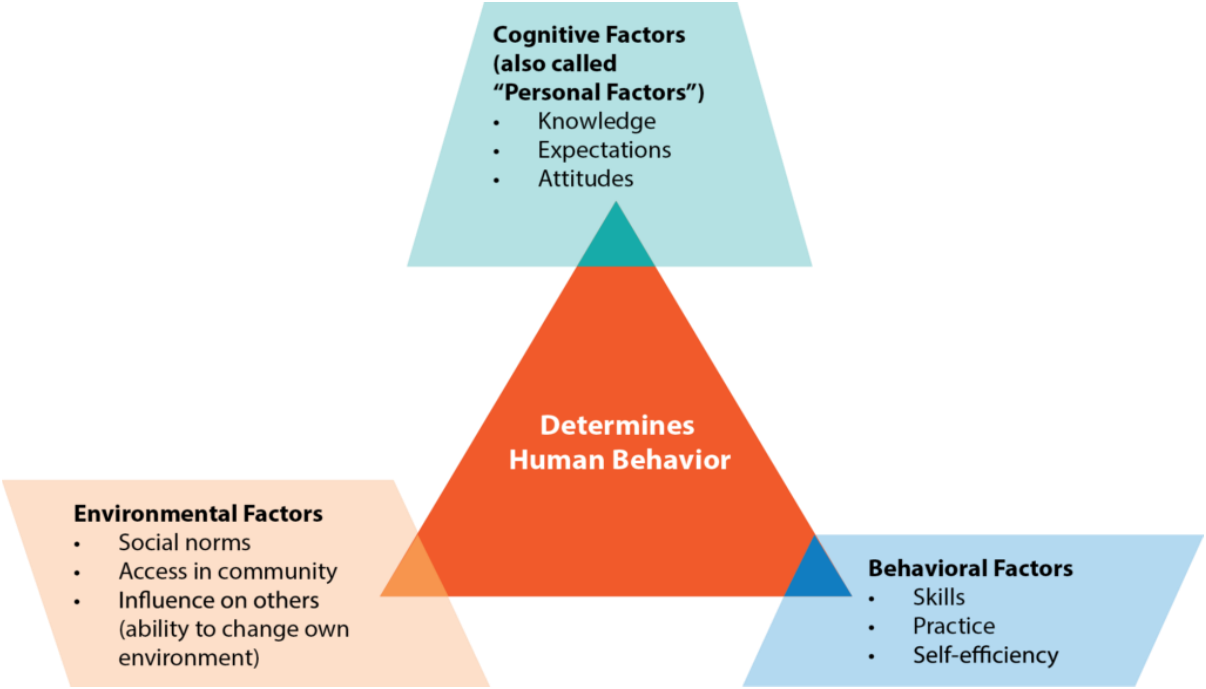
The social learning/cognitive theory posits that individuals initiate behaviors on learning from shared and reciprocal social relationships and support, explained by continuous interaction between cognitive, behavioral, and environmental determinants to which all are exposed (Bandura, 1977). Schunk and DeBenedetto (2020) demonstrated that the social learning theory/social cognitive theory (SLT/SCT) can play vital roles in motivation for individuals initiating, processing, and maintaining behavior changes towards improved health outcomes. Along with social supporters in the form of friends, family, and community stakeholders helping to organize, mobilize and reinforce wellness activities (Forthofer et al., 2016), the SLT/SCT propels internal motivational processes leading to decision-making, self-regulation, making choices, and self-management for underserved African American women.

Optimistic peer support interventions may motivate behavior change, may reinforce health prevention and promotion practices, can enhance awareness and actions toward disease prevention, can maximize adaptation and recovery from illness (White, 2016), can help to maintain an individual's identity, can enhance one's self-esteem and coping mechanisms, and can help in protecting people's health against CVD and mental disorders. In contrast, negative consequences can undermine health behavior change, such as providing false, misguided, or incomplete support to someone struggling with a health issue (White, 2016). Factors such as cultural influences, people's perceptions, past experiences, and other environmental factors and life events, may affect the impact of peer support at times when it can be most helpful. African American women may be among the most vulnerable groups who may retreat inwards due to fear and anxiety in the face of uncertainty brought on by a new medical diagnosis, a worsening of illness, or unwanted disease-related advice.

Fisher et al. (2015) found that most peer support studies are based on selected samples of participants, which conceal some groups or populations and the challenges and barriers they may have encountered in reaching them, and adequately addressing the effect of social support on health and non-communicable diseases, which are more predominant groups. Outcomes from past studies (Ananian et al., 2018; Fisher et al., 2015; Kong, 2019) indicate that peer support may benefit populations with chronic disorders such as diabetes, heart disease, stroke, and other health problems. These improvements in health metrics in the past including blood pressure, glycemic levels, and frequency of hospital admissions can help reduce cardiac insults or events (such as heart attacks) toward improvements in quality of life and overall cardiac health (Ananian et al., 2018; Fisher et al., 2015; Kong et al., 2019). These findings provide support for the utility of peer support strategies in helping patients create tailored self-care plans toward promoting better heart health outcomes, especially for African American women who tend to have greater disease burdens such as hypertensive heart disease. Being able to directly engage in candid and robust disclosures of participants' life experiences in the context of peer support strategies will help provide insights toward improving cardiac disease management. Specifically, gaining participants' perspectives on their engagement with peer support will help inform public health providers in devising effective interventions for the management of chronic diseases.

Figure 2

Interacting Factors



Perceived Susceptibility and Threats

Based on the HBM, an individual is likely to act for behavioral change if there is a perceived threat or susceptibility to disease, perceived barriers, perceived benefits, self-efficacy, and threat to disease or severity of disease (LaMorte, 2019). The individual may adopt the new behavior or make changes to behavior if along with her belief in the effectiveness of the recommended health behavior or action, benefits can be achieved (for example in responding positively to cardiac symptoms and maintaining compliance with medical treatments, disease complications and disease progression can be mitigated). Utilizing peer support has shown improvement in outcomes such as improved quality of life, increased capacity to process and handle cancer-related stress, and improved wellness parameters (Nicks et al., 2018). Cancer survivors who received peer support reported greater access to, and utilization of alternative support sources, had more capacity to process cancer-related stress, and had improved quality of life and adjustment to life as survivors, compared with those who did not receive peer support (Nicks et al., 2018). This evidence suggests that survivors helping each other, based on sharing similar experiences in susceptibility to the disease, the perceived threat of the seriousness of the disease and their vulnerability, and the perceived benefits of following recommended treatment strategies and cues to taking desired actions, can find strength and motivation in encouraging and supporting others with their health belief towards improvement. AA women can benefit from the provision of practical, social, and emotional support from a peer supporter, a service she would likely not be able to access or afford in normal states of living alone, being with family members who are unable to assist effectively, or lacking the knowledge, access, and confidence to seek and accept the better quality of care.

Cultural appropriateness in peer support delivery and interventions and their influence on AAs with chronic disorders is especially important in public health programs to prevent and control heart disease and other chronic disorders. Semi-structured interview responses from qualitative interpretive descriptive research conducted by Okoro et al. (2018), using a sample of twenty African Americans with type 2 diabetes who were participating in a peer support program, highlighted 3 main themes including a) healthy behaviors with cooking, eating and exercise, (b) frequent regular telephone contacts, and (c) emotional support with required activities, as most significant to participants. The study participants benefitted from the peer support intervention because it was culturally appropriate with respect to the use of language, advice on cultural diet habits, the emphasis placed on social practices, and incorporation of cultural health beliefs (Okoro et al., 2018). Minority women with CVD indicated interest in support groups. They may benefit from referrals to tailored support group types, including online platforms facilitated by medical experts, and to cardiac rehabilitation and clinical trials. Macario et al. (2017) found that most women with CVD in minority groups showed interest in attending peer support groups, but indicated preferences for the formats, frequency of meetings, group facilitator, group make-up and information delivery format. Culture and race played important roles in helping others understand the unique CVD-related support needs of women in minority groups such as AA women.

In managing CVD and hypertensive heart disease, the expectation is that affected individuals learn and understand the diagnosed disease, be able to identify worsening symptoms, and know when to seek medical attention. All these responsibilities, as well as their daily tasks, can be assisted and supported with the engagement of people in similar situations with similar needs. With the proposed research study and inclusion population, the researcher is aware that culturally relevant peer support interventions can influence the perceptions of the population being studied, and therefore be conscious of using cultural sensitivity with questions, prompts, and details sought, and also in the interpretation of responses provided. The researcher will obtain and record experiences relating to constructs such as disease literacy, perceptions of peer support strategies and activities, beliefs, and acceptance of health interventions and impact on self-efficacy, as they attempt to self-care with confidence, and achieve stable cardiac health and better quality of life.

Perceived Barriers

This refers to a person's feelings or belief that there are obstacles preventing her from adopting or performing a particular health action (LaMorte, 2019). Suppose the individual weighs the benefits of acting, against barriers such as incurring expenses to participate in the peer support program, or in purchasing healthy meals required. In that case, she is less likely to participate in the program activity. The perceived benefits to be derived from acting is weighed against the perceptions that the required action may be dangerous, expensive, unpleasant, time-consuming, or inconvenient (LaMorte,2019). The daily challenges and duties of being head of household, having multiple jobs, having poor health literacy, being unable to afford care items, and fear of rejection and discrimination, may place added strain and may lead to failure in program participation with an AA woman suffering from heart disease.

The use of online peer support has grown significantly, but some negative responses and challenges with computer access, affordability, literacy, and educational levels may be seen in this group (Palant & Himmel, 2019). This means that generalizations about individual or groups' responses and behavior change must be cautiously made regarding the use of online peer support format. Many patients or individuals must learn to manage multiple comorbidities, so the task of self-managing chronic disorders can prove to be challenging for many (Farley, 2020). This can lead to discouragement, demotivation, and a feeling of failure and depression in cardiac-afflicted individuals who are attempting to self-care and manage the disease with numerous additional social, medical, and financial barriers.

Perceived Benefits of Peer Support Programs

When an individual can identify benefits from the act of making a behavior change, they are more likely to engage in the behaviors for attaining goals. Peer support programs, and especially online groups and team networking have become more prevalent in the United States society. Apart from the regular benefits from both in-person and online forums, there are additional advantages to utilizing online peer support, including, a) providing an opportunity for maintaining anonymity, gaining personal empowerment, helping with the breakdown of any barriers caused by race, cultural differences, physical disabilities, and age differences, the advantage of having absent dues or fees for health guidance/education, having relief from emotional isolation, and obtaining promotion of self-esteem (Okoro et al., 2018; Peers for Progress, 2019). Accessibility is one of the most positive features of online support, and Okoro and others (2018) have asserted that the aspect of introspection is greatly assisted in individuals who struggle with complex thoughts and emotions. This informs the public that online resources promote personal empowerment because informed patients, such as heart attack and cancer survivors with good social support can be more active and optimistic in their treatment and recovery. Individuals and groups benefit from more personal support and information, for sharing, talking, venting, and crying (Parrish & Cornelius, 2015).

The CDC and other health institutions such as the Cleveland Clinic, the Mayo Clinic, Electronic Health businesses, and others demonstrate their abilities to adjust, upgrade and cater to the populations at risk, as well as to health care providers, regarding interventions such as using mobile apps, email, and text contacts, to help in reducing re-admissions, reduce complications from chronic diseases, and enhance learning and opportunities to prevent diseases or worsening of chronic diseases. Literature reports have indicated that peer and social support from laypersons such as trained community health workers who share a socioeconomic background with patients, can effectively improve chronic disease outcomes in minority groups (Kangovi et al., 2017). Community health workers who share cultural, ethnic, and language similarities with patients, can significantly contribute to the patient's recovery, health maintenance, shared learning experiences, as well as health disease prevention and improved outcomes. Research participation has been hostile or questionable in the AA community, so an endeavor that attempts to elicit their participation and potential benefit may also prove challenging. Sensitive and culturally appropriate strategies are most desired to relieve and improve disparities, improve cardiac literacy, quality of life, and outcomes. Community and group networking has also shown a positive correlation with improved health outcomes, promoting collaboration among older adults, promoting self-efficacy, and healthy aging resources with access to support systems for guidance, information sharing, counseling, and psychological and physical support (Kim et al., 2015; Marquez et al., 2019, Wu & Sheng, 2019).

Participating in a group allows individuals an opportunity to be with people who are likely to have a common purpose, have similar issues and needs, think in similar ways, understand each other, and possibly share similar language and belief systems. Group strength, community ties, and reciprocity help to foster improved health status for ill health, especially chronic illnesses that challenge vulnerable minority groups such as African American women with multiple issues including depression, feelings of isolation, poor motivation, and low self-efficacy (Kingod et al., 2016; Macario et al., 2017; Okoro et al., 2018). Being able to identify and share similar needs and beliefs, being able to share experiences, having their voices heard, and having others agree with each participant will help in confidence building and motivation towards self-care and self-management with an AA woman involved with peer-to- peer support or peer group strategies.

Women in multiple minority groups, including AA women, favored support groups with specific tailoring based on their unique cultural preferences such as having a peer support health worker providing guidance (Macario et al., 2017), based on a survey in 2017. The support and assistance of a peer who has had cardiac symptoms and has managed to gain effective self-care and confidence with their CVD and daily challenges on a long-term basis, is likely to be accepted and appreciated by an AA woman who can better identify with her situation. The minority women participants that were studied by Macario et al.(2017), also responded favorably to requests for online peer support, text alerts, webinars, live chats, blogs, mobile counseling, wearable devices and different apps, medical expertise with a hotline, meeting with peers or experts with the same CVD condition and some preferred engaging with peers from the same race and culture (Macario et al., 2017).

Identifying and focusing on meeting the specific unique needs of AA women is likely to result in added knowledge and awareness for providers, towards program implementation for self-care skills, particularly with others who can identify with similar history, experiences, and perspectives of ethnic groups with most vulnerabilities. AA women showed peer support preference for attending support groups with women of similar race, had higher levels of social support and self-efficacy, and did better with physical activity as compared to others in the research study conducted with participants from multiple cultural groups (Macario et al., 2018). Many women surveyed were also never asked or invited to participate in clinical trials (Macario et al., 2017). The low participation level in research studies is an opportunity being missed by the public health and scientific fields, as most of the study's participants in the named research on women with heart disease (Macario et al., 2018), as well as with other disorders, have never participated in clinical trials where they could benefit from practical clinical interventions, CVD, and other health education, and possibly make community connections. Female groups participating in minority heart-related research studies could benefit from clinical trials but are unable to participate due to multiple reasons, such as the systemic historical mistrust of the medical and health system by minorities, persistent disparities, lack of or absent healthcare access and information, lack of social and community support, and other factors.

Electronic applications, social media connections, and online forums have become more prevalent in society and may have better responses and possible successes in health care and other areas of societal concern (Jones, 2018; Singh, 2018). The uses and applications of this media will need follow-up studies to determine the access and effect on minority groups with CVD and hypertensive heart disease. The changes and benefits brought to healthcare by technology will undoubtedly provide patients with more access to health education, some of the best diagnostic tools, new and cutting-edge treatments, and multiple minimally invasive procedures resulting in less pain, quicker healing, and shorter hospital stays as supported by Jones (2018). Despite this new access and perceived benefit of technology, some in the vulnerable population as the AA women being studied, are without access and have limited access and affordability, which pose additional challenges. Direct cardiac peer support interviews with AA women in this research study have helped to elicit specific perceptions, beliefs, types of peer support used, preferences desired and obtained, and understanding of how peer support affects their daily lives, coping mechanisms, heart health, and self-efficacy with the AA minority female group participants.

Review of the Literature

Overview of CVD and Heart Disease

CVD refers to conditions of the heart and blood vessels, including structural and functional abnormalities (American Heart Association, 2019), such as coronary heart disease (CHD), hypertensive heart disease, congestive heart failure (CHF), atrial fibrillation (A Fib) and other disorders (CDC, 2020). CVD is one of the most prevalent and severe chronic diseases in the US, with coronary artery disease (CAD) or coronary heart disease (CHD) as the most common type of CVD (CDC, 2020). The AHA (2019) measures ideal cardiovascular health by the absence of clinically manifest CVD symptoms, together with the simultaneous presence of optimal levels of 7 metrics for health behaviors and health factors (Life’s Simple 7), including smoking avoidance, healthy diet pattern, sufficient physical activity (PA), abnormal body weight, abnormal blood cholesterol, abnormal blood pressure, and fasting blood glucose in the absence of drug treatment. Some minority groups, such as African American (AA) women, are challenged with achieving and sustaining optimal levels of cardiac health regarding the above metrics.

Ideal cardiovascular health is defined by the AHA (2019) as the absence of clinical manifestation of CVD signs along with the simultaneous presence of optimal levels of each of Life's Simple 7 factors. Studies have shown that individuals who maintain the optimal ranges of these seven health behaviors and factors have a lower risk of heart disease compared to those with poor ranges in these risk factors (AHA, 2019). It has been shown that AA women have had challenges with maintaining adequate physical activity levels (Roberts-Kennedy, 2017), having optimal blood pressure (AHA, 2020), engaging in a healthy diet and nutritional practices, having higher incidences of diabetes and maintaining ideal body weights (Brewer et al., 2017; CDC, 2019; Richard, 2016), all as high-risk factors for CVD, with the African American population experiencing the most disproportionate illness burden when compared to other race/ethnicity/cultural groups. The research focused on race, gender, and cultural practices has sometimes underscored the damaging experiences and mental toll of living in low socioeconomic resourced communities for African American families (Turkson-Ocran et al., 2020).

Thorpe and others (2016) reinforced that African American women bear the heavier burden of the mental, social, financial, and medical toll that is seen in disadvantaged groups, making them most vulnerable to other forms of long-term disparities. Also, the health of African Americans begins to deteriorate earlier and prematurely compared to whites because of long-term exposure to social and environmental risk factors compared to the white population (Thorpe et al., 2016), thus rendering them more vulnerable to those challenges. This is an ongoing public health issue that requires attention, as CVD disparity persists, and as public health attempts to focus on reducing disparities in health care that are contributing to morbidity and mortality in the population.

Prevalence of CVD and Public Health Awareness

In the United States, CVD affects more than half the population of adults, killing over 400,000 Americans per year (AHA, 2019). Heart disease is also the leading cause of death for people of most racial/ethnic groups in the United States, including African Americans, Hispanics, and Whites (CDC, 2017). In the United States, someone has a heart attack every 40 seconds, yet many are unaware of their risk for the disease (CDC, 2018). Each minute, more than one person in the United States dies from a heart disease-related event (CDC, 2017). The Centers for Disease Control and Prevention (CDC, 2019) has continued to endorse preventive measures of a healthy diet and engagement in regular physical exercise to enhance cardiac health and overall wellness, still the barriers and challenges within vulnerable groups are not adequately addressed to meet those goals. These basic practices can significantly impact morbidity and mortality levels even in individuals with high risk for heart disease, with risk factors including diabetes, high blood pressure, and high cholesterol levels (AHA, 2020a). Rodriguez & Harrington (2016) suggest that heart disease and other challenging public health disorders will require creative peer-based interventions targeting individuals in their communities, and maybe the most promising solution to creating positive lifelong health behavior practices as are needed in managing chronic diseases. AA women possess unique needs and challenges as previously discussed (Chinn et al., 2021), and require specific attention and interventions to be drivers towards changes in perceptions, behaviors, and acceptance of programs and interventions designed to affect health outcomes and quality of life.

Prevalence of CVD Among Women in the U.S.

CVD is the leading cause of death for AA women and white women in the United States, killing more than 300,000 women in 2017, or about 1 in every 5 female deaths (CDC, 2020). The most common form of Heart disease, coronary artery disease is found in 6.2 percent of women -white women (6.1%), black women (6.5%), Hispanic women (6%), and Asian women 3.2% (1 in 30 women). Women tend to present differently with CVD symptoms, have less awareness of CVD and its complications, and often experience CVD episodes in a different way. As a result of this fact, heart disease diagnosis can be missed early on, with delay in treatment and prevention of disease progression and complications. The general misconception of CVD being a man’s disease remains prevalent despite being false. Women may present differently with acute CVD episodes (such as a heart attack). As a result, they may be misdiagnosed or fail to receive timely treatment due to little or misguided concerns for a medical emergency. Some women have mild or absent expected symptoms with heart disease (CVD) presentation (CDC, 2020), and some may have atypical symptoms which can lead to confusion and a lack of appropriate and timely treatment. Almost as many women as men die each year of heart disease in the United States, enforcing that the myth of the disease being a man's disease is without credibility (CDC, 2020). Women do have unique presentations and needs, indicating that healthcare providers and the public health system have more significant opportunities to reassess and educate the public toward better awareness and prevention strategies.

CV Health Disparities

Heart disease causes more deaths in the United States than any other disease. It accounts for a disproportionate toll on many racial and ethnic minority groups that are inflicted with higher rates of heart or cardiovascular disease (CVD) and associated risk factors (CDC, 2017). CVD accounts for about one-third of the disparity in potential life years lost between African Americans and White populations (AHA, 2018). Also, racial and ethnic minority populations confront more barriers to CVD diagnosis and care, receive lower-quality treatment, and experience worse health outcomes than their white counterparts (AHA, 2018). These disparities are reportedly connected to factors such as income, education, genetics, physiological issues, access to care, and communication barriers (Brown, 2018), with an expectation that the trend will continue in the United States. Public Health practitioners remain tasked with the responsibility of relevant and appropriate health care for the public, especially in assisting with the reduction and control of morbidity and mortality rates. Zhao and others (2019) also note that Blacks (more than women) have a higher incidence of sudden cardiac death (SCD) out of the hospital in comparison with whites, with contributing factors of income (50.5%), education (19.1%), hypertension (22.1%), and diabetes mellitus (19.6%) explaining the differences between the two groups, seen in a cohort research study (Atherosclerosis Risk in Communities Study) (ARIC) done with Black and White participants. The persistent high burden of CVD and hypertensive heart disease, sudden cardiac deaths (SCD) and the racial–gender disparities documented in studies such as that above, continue to represent a significant public health and clinical challenge.

There is a marked disparity in the incidence, prevalence, morbidity, and mortality of heart disease in African American women with causation linked to multiple factors, barriers, and challenges (Ananian et al., 2018). Nationally, African American women die of heart disease more than White women, Native American, Hispanic, Asian, and Pacific Islander women (Green, 2017), which has remained an ongoing disparity for years. This disparity is attributed mainly to the higher rates of diabetes, high cholesterol, high blood pressure, obesity, poor cardiac literacy, and in general, being less likely to receive appropriate preventive care than their White counterparts (Havranek et al., 2015; Hurtado et al, 2014; Pullen et al., 2014). Inequity with CVD treatment strategies, services, and availability persist (AHA, 2018; Ferdinand, 2016), with the AA group facing a fifty percent greater risk of developing heart failure than their white counterparts. As heart disease typically presents earlier in life with this vulnerable group, there are more associated hospitalizations, earlier disability, and higher rates of premature death before the age of 65 for many AA women (AHA, 2017), despite the availability of multiple more advanced treatment modalities. The ongoing environment of stress and strain that are experienced daily by many AA women combined with social, genetic, and socioeconomic disparity places them at a continuous disadvantage to women in other ethnic groups, and especially to their white counterparts.

The expectation from public health currently is that more healthcare interventions and programs to treat and support all vulnerable communities are active and operational. African American women are less likely than Caucasian women to be aware of the facts and statistics relating to heart disease and of related challenges in their own group (AHA, 2017). There is a solid historical misconception of heart disease being a man’s disease, contributing to a false perception of less need for closer attention to cardiac risk factors and preventive measures. It is known that African American women have a higher risk for CVD than Caucasian women, and are more likely to die at an earlier age when compared to women of other ethnicities (Carnethon et al., 2017; National Heart, Lung and Blood Institute, 2018), yet the advances and treatment modalities reported as effective with an overall improvement in other groups, have not translated into better results for CVD statistics in African American women. Disorders including diabetes, smoking, high blood pressure, high blood cholesterol, physical inactivity, obesity, and a family history of heart disease are all powerfully prevalent among African American women as major risk factors for heart disease (AHA, 2019; Kalinowski et al, 2019).

Prevalence of CVD Among AA Women

AA women are affected disproportionately (AHA, 2016; Macario et al., 2017), and experience higher CVD sudden deaths as compared to white women (Zhao et al., 2019). They are also in the larger group of African Americans with the highest prevalence of hypertensive heart diseases, heart failures, and mortality from these cardiovascular diseases (NIH, 2021). The marked disparity in the incidence, prevalence, morbidity, and mortality of heart disease in the AA group has causation linked to multiple factors (Ananian et al., 2018; CDC, 2019) including low educational levels, lower health literacy, lower socioeconomic status, lower of social support, lower employment states, financial challenges, and other unexplained factors. These social determinants of health are necessary considerations in discussions and plans for addressing the emerging chronic disease toll and burden globally (Kumar, 2017), especially, among vulnerable populations. Studying the status of CVD in the AA minority group has both clinical and theoretical significance as the gaps in research relating to directly lived experiences of this population linger, and there lingers an ongoing misconception that heart disease is a man's disease, which is also a false belief. The results of this research study will help to fill the existing gap and deficiency of lived experiences for the AA-inclusive minority group and will inform public health practitioners and increase awareness among healthcare and public health practitioners regarding social interventions for improving cardiac outcomes in the AA women population. AA women also experience higher rates of obesity and do have challenges with unhealthy eating habits and inadequate physical activity (CDC, 2017) as other contributing cardiac-related risks. Educating on diseases, on healthy nutritional practices and physical activity, on self-care skills such as learning to understand and identify vital signs and symptoms of CVD, all will strengthen disease management and eventual CVD and health outcomes. McEvoy and others (2018), advocated for culturally tailored, specific, and relevant interventions such as health education and dietary behavior change as attempting the Mediterranean diet with peer support intervention, to address the biological, cultural, feasibility, and socioeconomic risk factors contributing to heart disease in African American women.

The AHA (2019) said CVD accounts for close to 50,000 African American women annually; AA women 20 years and older, experience a 49% heart disease rate.

One in five AA women believe they are at high risk for heart disease and only 52% of AA women are aware of the signs and symptoms of a heart attack, and e) 36% of AA women know that heart disease is their most significant health risk. Decreased or absent health and cardiac literacy are challenges for the group (Dunn et al., 2017; Magnani et al., 2017), and peer-to-peer support could bridge these gaps with the provision of informal health education for better understanding of heart disease, learning self-management skills to live and cope with heart disease, engaging in better-informed lifestyle choices, obtaining guidance in making better healthcare decisions, sharing similar experiences with peers, and receiving support to influence behavior change needed to adequately self-care and manage their heart disease.

Fisher et al. (2015) provided findings from a Diabetic peer support program that serves as a valuable self-management model for controlling and preventing the challenges of chronic diseases and demonstrates that evidence supports key peer support functioning and encourages flexibility in implementation and tailoring to meet local needs. Research studies were conducted in four countries, all projects focused on diabetes, and each was established in a way that allowed continuing evolution and intended to assist participants indefinitely (Fisher et al., 2015). The funded projects attempted to build an evidence base for peer support and develop models of how peer support programs might be implemented in multiple settings such as in managing chronic disorders, while maintaining vital critical functions of ongoing provision of social and emotional support for daily self-management, and linkages with community resources for prevention and care with chronic disorders (Fisher et al., 2015). The lower significance given to CVD programs means that less funding may be allotted to this service in minority communities. As a result, the needs for local businesses such as hairdressers and tailors have been encouraged in partnership to drive changes in community health care with chronic diseases.

Determinants of Heart Disease Severity

Disease severity is determined by multiple factors, and the severity will determine the treatment and outcome of the disease or disorder. The severity of chronic heart disease or cardiovascular disease (CVD) and heart failure is normally measured by cardiac health professionals based on the presenting symptoms and a specific classification measure, commonly the New York Heart Association (NYHA) Functional Classification, which places patients in one of four categories based on how much they are limited during physical activity (AHA, 2017). Disease severity also considers the intensity, acuity, and persistence of the disorder in question. Specifically, CVD in the acute state (such as following a heart attack) can lead to persistent chronic or long-term symptoms and could deteriorate into more severe states, affecting the heart's functional ability and consequently, the patient's physical mobility and activity tolerance level. In fact, CVD is one of the more common chronic diseases and is the top global cause of death for both males and females, with more than 17 million deaths in 2016 and a projected growth rate of about 34 million deaths per year by 2030 (AHA, 2020).

Social determinants of health such as ongoing daily stress, lower rates of formal education, poor living and working conditions, unemployed status, poor health literacy, and limited or lack of access to healthcare are more prevalent in minority populations such as the African American group, placing them at higher risk of disease progression, more severe disease states and higher morbidity levels. African American women face higher risk and prevalence of heart disease than Caucasian women and possess higher risk conditions than their white counterparts (Department of Health and Human Services (DHHS), 2018) including high-risk conditions such as hypertension, obesity, diabetes mellitus, and smoking. AA women are also more likely (35% more) to die of heart disease than other groups (DHHS, 2018). They tend to have less controlled disease states due to less healthcare access, less health literacy and skills, less financial resources, and less social support. AA women in the US also possess the highest prevalence rate of hypertension (HTN) and obesity (Abel et al., 2018), contributing to higher risk and rate of CVD, organ damage, morbidity, and death. Others are reminded that as the cardiovascular risk and trend persist, strategies like community support and interventions such as the Shape program that encourages healthy practices from childhood into adulthood and more widely held community-based interventions that can leverage social networks and provide motivation for behavior change towards healthier CV status and reduced CVD risks and threats, are more critical and more desired (Abel et al., 2018) by vulnerable groups such as this one.

Contributing Factors and Barriers to CV Health

The existing literature reinforces that vulnerable groups such as African American women face many daily barriers and challenges to maintaining cardiovascular health, including poor health literacy, stigma, health care costs, access to care, and lack of social support (Brown et al., 2018; Carnethon et al., 2017). This fact makes it clear that having a chronic disease or multiple diseases, combined with such challenges, places vulnerable individuals at an even greater disadvantage in obtaining and maintaining support and guidance to prevent ill health, disease progression, and complications. These challenges are even more burdensome for AA women who are tasked with multiple additional duties, responsibilities, barriers, and risk factors to cope with, daily. Healthy People 2020 (2020) stressed the importance of contributing factors (such as access to social and economic opportunities; resources and supports available in homes, neighborhoods, and communities; the quality of schooling; the safety of workplaces; the cleanliness of water, food, and air; and the nature of our social interactions and relationships, as well as maintenance of basic needs (healthy diet, exercise, health care), smoking avoidance and cessation, all needed for the maintenance of wellness states. The use of peer support has been shown to fill the gap in deficient and challenging areas of care as listed above (Erwin et al., 2018; Fisher et al., 2017; Goldstein & Odonne, 2018; Mayo Clinic, 2019; Patil et al., 2018). Studies on social support have demonstrated a positive correlation with improved health outcomes as in diabetes self-management, proactive approaches, and attention to emotions (Fisher et al., 2017); in non-hierarchical, flexible, accessible veterans' needs and care (Goldstein & Odonne, 2018); in assistance with daily disease management, providing emotional support, linkage to clinic care and community resources, and ongoing support (Okoro et al., 2018); and in glycemic and blood pressure control (Patil et al., 2018) with the general population, and with specific cultural references.

The burden of cardiovascular disease is also said to be growing faster than the ability of public health to combating the disorder due to the obesity epidemic, preference for less healthy diets, high blood pressure, and a dramatic rise in Type 2 diabetes – all major risk factors for heart disease, as well as high-risk factors for the African American women population (AHA, 2019). The major contributing factors attributed to sudden CV deaths in recent research for AAs and AA women, were income, education, hypertension, diabetes, and race (Zhao et al., 2019), suggesting the continued need for ongoing aggressive preventive and supportive measures such as peer support and more responsible individual self-care. The high burden of CVD and cardiac mortality, as racial and gender disparities, indicate that a major public health problem persists, requiring much attention from public health and from healthcare practitioners (CDC, 2018), with peer support as a promising and feasible recommended solution. Calls for creative peer-based interventions targeting individuals in their communities, as well as an understanding of culture-specific needs have been made and recommended by researchers (Rodriquez & Harrington, 2016). The AHA recommended education, guidance, and culturally relevant social support for behavior changes and improved outcomes (AHA, 2020).

Access to Quality CV Care

AA women are also known to seek medical and urgent care less than the white population, possibly from having less awareness of diseases, less health and disease literacy, less access to health care, from financial challenges that come with poverty, and from known mistrust of the medical institutions (AHA, 2020c; Noonan, 2016). Dong et al. (2017) offered their perspectives on the quality of care delivered during visits to Urgent Care outpatient settings by racial and ethnic groups with cardiovascular disease (CVD). The reviewed studies highlighted the ongoing racial and ethnic disparities in the process, quality of outpatient care and outcome measures related to CVD care (Dong et al., 2017), and the systemic impact on vulnerable individuals. African American females encounter challenges in primary and preventive care, treatments offered, service quality, and disease outcomes in urgent and ambulatory care settings, as they are socially and financially disadvantaged in dealing with the existing healthcare system (Dong, 2017; Noonan, 2016), and many in the group are without support and advocates helping with the known barriers and challenges. This proposed research study will aim to explore the experiential aspects of understanding, accepting, believing, adjusting, and implementing treatment strategies, as well as gain insights into the abilities of participants to embrace the principles of coping and adaptive skills, as they share their stories and experiences.

Multiple peer and community support groups are available as offline and online networking groups (e.g., Women Heart, Heart Sisters, Mended Hearts, Support Network, and Mayo Clinic). Primary care, Outpatient, and urgent care services are also now available for the general population in an online format. The extent to which these resources are available and accessible to minority groups is uncertain. AA women research participants will be questioned regarding the care received in these service areas, as well as with primary and preventive care, to help determine appropriate interventions or lack of actions that could affect the maintenance of cardiac health and prevention of cardiac complications (Dong et al., 2017). Some individuals may fail to observe significant clinical differences with the sharing and understanding from using peer support (Patil et al., 2018), but if services are not offered, not provided, nor clearly understood, then progressing with life's simple seven measures and overall wellness will be difficult. Both chronic conditions of Diabetes and hypertension are high risk factors for heart disease, and AA women are at very high risk for both disorders which often lead to heart disease diagnosis and cardiac complications (Kalinowski et al., 2019). This makes them more vulnerable and even better candidates for peer support interventions, which can be more cost effective, and can help to mitigate multiple social challenges, such as being able to use anonymity, carrying systemic legacies from racial and social injustices, having poor representation in health policy decision-making, having poor access to health services, influenced by social determinants of health, as well as physical and economic environments, and health disparities (Noonan et al., 2016). Understanding and appreciating the dilemma regarding increased frequency, prevalence, behaviors, and health risk factors involved with African American women, will assist health providers in planning and implementing culturally appropriate programs to enhance self-efficacy and optimal cardiac self-care while gaining the knowledge and ability to become more confident with the ability to identify and interpret medical issues in a timely way to prevent cardiac complications.

Peer support interventions were compared with a control condition with risk factors of Body Mass Index (BMI), smoking, diet, physical activity, cholesterol level, glucose control, and blood pressure (Patil et al., 2018). They resulted in a small positive effect on participants' systolic blood pressure. Even with a minor change in biophysical signs like blood pressure, an accumulative effect on the cardiac patient can translate to slower progression or worsening of disease and complications. Researchers also recommend using Peer support interventions as possible sustainable community-based strategies for behavioral counseling in people with CVD risk factors such as hypertension, and other Life's simple seven metrics. Despite small changes that may be observed with participants, researchers can agree that ongoing periods of peer support interventions, can translate to improvement in health (such as weight loss, improved blood pressure readings, and decreased stress levels) for AA women if other factors are controlled (Patil et al., 2018), and if the perceived threats from the disease motivate action towards long-term behavior and lifestyle changes.

Support and Management of CVD in the U.S.

Each year, the AHA, CDC, NIH, and other government agencies compile up-to-date statistics on heart disease and other vascular diseases in the US. The AHA (2019) reports that heart disease or cardiovascular disease (CVD) affects about half of the US population and remains the leading cause of death in the US. Heart disease remains the leading cause of death of women in the United States, with 1 in every five women affected by the disorder, and only about 56 percent are aware of this fact (CDC, 2020). African American women have the highest rates of obesity or being overweight compared to other groups in the United States, placing them at elevated risk for diabetes, hypertension, and high cholesterol levels, all risk factors for heart disease (Ananian et al., 2018; OMH, 2020). These risk factors are also chronic illnesses that may accompany heart disease and require optimal self-management skills that could be provided with peer-to-peer support, to achieve maximum quality of life. Poor cardiac literacy, decreased cardiac awareness from historical perspectives with a societal misconception of heart disease being a man’s disease, lack of social support, and lack of access to health care and public health services and funding are some factors contributing to the reach and effectiveness of traditional public health promotion, interventions, long term ongoing care, guidance and educational support.

The burden of cardiovascular disease is now growing faster than the ability of public health to combating the disorder due to the obesity epidemic, preference for less healthy diets, high blood pressure, and a dramatic rise in Type 2 diabetes – all significant risk factors for heart disease, as well as high risk-factors for the African American women population (AHA, 2019). The major contributing factors attributed to sudden CV deaths in recent research for AAs and AA women, were income, education, hypertension, diabetes, and race (Zhao et al., 2019), suggesting the continued need for ongoing aggressive preventive and supportive measures such as peer support and more responsible individual self-care. The high burden of CVD and cardiac mortality, as racial and gender disparities, indicate that a significant public health problem persists, requiring much attention from public health and from healthcare practitioners (CDC, 2018), with peer-to-peer support as a promising and feasible recommended solution. Calls for creative peer-based interventions targeting individuals in their communities, as well as an understanding of culture-specific needs have been made and recommended by researchers (Rodriquez & Harrington, 2016). The AHA recommended education, guidance, and culturally relevant social support for behavior changes and improved outcomes (AHA, 2020).

Role of Peer Support in Managing Chronic Diseases

Chronic diseases such as cardiovascular disorders, diabetes, hypertension, stroke, and asthma are medical conditions of long-term nature, and normally require lifestyle adjustments to self-manage and control the disorder and prevent complications adequately. As chronic diseases progress, self-care practices require increased skills, commitment, and support, as demands on daily living and life’s activities become increasingly more difficult with the disease. The commitment of cardiac self-care includes vigilance to daily monitoring which is sometimes similar to learning and performing daily employment.

Peer support strategy has shown effectiveness in its use with chronic diseases, with reported benefits of a) increasing disease literacy, b) increasing life expectancy, c) improving self-efficacy, d (improving self-care skills and treatment adherence, e) decreasing morbidity and mortality, and f) reducing the use of emergency services (Fisher, 2015). The strategy is recognized in most aspects of healthcare, with multiple populations and settings with healthcare providers reporting benefits on their medical practices, especially with regard to patient satisfaction and patient outcomes (Fisher, 2015). Despite the increased use and recommendation of peer support strategy, heart disease (a chronic disorder in the global society), remains a significant cause of morbidity and mortality in the United States, and continues to be a heavy disease burden in minority communities (CDC, 2017; AHA, 2017). One problem and gap is that the use of cardiac peer support has not demonstrated consistent results with specific minority communities such as AA women with high risks, higher morbidity and mortality levels, and questionable self-management status.

Reports have indicated that the overall efficacy of peer support strategy across population groups and chronic conditions has not been clearly articulated despite recommendations for additional use of this strategy. Some studies report conflicting findings, some report benefits to participants, and other reports fail to find benefits for all study participants. Some studies lack details on specific variables such as age, genders, cultures, types of peer support programs, places of residence, psychosocial elements, socio-economic and educational states, while some have recommended or suggested further studies to address the above details and future emerging perspectives on peer support (Munce et al., 2017). The reports and stories are not all complete as most studies focus on one particular aspect of peer support such as self-managing a particular disease as congestive heart failure, diabetes, or hypertension, or looking at biophysical improvement in patients with a chronic disease (Patil et al, 2018).

The proposed phenomenological approach will facilitate sharing of lived experiences and a deeper understanding of the participants' perceptions, perceived benefits,, and impact on self-efficacy related to the use of peer support to gain more insight into the psychosocial and physical impact such as beliefs and levels of self-efficacy attained based on interventions aimed at improving disease knowledge, confidence, and self-care skills to adequately manage the quality of life and cardiac outcomes with heart disease. Health perceptions, disease literacy, and self-management do play significant roles in appreciating and performing interventions focused on establishing and maintaining social connections, helping to reduce stigma, and increasing empowerment and eventual outcomes from utilizing peer-to-peer support in treating heart disease. Multiple research studies have been conducted on peer support and heart disease (Kingod et al., 2018; Lauckner & Hutchinson, 2016; Nicks et al., 2018; Okoro et al., 2018; Patil et al., 2018), but there is a paucity of information addressing the crucial questions of people's perceptions of peer support interventions that lead to adjustments in behaviors, in empowerment status, in enhanced self-efficacy and self-care skills.

Types of Peer Support Programs

There is quite an abundance of health-related information available worldwide for consumers, and the hope of public health practitioners is that there will be comprehensive and broad extensive use of this information to enhance wellness and prevent diseases such as CVD (Singh, Meyer, & Westfall, 2019). Peer support can be provided in a variety of formats including; a) peer-led face-to-face self-management format; b) professional-led group visits with peer exchange; c) peer coaches or mentors meeting one-to-one with the recipient; d) community health workers; e) support groups; f) telephone-based peer support and g) web and email-based programs (Peers for Progress, 2020). In any format used, peer mentoring, reflective listening (reflecting content and/or feelings), counseling, sharing, encouraging, problem-solving or initiatives where colleagues, members of self-help organizations, and others meet, in person or online, as equals, give each other support on a reciprocal basis, there is no guarantee of success for individuals or groups (Peers for Progress, 2020).

Women Heart is a national coalition for women with heart disease, started in 1999 by three women following heart attacks, and aspires to inform and support other women with heart disease challenges (Women Heart, 2020). The organization has grown over 20 years with numerous partners and volunteers dedicated to increasing CVD awareness, supporting individuals and communities, training peers and advocates, and attempting to affect policies and research focused on heart disease in women nationally (Women Heart, 2020). Programs include Sister Match, Heart Sisters, and Sister Match Online, which connect affected women with a peer champion for ongoing guidance and support while learning to self-manage the disease. Online community support (INSPIRE) provides a forum for affected women and their families and friends with added virtual meetings and specific heart disease group networking (Women Heart Support, 2020). Mended Heart is the largest peer-to-peer heart patient support network in the world, providing support and guidance to heart disease patients, their families, and caregivers (Mended Heart Support, 2020) with programs geared towards peer/social support, education, community resources, awareness and connection for families with needed resources (Mended Hearts, 2020). Peer support strategies from mended hearts include hospital visiting, online visits, phone connections, and visual connections with social media (Mended Hearts, 2020).

It is unclear of the overall involvement of AA women with CVD in this group as the literature regarding local groups and specifics are not readily available. My proposed research study will attempt to identify those who have utilized online and in-person peer support groups and assess the impact of this strategy on variables such as age and generational difference, employment status, educational status, marital status, the period involved with peer support intervention, frequency of engagement with peers or group, and stage of the participant's heart disease.

There are specific CDC programs nationally (eg., Wisewoman, Sodium Reduction programs) and multiple blogs and online support groups such as Heart Sisters that allow for free questioning and answers, blog postings, expert advice, and much sharing and support, usually led by professionals who have had cardiac experiences themselves (CDC, 2019; Heart Sisters, 2020). These are all good strategies but may not be affordable or accessible to AA women due to systemic determinants and diseases challenges. There are multiple peer support programs available for various medical conditions and supported by the CDC (such as diabetic support, kidney support, and breastfeeding support groups), some online and growing with time. In Mental Health, a peer support program called 'Bringing Recovery Supports to Scale Technical Assistance Center Strategy (BRSS TACS)' is supported with lived experiences of people in recovery who play vital roles in BRSS TACS project leadership, development, and implementation (USDHHS Office of Minority Health 2016; SAMHSA, 2019).

Peer support workers have had success in the recovery process. They can help others experiencing similar situations through shared understanding, respect, and mutual empowerment as they remain engaged in the recovery process and reduce the likelihood of relapse (USDHHS Office of Minority Health, 2016; SAMHSA, 2019). The AA community is heavily afflicted with mental illness, sometimes combined with CVD and other comorbidities, and making their self-management even more challenging and burdensome. Having the support of peers could help to mitigate the challenges of daily quality-of-life activities.

Peer support is also powerfully used in the Veteran Administration (VA) department. Peer Specialists are trained to help others with mental health and medical challenges in order to reach certain life and recovery goals, as well as with transition for veterans who are moving from active military service and reserve duty (US Department of Veterans Affairs, Veterans Health Library, 2020). Goldstein and others (2018) evaluated peer support with female veterans at risk for CVD, using semi-structured, telephone-based interviews and reported that peer support was appropriate for groups or populations that shared a common identity and sense of commitment to communal well-being as would be the case in AA women sharing commonalities in various aspects of life and with medical challenges. Being able to feel, understand and share in their experiences, and find common wellness initiatives and interventions for improved quality of life and cardiac outcomes will enhance coping strategies and self-care management of the disease. Despite the format used, and the population engaged with peer support, shared goals include the ability to guide, encourage, empower, develop coping skills, enhance self-care, and maintain linkages with health systems and primary care providers

(Peers for Progress, 2020), some of which are not easily achieved or maintained in the AA women population with chronic diseases and other social and psychosocial challenges.

Social Bond, Connectedness, and Reciprocal Exchange

In the proposed community research, the usefulness, and value of community resources such as trained peer supporters and professional-led support groups will be examined with participants, to identify the relevance and culturally appropriate interventions offered and addressed, to make a difference in the peer support strategies presented (Kingod, et al., 2017; Macario et al., 2017; Okoro et al., 2018). Peer support communities provide a supportive space for the maintenance of daily self-care with chronic illnesses and help to provide a sense of group belonging and reduce feelings of isolation. Online communities continue to increase, and research has shown that they help in supporting and strengthening social ties and knowledge exchange in medical, social, and everyday life and wellness concerns (Kingod et al., 2017). This means that the knowledge gained from the peer support network was perceived as valuable and extended far beyond medical challenges. Community workplace peer support programs are also available to educate, support and enhance cardiac self-care and wellness. Kingod and others (2017) found that social and cultural bonds are generally strong in workplaces, where employees can share similar medical and mental health challenges and solutions, and can support each other, making workplace peer support a winning strategy for all, both with in-person and online methods of collaboration. Common themes identified from peer support bonding in the workplace included a) social support and connections, (b) similar illnesses identified in employment, (c) sharing of knowledge and experiences, and (d) collective voice and mobilization. If the environment of online sharing is convenient and friendly to the proposed study's inclusive participants of AA women with heart disease. In that case, online peer-to-peer communities could provide a supportive, experience-sharing, educational environment with a collective voice for self-care towards self-efficacy related to managing chronic heart disease and attempting to overcome the heavy burden of systemic disparity, misperception of heart disease, and multiple lifestyle changes required to address CVD risks such as diabetes and hypertension. Reciprocal exchange of knowledge and experiences may help to strengthen social community connections, disease literacy, individual and community empowerment, as well as behavior changes and self-care skills acquisition towards a healthier quality of life. Peer support evidence with other chronic disorders has demonstrated that peer relationships can provide consistent, higher-quality social support, better-coping strategies for handling stress that usually comes with such chronic states and enhanced psychosocial health and quality of life (Fisher et al., 2015; Nicks et al, 2018). The chronic nature of CVD in AA women, along with their sustained exposure to multiple social determinants of health and disease challenges, place them at the top of priority lists for peer-to-peer engagement for all the benefits known and demonstrated in the past.

Self-Efficacy as a Predictor of Disease Management

Self-efficacy is defined as a personal belief in one's capabilities to organize and execute the courses of action required to attain success and manage particular situations (Bandura, 1977). Bandura described such beliefs as determinants of how people think, behave, and feel, with these actions potentially affecting their decision-making and life choices, their motivation levels, their quality of functioning, their ability to recover from difficulties, and their vulnerability to stress and depression (Bandura, 1977). People's beliefs in their efficacy are developed by four main sources of influence, including mastery experiences, observing successful management of tasks in people similar to oneself, persuasion and confidence that one is capable of success in specific activities, and demonstration of personal strength and ability to overcome adversities and challenges (Farley 2020). If an individual learns the skills needed to self-care with chronic diseases, she will likely gain increased self-confidence, and will be more likely to manage disease adequately to prevent complications and rapid progression. There is now about fifty percent of the population with chronic diseases (CDC, 2020), and so most individuals are expected to take control and be the primary driver of their diseases, with help and support from the public health services and strategies available at their local community levels to self-manage effectively. Many patients or individuals must learn to manage multiple comorbidities, so the task of self-managing chronic disorders can prove to be challenging for many (Farley, 2020). This can lead to discouragement, demotivation, and a feeling of failure and depression in cardiac -afflicted individuals who are attempting to self-care and manage the disease with numerous other social, medical, and financial barriers.

Self-Efficacy and Self-Care with CVD

Peer support and guidance should assist individuals with strengthening self-efficacy (Peers for Progress, 2019) which could alter the management of cardiac and other chronic disorders. Self-efficacy is based on an individual's belief in her own abilities to address and adequately manage her own behaviors to successfully meet set goals (Bandura, 1982) including: treating and controlling underlying contributing factors (such as diet control for Diabetes and Hypertension), gaining self-care skills and reducing the progression of heart disease. Individuals with lower levels of self-efficacy may experience decreased confidence in making healthcare decisions, actively engaging in public health programs, and in adjusting lifestyle behaviors (Xu et al., 2017; Imes et al., 2016). Self-efficacy was shown as a predictor of patient-reported outcomes in individuals with acquired diseases such as heart disease, with a lower level observed more in females, and with those unemployed (Thomet et al., 2018). Quality of life, anxiety, and depressed states could also be predicted by the level of self-efficacy with research participants studied by Thomet et al. (2018). The concepts of the HBM and Social Learning/Cognitive theories will be utilized during the detailed one-to-one interview and will be able to elicit responses without coercion, regarding diagnosed cardiac diseases, participant's awareness of the disease, levels of self-care and confidence, perceived barriers, perceived health and social issues, the value of peer support in their daily activities and positive or negative effects observed or experienced with the addition and maintenance of peer support, and interventions. The questions, answers, and detailed descriptions of experiences will help to clarify perceptions and answers related to cardiac-associated behaviors, performance and beliefs of this AA women group.

Learning and taking responsible actions with prescribed treatments, improving self-care skills, obtaining social support, and maintaining provider follow up care, are all essential for higher levels of self-efficacy, and managing cardiac disorders (Beckie et al, 2018). These factors are known or perceived challenges, areas of concern and sub-optimal care for many African American women with chronic illnesses. The HBM will assist in identifying perceived benefits and challenges, and help us understand the kinds of teaching, guidance and support that might help to motivate these AA women toward behavior change. Changes are predicted based on the threat and severity of their disease, the barriers to change, the benefits of change, and the self-efficacy required (Jones et al., 2015; LaMorte, 2019).

Self-efficacy was derived from the social cognitive theory (SCT) and relates to people's beliefs in their ability to think, feel, act, motivate themselves, and maintain some control over events that affect their lives (Kohler, 2018; La Morte, 2019). The way study participants or individuals think, act and feel is influenced by self-efficacy and the level of confidence they possess. It therefore follows that if an individual cardiac sufferer believes that she will succeed in achieving the goal of a stronger, healthier cardiac status with sufficient staying power and capabilities, as well as maintaining optimal daily functioning, she will be more likely to attempt new or adjusted behaviors, especially if she is engaging with peers and supporters on a similar journey. In order to achieve higher self-efficacy, an AA woman being studied may; a) attempt to perform a task that was previously successful within her capabilities (mastery experience), b) she may watch or emulate a peer with whom she can identify performing a task successfully (social modeling), c) she may receive positive feedback or verbal persuasion relating to the task from a peer, or d) she may interpret physiological or affective states, with some or all of these factors involved (Kohler, 2018). The perceptions and susceptibilities that formed the lived experiences of the study participants, were collected with interview techniques, including asking open ended questions that will allow for depth and breadth in explanation, and a better understanding of the phenomena (Stuckey, 2018) of sustained

CVD and health challenges while utilizing peer support with a chronic disorder. They were interviewed in their home environment via an electronic platform Zoom, where trust can be obtained in their place of comfort.

Self-efficacy dimensions include magnitude which refers to the difficulty level (such as easy, moderate, or hard) that an individual thinks he or she can perform adequately (Psychology Research and Reference, 2020). An AA woman who believes that she will have multiple challenges performing the task of physical activity or increased vegetable consumption will be less likely to engage in this intervention towards cardiac health behavior change, thus suggesting lower self-efficacy magnitude. Generality and strength are other dimensions considered with self-efficacy and their applicability with AA women may relate to their experiences and self-management with peer support strategies in geographic residential location (DMV region), and strength in the judgment of being able to succeed at a particular task (Mudde et al., 1995). AA women with heart disease will exude strength when they believe that there is confidence and comfort in their ability to perform activities leading to positive health benefits for their situation.

Self-Efficacy and the HBM

With the HBM, an African American woman participant may become motivated to act and participate in the peer support interventions (such as social engagements with reciprocity, educational sessions, lifestyle changes with diet and exercise), when there is perceived disease threat and possible health benefits identified (LaMorte, 2019). An individual female victim of heart disease may develop confidence in her ability to perform and manage her compromised heart condition and quality of life after receiving cardiac education, cardiac self-care skills, social engagement with others, and self-management training from the multiple components involved in the participating peer support program and interventions. Suppose patience, culturally appropriate and acceptable language use, counseling, and guidance are provided to AA women with heart disease, following early needs identification, it is more likely that some positive effect could be achieved based on the HBM theory and self-efficacy (Imes et al., 2016). Perceived susceptibility to ill health (risk perception), perceived severity of disease, perceived benefits of behavior change, and perceived barriers to taking action, and self-efficacy are core factors posited in the HBM and will be reviewed extensively to garner a better understanding of participants' self-efficacy based on their lived experiences during their use of cardiac peer support strategies.

People sometimes avoid tasks when they possess lower self-efficacy. The knowledge, skills, and confidence obtained with peer support are expected to increase self-efficacy, so asking questions about perceptions, beliefs, coping mechanisms, expected outcomes, and goals, will elicit an understanding of the level of self-efficacy that exist within the AA women included in the proposed research. Questions related to self-efficacy will include: a) whether the AA woman believes she can succeed or fail when confronted with challenges, b) how have self-care skills developed during her experience with peer-to-peer support and reciprocal learning and sharing, c) how confident she is about her capability to resist temptations and adapt to a healthy lifestyle, d) how confident is she in including enough fruits and vegetables in her diet daily? e) how confident is she in exercising daily to maintain heart health? f) how confident she is that she will have someone available to assist in case of a medical emergency.

Kong et al. (2018) showed that peer support significantly improved self-efficacy and quality of life in shorter intervention periods of 6 months or less but had less impact on overall physiologic changes and maintenance of Type2 diabetic patients. It stands to reason that not everyone experiences the exact effects of self-efficacy, and generalizations should be avoided, made across variables such as gender, age, and beliefs. Males and females seek, receive, and give emotional and social support more or less in different locations, differing in age ranges and with different cultural settings and belief systems (Okoro et al., 2018). A direct face-to-face interview with AA women participants will be able to shed light on each study participant's real-life experience regarding self-efficacy, perceptions, self-care and abilities to meet the reasonable quality of life, as the available literature addressing this area on CVD, peer support and self-efficacy has not adequately explored this challenging matter.

Self-Efficacy, Motivation, and Behavior Change

The HBM suggests that people's beliefs about health problems, perceived benefits of their actions, barriers to activity, and self-efficacy explain engagement (or lack of attention) in health-promoting behavior (LaMorte, 2019). A stimulus, or cue to action, must also be present to trigger the health-promoting behavior. Based on the Social Learning/Cognitive theory, and the resources made available by peer support, the African American participant with higher self-efficacy will be more likely to exert additional or sufficient effort that may lead to more successful cardiac health, whereas those with lower self-efficacy may be less likely to achieve their goals, or may cease effortful trials and may fail in the process (Imes et al., 2016). So, if AA women believe they are at high risk for a serious illness such as heart disease and develop relationships with a peer or peer support group, she may become more interested and motivated to change health behaviors more readily than if she perceives a low level of disease threat although shared stories have been heard from others in similar situations.

The level of social relationships and networking will also influence health outcomes by supporting the motivation or actual practice of health-related behaviors, including preventive and lifestyle practices, treatment adherence, and disease self-care behaviors. Imes et al. (2016) emphasized that adequate self-efficacy or belief in one's capability is required for engagement in the behavior change process. There are three necessary conditions to be met for an adult at increased risk for CHD. The individual must; perceive that she is at high risk for CHD,she must be aware of the benefits of a CHD risk-reducing lifestyle, and she must possess the level of self-efficacy to engage in a CHD risk–reducing lifestyle (Imes et al., 2016). The authors noted that behavior change will be unlikely to occur if all three conditions are missing. The inclusive study population of AA women will be able to explain and expand on their self-efficacy related to awareness, beliefs, and perceptions regarding CVD, as well as perceived barriers in self-care and management of CVD. Thomet et al. (2018) found that lower general self-efficacy (GSE) was associated with the female sex ($p = 0.025$), with not having a job ($p = 0.001$) and being in poorer functional class ($p = 0.048$) in a study conducted on a large cross-sectional multi-site study done on adults ages 18 -81 years with heart disease in 2 countries. General Self-Efficacy was also found to be positively associated with prediction of quality of life, and negatively predicted symptoms of anxiety and depression with this study (Thomet et al., 2018). The self-efficacy questions and responses from the proposed cardiac peer support interventions and engagement will enlighten public health providers on the effect on the inclusive population of AA women to be studied, and what barriers prevented progress with cardiac self-care. Based on the HBM, the perceptions of disease threats, barriers and benefits are other factors that will impact health outcomes with self-efficacy.

Positive Social Change with Peer Support Programs

The implications for positive social change from the results of my proposed research study are multiple and include; a) a better understanding of behaviors demonstrated in individuals and groups with heart disease and some other chronic diseases, who share treatment strategies with other peers and community members. Other implications for positive social change include possible enhanced self-management skills and self-efficacy obtained from cardiac health education, improved knowledge, and self-confidence from using peer support and mentoring. Positive social change may also include an impact on public health programs with resulting health status change, health outcome improvement, decreased hospitalizations, improved quality of life, and reduced cost of care associated with the acquisition of change in perceptions and attitudes gained from the peer support intervention. Positive social change will also help in strengthening of Partnerships with peers, individuals, groups, families, and community members as they bond and share in similarities with knowledge of chronic diseases, treatment strategies, and self-management process. Researchers and public health practitioners could benefit from study results and knowledge gained from the individual, group and community activities as continued public health interventions are planned and provided to vulnerable community groups.

The proposed research inquiry will examine the perceptions among minority groups with heart disease, utilizing peer to peer support as a treatment strategy, and results will provide additional scientific literature on the topic, and to future interventions for prevention and control of heart disease and possibly other chronic disorders in the African American minority female groups. The result of the proposed study will also provide in addition to the research data and scientific knowledge regarding peer-to-peer support based on the evidence gathered. Community and family members may later become support agents and partners with other clients and patients with chronic diseases. Positive social change can also include an impact on Public Health Programs with cardiac and disease prevention knowledge and resources, health maintenance and improvement, improved health outcomes, decreased hospitalizations, improved quality of life and reduced cost of care associated with the alternate chronic care of at-risk minority women with heart disease.

Summary

Use of P2P support to enhance and sustain treatment and control chronic diseases in the U.S. has become popular and highly recommended by public health practitioners, with some issues involving minority populations with increased morbidity and mortality rates due to chronic disorders such as heart disease. Heart disease remains the leading cause of death for women globally (Kumar, 2017), with minority groups such as AA women carrying heavier burdens in terms of chronic diseases and heart disease in particular. Social and environmental determinants of health are associated with etiology, incidence, and evolution of such diseases that pose significant challenges and are not always given attention that is deserved for minority groups (Martinez-Garcia, 2018).

Social determinants include interrelated factors such as socioeconomic status (including wealth, income, education, employment or occupational status), race and ethnicity, social support, social networks, culture (including language), access to medical care, and residential environment, as well as psychological, behavioral, and biological mechanisms and social determinants which cause and perpetuate CVD (Havranek et al., 2015; Martinez-Garcia, 2018).

Health behaviors such as tobacco use, physical inactivity, unhealthy diets, and lack of social support contribute significantly to CVD morbidity and mortality, but these factors are also not easily modified or controlled due to ongoing disparities, cultural beliefs and practices, and systemic barriers involving population-wide preventive measures and access to healthcare. In this study, I reviewed information regarding heart disease in the U.S. as well as heart disease in women, particularly AA women, use of peer support to enhance self-efficacy and self-care for improved cardiac health, improved cardiac and health literacy, peer support impacting CVD severity and progression, and reducing morbidity and mortality due to heart disease among AA women. Understanding specific beliefs, attitudes, perceptions, and opinions related to peer support and its impact on self-efficacy regarding heart disease will better prepare health providers and community care workers to deliver optimal support to afflicted individuals. Having communities with similar cultural beliefs, perspectives, and practices network and engage to find solutions for CVD and other chronic disorders may prove helpful in terms of reducing disparities and improving outcomes for underserved populations with ongoing social, economic, and systemic challenges. This study may help explain experiences and perspectives of those who are directly affected, to provide helpful guidance and interventions for prevention and management of CVD among minority groups.

Chapter 3: Research Method

Lived experiences and perceptions involving peer support for hypertensive heart disease among AA women was assessed in this study. Increased morbidity and heart disease mortality rates among AA women justifies recording their real-life experiences and perceptions to inform peer support providers about relevant and culturally-specific interventions to improve self-efficacy and lead to enhanced heart disease management outcomes.

In Chapter 3, I provide a description of the research design, central concepts, and phenomena, as well as justify why the design was chosen. Next, my role as the researcher was discussed, including management of biases and how they were addressed. Then, a description of the sample is provided, along with selection criteria for study participants, an overview of the research instrument, as well as concepts in the study are discussed. This is followed by a discussion of the data collection process, data analysis, data storage, credibility, and ethical considerations. In qualitative research, the researcher focuses on persons currently involved in situations or phenomena and records their experiences to find common themes and frame of reference. The goal for this research was to develop and collect rich and in-depth data from participants to increase public health awareness of peer support and its effect on self-efficacy, self-care management, and quality of life among AA women with hypertensive heart disease.

This study involved addressing AA women with heart disease as they verbalized experiences about direct life activities involving participating in P2P support interventions to achieve higher self-efficacy in terms of managing and controlling heart disease. After approval by the Walden University IRB, invitational flyers (see Appendix

B) were distributed online via social media contact pages and emails to healthcare and community contacts due to ongoing challenges with the Covid-19 pandemic, which restricted social contact globally. A summary of the study as well as my contact information was provided in flyers. Informed consent was obtained from participants prior to the study. Consent forms were provided electronically to all participants, and a detailed explanation of the purpose of the study was given prior to commencing interviews. Information regarding risks and benefits of participating in the study, voluntary nature of the study, and a confidentiality agreement was included in the consent form. Participants were informed of their right to withdraw from the study at any time, and they were provided with the contact information for Walden University's IRB.

Research Design and Rationale

This proposed qualitative study involved using a phenomenological research design. The purpose of this study was to share experiences and perspectives of AA women living with hypertensive heart disease who have been attending P2P support groups in person or online for a minimum of 3 months. Specifically, this study involved documenting their real-life experiences, thoughts, beliefs, and perceptions in the context of self-care management and self-efficacy. The phenomenological research design is used to understand how people construct, interpret, or make meaning from their world and experiences (Percy et al., 2015). This research design was suitable to understand meaning of participant's lived experience as they relate to CVD management in the context of P2P support. I used inductive coding for rich in-depth data that was collected from participants. Use of open codes, categories, and thematic analysis is most common with phenomenological research studies, where researchers seek to conceptualize processes and structures involving individual’s mental states, thoughts, beliefs, opinions, and motivations (Rudestam & Newton, 2015. The study involved observing participants and listening closely on Zoom and the telephone, while recording their accounts of their lived experiences. This helped in terms of assessing and understanding effects of peer support on their personal perspectives, behaviors, education, and skills in the context of CVD management. Analysis of interviews involved addressing the following research questions:

RQ1: What are lived experiences of AA women with CVD who are receiving peer support?

RQ2: How do AA women with CVD experience effects of peer support on their self-care?

Role of the Researcher

As the researcher for this proposed study, I as the sole point of contact for data collection. I designed and conducted interviews with selected participants following a pilot study with 2 participants, who were healthcare professionals. Experiences and insights gained from the pilot study helped me determine how to craft the most effective interview prompts for the study. Semi-structured interviews took place in participants’ homes or dedicated locations chosen by them, which were safe and comfortable environments where they felt free to share their lived experiences with me. Zoom platform was suitable and convenient for most participants. Telephone conversations were chosen by those without access to Zoom. Thematic data analysis was done manually and with the aid of Quirkos, a validated software tool. Thematic analysis process started with coding. I used Quirkos qualitative software to assist with identifying themes to help in comprehending the findings.

Sampling involves determining those who can best provide knowledge to answer research questions (Ravitch & Carl, 2016; Rudestam & Newton, 2015). Purposive sampling of participants was conducted to intentionally select participants who understood social and research problems related to peer support strategies. Purposeful sampling for this study was needed to gain rich insights regarding perspectives and experiences of AA women living with chronic hypertensive heart disease who use peer support strategies. Interview questions were mainly open-ended to elicit descriptions as I probed for clarification, increased depth, further details, and verification.

Patton (2015) emphasized that researcher bias such as beliefs about the participants' cultural preferences could be minimized or managed by focusing on the research prompts, and by being open-minded to the data provided by the participants, without interference or prodding by the researcher and using only the responses they provide, and from close observation of each participant as she shared her story of using peer support, and her cardiac experience in her own words. A careful examination of the research questions was done to ensure that the questions were unbiased, and that the interview wording of questions was not leading nor prompting the participants in their responses. Prompts were deployed to maintain conversational flow, to encourage deeper reflection by the respondents, and assist in the ongoing understanding of the data being collected regarding the phenomenon in question. A high-quality audio-recording device was also used during the interviews, and the services of a transcription specialist Otter was obtained to transcribe recordings following the interviews for data analysis. An audio and video-recording device enabled the capture of details and nuances that occurred during the interview process. This allowed the interviewer to engage more freely with the respondent, knowing that gaps could be filled in the notes by watching and listening to the recording later. This process was also explained to the participants by the researcher. Participants verbalized understanding and none objected to the use of the recording prior to the interviews.

Location and time for interviews were seriously considered and accommodated in the most convenient way for the study's participants. The location of the interview was important to ensure the good audio quality of the recordings, decrease distractions as much as possible, as well as being convenient for the participants and their preference which would reduce bias and control by the researcher (Jamshad, 2014). The selection of sites and sources for the study was chosen based on preference and convenience for each participant.

Methodology

Procedures for Recruitment and Study Participation

The recruitment process involved communication with healthcare and public health professionals, as well as social contacts in advance of the actual research study. Invitational flyers were made and distributed to Facebook online in order to recruit multiple community members from various community settings and social stations. This change was made due to the presence of the COVID-19 pandemic, limiting access to physical meetings with individuals and groups. Research study approval from Walden University Institutional Review Board (IRB) and authorized consent to participate were obtained from the response volunteers prior to starting the planned direct interviews. A copy of the consent form is enclosed in Appendix A. Potential risks and benefits were discussed with participants (APA, 2020). They were given an opportunity to ask questions and receive answers, clarifications, study requirements, and expectations before signing an informed consent or giving verbal authorization. Contact for the researcher was provided on the flyer and in email for participants (Appendix B).

Responders to the research flyers were contacted by the researcher for a brief pre-screening telephone call (lasting about 5 –10 minutes) or via email to ascertain that relevant study and procedure information was given and understood by participants in preparation for the main study. The restrictions and limitations that have become necessary with the pandemic of COVID-19 changed the format of face-to-face interviews, so additional time and explanations with the web-based platform was necessary for some volunteers. The brief pre-screening telephone session as well as the initial email contacts ensured that basic inclusion criteria were met and that access to zoom platform or telephone was available prior to the main study. Two participants did not have zoom access, and four others chose the use of the telephone over zoom. Prior to starting the main interviews, the confidential nature of the study was clearly explained. The informed consent for signature or verbal authorization was written clearly in concise language that was easily understood as verbalized by participants. Participation was voluntary, and participants were notified that they could withdraw from the study at any time before, during, or after the interview started. This was clearly outlined in the informed consent, and was reinforced by the researcher with procedural instructions in the pre-screening call. Participants had the opportunity to ask questions prior to authorizing consent. On completion of the interview process, a gift card of nominal value

($25) was provided to volunteer participants as a small token of appreciation for their time.

Conducting a Pilot Study

A pilot study was conducted with two volunteers before the main study. These volunteers were recruited via telephone and email solicitation to respond to interview questions and share their experiences as outlined in Appendix D for the main study. A prescreening contact and informed consent were also provided to these two participants before the main data collection. The researcher collected data, and data analysis and coding were done by the researcher and assisted from a qualitative research professional. The participants from the pilot study were not included in the main study, nor was data collected included in the main study. The pilot study served as a guide in gauging whether the research goals and design were realistic, the time and costs associated with the study were estimated, and provided the researcher a better idea of the best way to craft an effective interview guide for the larger study (Crossman, 2019; Patton, 2015).

Data Collection

A qualitative approach using semi-structured recorded interviews on web-conference platforms was used to explore the lived experiences and perceptions of African American women with a purposeful sample of participants utilizing online group platform zoom for peer-to-peer support. Each interview recording was then transcribed and coded manually and with the assistance of a transcription service Otter, and a qualitative analysis tool Quirkos.com/web. Common themes were identified until the required saturation level in analysis was obtained, and until no further data collection or analysis was needed (Saunders et al., 2017) in the context of the research questions.

Saturation is a goal of qualitative research and occurs when adding more participants to the study does not result in obtaining additional perspectives or information in regard to the research questions. The semi-structured interview format was utilized and guided the process with each participant who passed the inclusion criteria. Interviews were conducted on the web-conference platform zoom that was preferred by nine participants. Telephone interviewing was chosen by six participants. The interviews consisted of semi-structured open-ended questions with prompts to facilitate an environment of trust within which the participants could feel comfortable with sharing emotionally sensitive life experiences with the researcher. A small pilot study consisting of two volunteers was conducted to gain insights into the interview process, the web-conference interface, the general feasibility of the study and other related aspects to help design an effective study (Crossman, 2019). Specifically, it will provide an opportunity to ensure that the interview prompts were comprehensible, the wording was clear and concise, and that the participants felt that they were able to express what they wanted to share (Crossman, 2019). Although general self-efficacy questions were used to provide broad directions for the interview prompts, participants were allowed to respond in their own words and expand on their responses as needed, and as guided by the natural flow of the interview. Some interview prompts to questions will include; a) common daily activities specific to cardiac self-care, b) her abilities to learn and perform skills learnt with peer support, c) the role that peers and family played in helping with activities of daily living and in emergency situations, and d) her confidence level with knowledge gained and skills learnt to better self-manage with heart disease.

Data Analysis

Thematic analysis was used to identify, analyze, organize, describe, and report themes in the data. Thematic analysis is appropriate for this study as it allows for the consideration of interesting themes and patterns while aiming to create sensitive, insightful, rich, and trustworthy research findings (Nowell et al., 2017). Percy et al. (2015) suggested that thematic analysis is a generic approach to analyzing people's reports that may form the basis for many kinds of qualitative interpretation, where the data set is searched carefully for patterns or meanings, and subjective experiences are explored further. Following each interview with participants, brief analytic memos (notes) were taken by the researcher along with detailed notes from the video recording of the interview. The initial insights gained from these notes in conjunction with the video recording of the interview will help link and categorize data to provide a full description for the coding process as suggested by Corbin & Strauss (2015) and Rogers (2018). Analytic memos will help the interviewer to remain reflective on the research process, to obtain clarity with interpretation of the data and the bigger picture, as well as on the theory being employed (Rogers, 2018). Reviewing and transcribing the interviews soon after each is completed assisted the researcher to maintain a fresh recall rather than waiting for all interviews to be done, with larger volume of data, and possible challenges with recall. Computerized qualitative software tools Quirkos web, was utilized to reduce the risk of data loss, to assist in providing coding of themes and other unstructured areas in studying and organizing interviews and social contents for best results (Auld et al, 2016). All physical and electronic data are being kept private and confidential in a safe locked drawer by the researcher, and accessible only to her.

Validity, Credibility, and Ethical Considerations

To ensure validity of the data, each interview was conducted using video conferencing with audio recording, after permission was granted by participants, to allow for verbatim transcript of the interview. This allowed for the availability of actual live interview access during and after interview sessions for proper analysis. Coding of the data from the interviews followed data collection. Manual coding and a reliable qualitative software program Quirkos web, was utilized to assist with data analysis. Participants for the research study were recruited via social media flyer and via email contacts, allowing for a wide geographical and online reach of volunteers. African American women of ages twenty years and above (based on public health evidence with heart disease), diagnosed with hypertensive heart disease by a healthcare professional for a minimum period of three months, had been engaged with a peer-to-peer support group online or in-person for a minimum of three months, were willing to participate in the research study, were at different employment status, helped with a wider inclusion and diversity of participants, helped to reduce bias, and improve external validity (Clark, 2019; Patton, 2015). This will also help to better illustrate concepts, increase randomization and reduce sample bias, as the researcher aimed to adopt, design and incorporate methodological strategies to ensure credibility and trustworthiness of the findings (Noble & Smith, 2015; Patton, 2015). Credibility of the research relies more on having quality information-rich, believable collected data that represent depth from interviewees who shared explicit experience and meaningful perspectives of the phenomenon being considered (Patton, 2015).

Issues of Trustworthiness

Qualitative researchers study individuals' understanding of their social reality and how they experience the world (Patton, 2015, Rudestam & Newton, 2015). In order to ensure trustworthiness and a study's worth in qualitative research, Lincoln and Guba recommend that credibility, transferability, dependability, and confirmability be established (Lincoln & Guba, 1985) to overcome challenges, questions, and uncertainties related to this methodology. Patton (2015) also suggested that qualitative researchers should explore multiple ways of reaching conclusions, such as using triangulation methods as member checking or other validation methods to appraise consistency in order to enhance the credibility of the study.

Credibility

Credibility entails having the results of the research study be believable and understandable from the perspective of the participant, and can be relied on (Patton, 2015; Trochim, 2020). Credibility and accuracy were obtained with member checking interview content, obtaining participant feedback and validation, as well as maintaining prolonged interaction before and during the research process. Clarification was sought as needed by the researcher, to ensure clear understanding of the information being provided as experiences are shared. Direct interviewing of participants also lent credibility as interviewees possess firsthand rich information, knowledge and experience that they have volunteered for, and agreed to share with the researcher regarding this research topic. Note taking was also done throughout the data collection process to remain engaged with the data and not lose the essence and details of information and experiences shared (Tufford & Newman, 2010). The interviews were audio and video-recorded, allowing for multiple reviews as needed following the process. Credibility research guidelines also include exercising transparency in the data collection process, bracketing research biases to ensure objectivity, and mitigating any potentially undesirable influences (Patton, 2015). I attempted to bracket potential bias as a professional health care provider and one with a family history of CVD, to mitigate effects from preconceptions, and to increase scientific rigor in the research study (Tufford & Newman, 2010).

Transferability

Transferability acts as a check for external validity, where concern focuses on how the findings of the study can be applied to other situations (Trochim, 2020). In this study, qualitative phenomenological method was used to explore the lived experiences of African American women with hypertensive heart disease, in the online community facing challenges with the chronic disease, while utilizing peer support to improve self-efficacy and disease management. Transferability and generalizability of the research findings may be limited because the study was localized to a few areas in the US and the online environment. Patton (2015) suggested specific criteria that help towards making a transferable and generalizable study, such as addressing communities that have similar attributes and comparable cultural backgrounds to those of the original population studied. An environment of comfort and positive rapport was built with participants from early contact with the researcher towards fostering of deeper responses and sharing of experiences.

Dependability

Dependability establishes the research study as trustworthy, with consistent, believable, accurate and repeatable findings. Transcription of the interviews was done partially by a professional service Otter, and mainly by myself the researcher. My dissertation chair and committee members will provide expert analysis, feedback and guidance regarding the research procedure, contents and documentation. Trochim (2020) emphasized the need for researchers to consider and disclose the changing environment in which research is done and how well the study adapts to dynamic research settings.as needed during the process. An outside qualitative researcher was consulted to assist in examining and exploring data analysis and interpretation occurred. A researcher can gain valuable insight from this method, and the inquiry can help to build a stronger case for the study's findings.

Confirmability

This criterion has to do with the level of confidence that the research study's findings can be confirmed or corroborated by others (Trochim, 2020), and are based on the participants' narratives and words rather than on potential researcher biases. Confirmability helps establish that the research study's findings are accurate participants' responses. To ensure that the results are not based on personal motives or potential bias, I must provide a comprehensive account of the research data collection process, inclusive of the recruitment process, the description of the research setting, the participants' demographics, including data analysis and interpretation. Confirmability also involves the researcher recognizing that absolute objectivity in qualitative studies is impractical, yet the researcher must avoid influencing the research process and its findings by bracketing personal bias and avoiding conflicts. For the purpose of this research, I attempted to control my own viewpoints and demonstrated objectivity throughout the research process.

Instrumentation

A qualitative phenomenological research method is often used in the health science field to collect detailed data from participants, and this method has been supported by previous researchers (Colorafi & Bronwynne, 2016). It is recommended as the most appropriate qualitative approach when people's subjective voice on actual external situations and events are being studied (Percy et al, 2015). Semi-structured interview questions were developed (Appendix D) based on the purpose of understanding the underlying subjective experiences and self-efficacy related to cardiac disease management with the guidance of peer support strategies employed by the inclusive population of African American women. I ensured the validity of this research study by including ethical recruitment of participants, the exclusion of personal bias and expectations, and performing respondent validation or member checking with participants, to decrease the incidence of incorrect collection and interpretation of data (Patton, 2015). The research and interview questions for this study was developed from the gap in factors impacting persistent adverse cardiac status of African American women despite receiving peer-to-peer support for guidance. As a critical part of the research and the main research tool, I ensured that real life experiences and perspectives were brought out, maintained, and focused on participants' opinions, ideas, reflections and thoughts that provided richness in data for the significant topic being studied.

Protection of Human Subjects

The protection of human participants is significant and well recognized throughout this dissertation project, especially during and after the data collection phases. An important research goal was to ensure that all risks were explained and minimized

(NIH, 2015) while benefits were also explained and understood by study participants. The participants' rights to privacy and confidentiality were protected and their anonymity was maintained. Throughout the data collection stage, the data gathered was handled and stored with confidential means and locked away from public view or reach. Participants were informed of the data collection method and exactly how their information would be handled and used (NIH, 2015). There are no known anticipated risks involved in this project, and potential psychological or social risks were also minimized. As the researcher, I ensured that participants were protected from potential emotional or social risk during the data collection phase, that their information was safeguarded, kept locked away from others, always maintained with password protection for access, only accessible to the researcher, and ensured that participants cannot be personally identified (NIH, 2015). Once the project was reviewed and approved through the IRB process, pilot testing, then video conferencing interviews of participants ensued. Interview questions covered multiple subject areas related to heart disease, health beliefs, health care practices, cardiac self-care, self-efficacy, peer support, community support, and lifestyle habits. Data analysis followed detailed semi-structured interviews of participants. Participation in this qualitative research was voluntary, and participants were notified that they were at liberty to cease participating in the study at any time. Privacy and confidentiality of participants' personal information was always maintained.

Summary

The purpose of this qualitative research study was to describe lived experiences of AA women receiving P2P support regarding strategies, use, and effects on their self-efficacy and cardiac self-care management. Qualitative research studies involve capturing and communicating participants' stories in order to generate findings that are useful and credible to relevant decision makers (Patton, 2015). Participants volunteered for the study to improve CVD and hypertensive heart disease in African American populations. The open-ended interview questioning format was selected as the most appropriate to explore the phenomenon from the perspectives of participants. Plans for data collection and data analysis processes were detailed. Procedures to ensure trustworthiness and quality of results were outlined, including associated steps to reduce researcher bias. Guidelines for ethical research practices were also detailed, along with plans for protecting anonymity and safety of participants. In this chapter, I explained the methodology, research design, sampling, role of the researcher, plans for data collection and data analysis, and ethical practices and credibility.

Chapter 4: Results

The primary purpose of this phenomenological qualitative study was to explore lived experiences involving P2P support for hypertensive heart disease among AA women currently living with this disorder and receiving P2P support to assist in self-management of their disease. The initial plan for direct one-on-one interviews was revised to includd Zoom and telephone use due to the ongoing COVID-19 pandemic restrictions starting in the year 2020. A purposive convenience sample of15 AA women, aged 20 to 61, who self-reported a diagnosis of hypertensive heart disease and received P2P support were recruited for this study. According to Creswell (2018), purposive convenience sampling is appropriate when it may be difficult to randomly select participants from a large population, such as in online environments. A semi-structured interview protocol with 48 open-ended questions (see Appendix C) was used to explore participants' lived experiences involving P2P support while trying to self-manage hypertensive heart disease.

In Chapter 4 of this research, I detail the recruitment process, data collection process, analysis of data, and study findings. I present major themes that emerged from data collection, as well as strategies I employed to ensure trustworthiness of data.

The research questions are as follows:

RQ1: What are lived experiences of AA women with CVD who are receiving peer support?

RQ2: How do AA women with CVD experience effects of peer support on their self-care?

Research Settings

This study involved examining shared experiences, beliefs, understanding, and perceptions about barriers, benefits, and challenges with P2P support and how this strategy has affected participants living with hypertensive heart disease. Shared experiences were used to inform stakeholders about participants' ability to self-manage and support self-efficacy in terms of directing and controlling their disease while having daily responsibilities. With this study, I addressed the phenomenon of ongoing and challenging heart disease morbidity and high mortality among AA women, despite use of strongly recommended peer support strategies for partial solutions to chronic disorders. Interviews were conducted via zoom or the telephone. Participants chose their homes and preferred areas of comfort to engage in interviews. In these settings, privacy was maintained, and participants were free and comfortable in terms of expressing themselves and sharing their experiences. Most participants preferred the telephone format or recording audio via zoom. Some participants lacked laptop cameras, and some were more comfortable being off camera. The study's data collection period was between October 11, 2021, and December 10, 2021.

At the time of initial contact, all participants were provided a copy of the consent form via email prior to accepting terms for the study and were given an opportunity to ask questions. Each participant was interviewed once, with interview recordings lasting 35 and 50 minutes. P1's interview was not recorded as the Sony audio recorder (ICD-PX312) malfunctioned during the telephone interview and P1 had no access to Zoom. Some participants (P2, P4, P6, P9, P10, P11, P14, and P15) had their small children with them during interviews. Copious field notes were taken by me, so contents and essence of interviews were documented as much as possible. Semi-structured interview questions (see Appendix C) were open-ended and allowed for participants to elaborate on or respond to multiple questions at once. Some participants required some prompting to obtain in-depth responses. Follow-up probing questions were used to elicit in-depth views about their perceptions regarding receiving P2P support, heart disease, treatment, coping with stress, and access to cardiac care. As the study progressed, more probing questions were focused on themes that emerged from interviews.

Demographic Data

Recruitment of AA females between 20 and 61 was made via an online flyer that was posted to my Facebook page and sent via email to social contacts. All participants were required to speak the English language, were part of P2P support group online or in-person for a minimum of 6 months and were AA females between the ages range of 20 and 61 (see Table 1). Fifteen volunteers were obtained to participate in the study.

Active participants were employed as healthcare professionals (n = 2). Most were stay at home mothers and homemakers (n = 11), and two (n=2) were students living with family members. Many participants were involved with P2P support prior to COVID-19 pandemic, and most have been involved with online groups following pandemic restrictions globally since early 2020. Most groups were held and facilitated by healthcare personnel (mainly nurses) from local churches and communities. Some peer groups are facilitated by group members themselves, taking turns on a weekly basis. Healthcare and group member facilitation continues online currently. Group members reside in multiple states and interact online via emails and telephone.

Table 1

Demographic Information of Participants:

Characteristic	# of participants	Percentage
Age		
20 - 30	9	53%
31- 40	4	27%
41 -50	0	0
51 -60	1	13%
61-75	1	7%
Gender		
Female	15	100%
Male	0	0
Education Level		
High School	2	13.3%
College	12	80%
Advanced Studies	1	6.7%
No High School	0	0
Employment Status		
Employed F/T	5	33%
Stay at Home working moms	8	53%
Unemployed	0	0
Student	2	13%
Living Situation		
Lives Alone	2	13%
Lives with Spouse/Child	8	53%
Lives with family	5	33%

Data Collection

A total of 15 volunteers were interviewed as participants with firsthand knowledge regarding P2P support with hypertensive heart disease among AA females.

The recruitment and data collection process continued with direct interviews until saturation was achieved and no additional relevant information emerged from participants. Participants were given the option of Zoom or telephone interviews. Most participants preferred the telephone interview format as that was more convenient for them. Some participants had only audio access to zoom. Participants had the opportunity to ask questions prior to starting interviews as well as after completion. Participants were asked to contact me if they had questions or concerns following interviews. They also agreed to follow-up phone calls if additional clarification was needed by me.

Interview Process

Participants received the consent form via email in advance, to allow them time to preview the procedure prior to their interview. Some participants were interviewed via zoom platform, and some via the telephone in their homes and preferred space and time, ensuring a quiet environment and privacy. Some participants had their small child with them during the interview. Each interview lasted between thirty-five minutes and fifty minutes. Some probing was required to elicit clarification and depth as their stories were shared relating to their thoughts, views and perceptions regarding peer-to-peer support, treatment of heart disease, responses to treatment, stress control, self-care skills, and experiences related to access to hypertensive heart disease care. It was also important to build rapport with the participants earlier on and prior to the main study, where the period of sharing their stories and developing some level of trust and comfort with the researcher was necessary (Rudestam and Newton, 2015). The conversations between participants and researcher required restating and repetitions for clarification. Rudestam and Newton (2015) suggest that researchers conducting qualitative studies are required to modify questions and prompts as the interview process proceeds. Restating and repetitions were done in this interview process to obtain clarification of information shared. Recruiting a sufficient number of participants to capture critical information and establish theoretical relevance to explain the phenomenon being studied was evaluated using saturation which was reached after fifteen interviews as no new relevant data was obtained for the study (Rudestam and Newton, 2015).

The start of the interview consisted of reviewing the purpose of the study, the elements of the consent form, and screening for eligibility. Participants were reminded that participation was voluntary and that they could stop the interview at any time. Also, it was emphasized that their privacy would be protected and their identity would never be revealed. Participants also were asked to agree to the interview being recorded. Interviews done via the audio-visual platform were recorded by the conference calling system on zoom. Note-taking was done extensively, and notes were reviewed immediately following each interview while information was fresh with the researcher. Following data collection from all participants, a small token of $25 visa gift card was offered to them, accompanied by a ‘Thank You’ note via email.

A manual transcript of the audio recordings and notes was then made by entering the conversation into a word document and later to a professional audio-to-text transcriber. The word document was uploaded to a qualitative analysis tool Quirkos (quirkos.com), which was used for assistance with coding and ongoing data analysis after editing was done to the professional transcripts. The word documents of the transcripts were placed in a secret password secured Google drive, with access available only to the researcher. De-identified codes (P1- P15) were used to identify participants in keeping track of their responses. The researcher intends to delete these files completely after five years in adherence to Walden University dissertation research policy.

Table 2

Interview Details

Participant #	Interview Date	Interview time (mins)	Location of Interview
P1	10/11/21	40	Telephone
P2	10/13/21	45	Telephone
P3	10/19/21	40	Telephone
P4	10/27/21	38	Telephone
P5	10/29/21	40	Zoom
P6	10/29/21	40	Zoom
P7	10/29/21	50	Telephone
P8	10/29/21	70	Zoom
P9	11/01/21	35	Zoom
P10	11/02/21	40	Telephone
P11	11/07/21	50	Zoom
P12	11/09/21	35	Zoom
P13	11/16/21	35	Zoom
P14	11/18/21	40	Zoom
P15	11/29/21	45	Zoom

Data Analysis

For the data organization and analysis, I listened to the audio recordings repeatedly, and reviewed my notes taken during and after the interviews. Data analysis is a continuous and evolving process, starting from notetaking of the interviews, transcribing all the interviews manually onto Microsoft word, and repeatedly reviewing the transcripts for clarity. While reading the transcripts multiple times and attempting manual open-hand coding, a manual search was done from each set of interview responses to identify the keywords and sentences that emerged from the interview questions and shared data. Following that, the meaningful patterns, phrases, and themes in the transcripts were noted and emphasized. Later, preliminary themes were developed based on the research questions derived from the two conceptual frameworks that were used in designing and guiding the study (the Health Belief Model and the Social

Cognitive Learning Theory). I am also utilizing the expertise of my committee members, as well as other qualitative research experts - to double-check the identified themes I developed from the data.

Computer qualitative software programs can assist in coding, storing, and comparing qualitative data (Patton, 2015) with information entered and organized into a word document or excel spreadsheet. Qualitative data analysis software enables researchers to interpret interview data, save time and improve the validity and credibility of research data (Patton, 2015). The use of a qualitative analysis software tool of the latest and new web version of Quirkos (Quirkos.com and quirkos.com/web) was utilized to assist in data analysis for appropriate codes, categories, and themes, along with hand-coding which involved visually observing, rereading and identifying common keywords and themes from the interviews and excerpts. The data interpretation discussion will follow in chapter five.

Issues of Trustworthiness

Qualitative researchers study individuals' understanding of their social reality and how they experience the world (Patton, 2015; Rudestam & Newton, 2015). To ensure trustworthiness and a study's worth with qualitative research, Lincoln and Guba recommend establishing credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985) to overcome challenges, questions, and uncertainties related to this methodology. Patton (2015) also suggested that qualitative researchers should explore multiple ways of reaching conclusions and credible findings that answer the research questions, and such was done with the data analysis of this current research study.

Credibility

This entails having the results of the research study be believable and understandable from the perspective of the participants (Patton, 2015; Trochim, 2020). Member checking with participant feedback and validation was done in this study to ensure the accuracy and credibility of the collected data. An interview guide with semi-structured questions and utilization of two conceptual frameworks (health belief model and social cognitive learning theory) as a template for the interview produced in-depth data sharing and quality results. Clarification was sought as needed by the researcher, to ensure a clear understanding of the information provided as experiences were shared. Direct interviewing of participants also lent credibility as this provides firsthand rich information, knowledge, and experience that was volunteered for research and that was agreed to share with the researcher regarding this research topic. Follow-up probing questions, restating, and repeating answers and phrases were done to obtain clarification. I spent an extended period reviewing the transcripts to understand the data and identify patterns and similarities among the responses (Lincoln & Guba, 1985). Note-taking was done throughout the data collection process to remain engaged with the data and not lose the essence and details of the information and experiences shared (Tufford & Newman, 2010).

Transferability

This focuses on how the findings of the study can be applied to other situations (Trochim, 2020). In this study, qualitative phenomenological methods were used to explore the lived experiences of African American women with hypertensive heart disease, in different States and via online platforms, who were facing challenges with the chronic disease, while utilizing peer support to improve self-care, self-efficacy and disease management. The transferability and generalizability of the research findings may be limited because the study was localized to a few areas of the general population, although online formats can be accessed from any location globally. The restrictions of the Covid-19 pandemic created adjustments in the recruiting and data collection process, thus extending the reach of participants. Online recruitment and target population access was utilized instead of the original localized geography, allowing for a wider reach to volunteers and participants. An environment of comfort and positive rapport was created with participants from early contact with the researcher towards fostering deeper responses and sharing of experiences.

Dependability

This establishes the research study as trustworthy, with consistent, believable, accurate and repeatable findings. Transcription of the interviews was done with a professional service Otter and was checked and edited by the researcher for accuracy. My committee members will provide feedback and guidance regarding the research procedure, contents, and documentation. Trochim (2020) emphasized the need for researchers to consider and disclose the changing environment in which research is done and how well the study adapts to dynamic research settings as needed during the process. An outside researcher was also consulted to examine, explore, and challenge how data analysis and interpretation occurred. A researcher can gain valuable insight from this method, and the feedback can be helpful in building a stronger case for the study's findings.

Confirmability

This criterion relates to the level of confidence that the research study's findings can be confirmed or corroborated by others (Trochim, 2020), and are based on the participants' narratives and words rather than on potential researcher biases. Confirmability helps establish that the research study’s findings are accurate participants’ responses. To ensure that the results are not based on personal motives or potential bias, I provided a comprehensive account of the research data collection process, inclusive of the recruitment process, the description of the research setting, the participants' demographics, peer support use and format, including data analysis and interpretation. Confirmability also involves the researcher recognizing that absolute objectivity in qualitative studies is impractical, yet the researcher must avoid influencing the research process and its findings by bracketing personal bias and avoiding conflicts (Patton 2015). For this research, I attempted to control my own viewpoints and demonstrated objectivity throughout the research process. I attempted at all times to remain positive, objective, caring, empathetic and non-judgmental.

Coding Process and Emerging Themes

The coding process started with identifying keywords and phrases obtained from the sharing of experiences with participants and based on the conceptual framework guiding this research. The parent codes (or anchor codes) that initiated the thematic qualitative process included the following - support and assistance from peer-to-peer support, benefits from peer support, lifestyle changes while in peer support, health literacy, mental health, challenges, outcomes, skill development and healthcare providers. From here, categories were developed to help answer the research questions. Main categories identified included; Education and Awareness, Self-care management and skills building, emotional and social support, Lifestyle modifications for wellness, Healthcare provider relationships and outcomes. Main themes that emerged within each category above include the following: enhanced self-efficacy, reduced medical complications, peer support benefits, help-seeking from peers and family, lifestyle adjustments and behavior change for disease & self-care management, positive and negative interactions with healthcare providers, and managing challenges with peer support help and guidance.

Research Questions

RQ1: What are lived experiences of AA women with CVD who are receiving peer support?

RQ2: How do AA women with CVD experience effects of peer support on their self-care?

Study Results

Study results were obtained using manual coding via Quirkos (see Figure 3). Keywords, key phrases and patterns were identified and then categorized and analyzed thematically. Participants' responses were assigned by reading every response line by line to categorize the data into themes that represent the lived experiences shared by them.

Figure 3

Quirkos Canvas

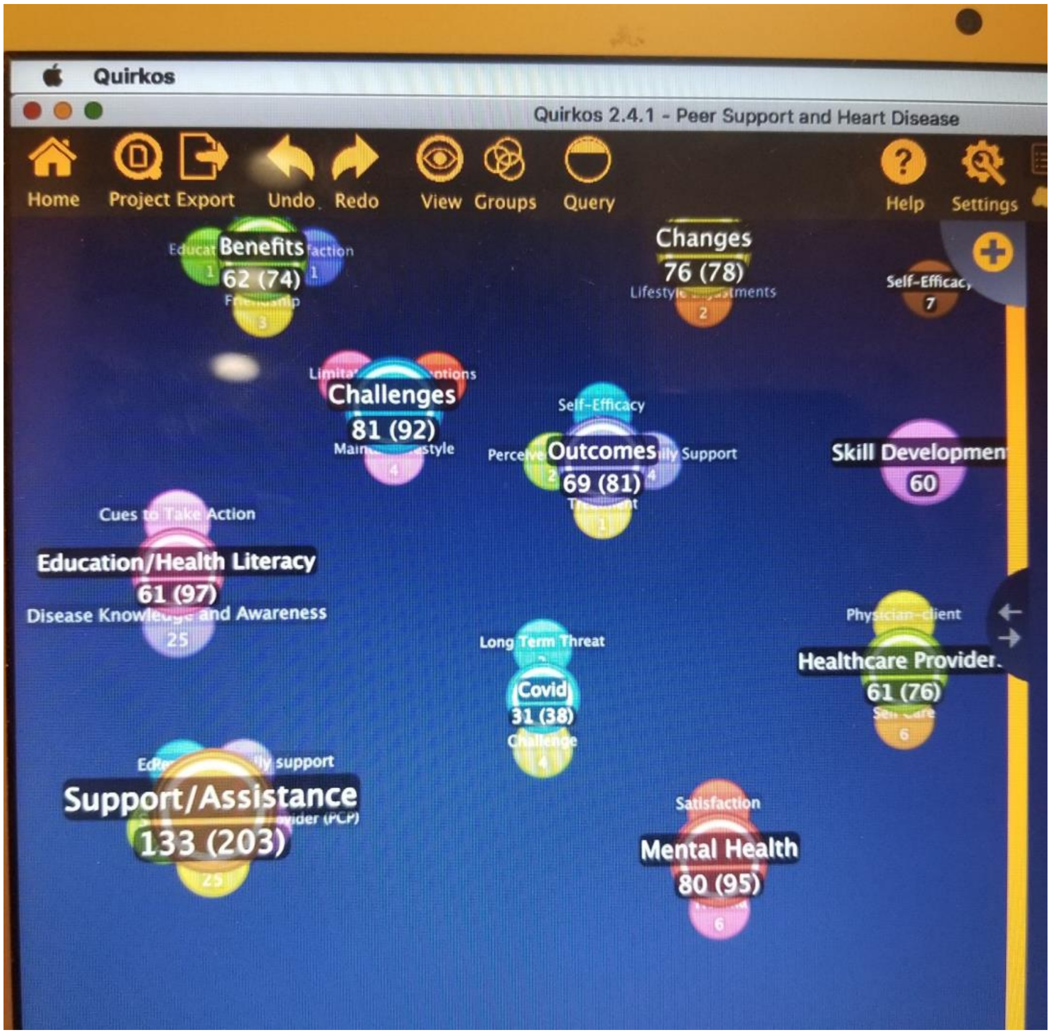


Table 3

Research Questions and Themes

Research Questions	**Themes**
RQ1 What are the lived experiences of African American women with heart disease who are receiving peer support?	Peer support enhances self-care and self-efficacy, reduces medical complications. Peer Support builds acceptance and resilience. Satisfaction, gratitude and appreciation for Peer Support Groups expressed (Perceived Benefits).
RQ2 How do African American women with heart disease experience the effect of peer support on their self-care?	Peer Support and Family Members Provide Critical Help for CVD Management. Lifestyle Adjustments are Essential for CVD Self-Care. Positive Interactions with Health Care Providers enhance CVD Management and Outcomes Ongoing Challenges, Perceived Barriers and Threats exist.

Theme 1: Peer support enhances self-care and self-efficacy, reduces medical complications

Participants' experiences and responses to the cardiac peer support questions and prompts suggest that peer-to-peer support helps to enhance confidence in their self-care management; for example, P3 shared, 'I feel comfortable managing myself' and thought she really benefitted from the peer support groups, both with in-person and online formats. P5 shared that she was able to take her blood pressure and weight by herself with “a lot of ease” and knows when to take a break from activities and “pay attention to signs if anything happens”. P1 shared that her heart disease was helped by peer support engagement as the group provided safety and mental support and helped to reduce stress and ultimately reduce disease complications.

Participants reported having gained some comfort in living with their condition and an increase in confidence, knowing that they can control their symptoms and manage their care with a supportive community, including peers, family, and healthcare providers. Participants verbalized their feelings on being able to self-manage and reported with satisfaction the support and influence of follow-up visits, reminders, and encouragement from their peers, family, and healthcare provider to maintain disease stabilization.

P11 shared that “most of the time, family connections, and even our friends that I stay in touch with, they also remind me of appointments”. P12 shared that her PCP has been there to help with almost every need she has with medical and mental health.

Avoiding Acute Care Episodes

Most participants had not been admitted for acute medical challenges in more than one year prior to the interviews and felt confident that their current regime of a healthier diet, more frequent exercises, having a positive attitude, maintaining engagement with the peer support group, getting adequate rest, and maintaining follow up care with their primary care provider, could prevent adverse cardiac events and medical challenges. Many felt that the maintenance of PCP calls and visits helped with medical checks on patients’ compliance and treatment plans. Some participants were referred to the support groups by their primary care providers, and follow-up reminders were regularly provided by peers during weekly meetings and contacts.

P3 said:

> I feel comfortable in managing myself and my heart disease with all that was learned from the peer support group. My stress level has decreased as I can always share with someone in the group. I find the source of my stress and try to talk about the issue. It (peer support) is important and helpful for those who need it. I manage mainly with diet, exercise, and relaxation.

P12 said:

> I am still with heart disease. Only that everything is working out well. So basically, I'm doing well. It's something I don't regret joining, and it's something I intend to continue attending (peer support group). I get more motivated each day. I think I'm doing pretty good. I don't have bad things going on. My health is stable. I'm exercising. I'm doing a good job in maintaining good mental health.

P15 shared:

> I feel like I'm so positive about life now, so I can control the disease with the help of peer-to-peer support. The experience with the peer support system that I have gives you a sense of peace, having people who are caring towards you, having people sharing one common thing. You are in a space where you cannot be judged; you're in a space where you cannot challenge; also, in a space where you can encourage each other in terms of certain challenges. Yea, because there is a direct connection with somebody or even this feeling that makes you know that you are not alone.

> P10 shared: “It gets challenging at times, but when I need a break, I ask for help from family members. I can also get advice from my peer group members.”
>
> P10 reported learning to take her blood pressure and monitor and check herself for signs of increased fluid, any swelling in the feet or eyes. She continued to attempt losing weight as ‘that was the best thing to do’.

Theme 2: Peer Support builds acceptance and resilience

The participants of this current study have accepted and resigned themselves to the medical condition that exists and are willing to survive with assistance from available resources to optimize their long-term cardiac stability. Feelings shared by participants indicate acceptance of their fate, with attempts to maintain positive attitudes towards treatments and support, but questions remain about the prevalence and uncertainties of this affliction on even the very young in this African American women population.

P6 shared her thoughts and attitude of comfort in believing that her heart disease does not hinder her from engaging in activities of daily living just as others have, stating “I can do anything as others can”. Most participants have avoided the Emergency Room (ER) visits in more than one year and have regular follow-up visits with their primary health care provider (PCP). This was reassuring to some, feeling that they were able to self-manage adequately with guidance and support from the peer support group and from their PCP as a safety check with the cardiac wellness process. Most had monthly, or two monthly medical follow-up visits and were determined maintain that commitment to preventing cardiac complications. P15 said:

> I feel very strong. I don't think of myself as having a condition. I don't let it get into my mind. Personally, I'm able to do the most important things that anybody

> can do. I don't think of having a disease and can do anything that others can do. Mostly, I take a lot of fruits and vegetables and low salt and low starch in my diet. Sometimes I'm tempted to take bigger portions, especially when I get stressed out, but this is something I'm really working on.

P15 also said:

> That helps in losing weight, with activities such as running chores, taking long jogs, taking a lot of water, also making sure that I am well and psychologically set, so I don't have things going on in my mind and making me lose control.

Some participants have identified that seeking and receiving help from family members to provide quality time for their roles as mother and caregiver (participant), are essential to their cardiac stabilization and well-being. They were learning and adjusting to prioritizing self-care, and shared basic activities such as listening, supporting, and sharing with group members during weekly online meetings (and in-person meetings prior to the Covid-19 pandemic). In this regard, participants are not always involved in actual discussions, but can benefit in multiple ways, as P8 shared: “Sometimes on the groups, I just listen to others and learn from others”, and similarly, P9 shared “It could be so relaxing, listening to other people share their insights on different things”.

Some participants also thought that hereditary contribution was a factor in their hypertensive heart disease diagnosis, as other family members such as parents, sibling, aunts and grandparents were also afflicted with the disease (P1, P6, P7, P8, P9, P10, P12). They were, however, not eager to discuss family medical issues.

Theme 3: Satisfaction, gratitude and appreciation for Peer Support Groups expressed (Perceived Benefits)

Most participants expressed satisfaction, pleasure, gratitude, and appreciation when sharing their perceptions of and their experiences with receiving peer-to-peer support in the management of their self-reported diagnosis of hypertensive heart disease. P12 and P13 explained the following regarding their experience with peer-to-peer support; P12 shared: “Peer support is awesome. The group made me feel loved, and as if everything would work out. Others who need help should try it. I guarantee it really works”. P13 said:

> If I have challenges and things are not going well, the peer support group is the best place to be. I get to interact with so many people, get to hear how they are managing their condition, get to know more than heart disease, get to know about other things in life, such as managing careers with the disease. The online platform provides a positive environment and is very supportive.

P1 shared: “I learned to remain positive and change lifestyle habits- with a healthy diet, more frequent exercises, medications when needed, a positive environment, and attitude.” P9 also shared benefits from her peer support experience:

> I feel comfortable, and the reason I say that is because you gain a lot from the support groups, and I could focus on so many things that could help me. What I learned is that during the support, with the peer support group sessions, you may come in feeling so down, then when you are leaving the session, your moods are very uplifted. Then you feel like there's a burden that has been taken away from you.

Being able to share and engage with others in similar situations as one is experiencing can influence behaviors and responses from peer support members. Some participants found the elders in their support groups had valuable advice and encouragement for younger group members. Participants shared that peer support group members ‘check up on each other’, assist with stress coping strategies, provide “a listening ear and provide advice when necessary”. Participants shared that a non-judgmental environment is usually present in the group, and that is needed for support of the women being assisted with challenges and uncertainties. There is a new normal level of activities of daily living as they adapt to their daily symptoms. The adjustment is perceived as within their control despite the fact that they are not in control of their disease outcomes.

Subtheme: Improved Cardiac Literacy

Gaining knowledge of medical conditions, disease symptoms such as chest pains, difficulty breathing, fatigue, and activity intolerance, as well as taking actions such as obtaining rest, seeking help, contacting her Primary Care Physician (PCP) or emergency care was addressed with peer support groups. Some participants were able to articulate daily challenging symptom changes such as increased tiredness and admitted to obtaining rest as needed, seeking help as needed, performing close self-monitoring and self-care, then following up with their primary care physician or the Urgent Care facility for expert attention. Three participants (n=3) reported occasional chest pains for which Aspirin and Tylenol medications were taken as needed. P15 shared that most cardiac disease educational information was obtained from the hospital at diagnosis and with subsequent visits, while strategies for maintaining control and prevention with social aspects such as diet and exercise plans -" those came from the group engagements." Most of the peer-to-peer support groups were facilitated by healthcare providers, usually nurses from the local churches and communities where participants resided.

Presently, more participants can join the groups and participate online, with easier access to online formats for receipt of informational, emotional, and social support. P01 reported that she "learnt to remain positive and change lifestyle habits" with a healthier diet, more frequent exercises, taking medications when needed, and maintaining follow-up care with her health care provider. P09 shared that she learned more about heart disease and some of the strategies that can be used to avoid certain symptoms and complications from the peer support group. The participants below also shared benefits obtained from peer support:

P5 shared: "I can do that with a lot of ease," when asked about learning skills such as taking her blood pressure and weight in self-management and self-care in disease control.

P11 shared:

> Some things I learned from the group. I remember at times; we even did some exercises online over zoom. There are times when you don't have the motivation when by yourself, you cannot get motivated, but with the group, it was enjoyable, and you also learned a lot. You also learn from other people's experiences.
>
> P13 shared: "I learned that people have different challenges and needs, only that you cannot be looking like you are challenged all the time. You must be very optimistic".

Participants also reported learning about other cardiac conditions and ways to manage them while sharing and interacting with peers.

Subtheme: Concern for Mental Wellness

Some participants voiced awareness of the importance of their mental state as they tried to self-manage the chronic disease. As they learned to love and improve self-care, participants also learned to identify their own needs and ways to prioritize activities to meet them. This includes gaining the knowledge, awareness, and understanding of when to focus on self-care when to take mental breaks, know when to seek assistance for themselves and their dependents, and know how to obtain relief from activities that may worsen symptoms and their diseased heart. This includes activities of childcare, household chores, laundry, cooking, and shopping. P15 shared:

> I realize my mental status is important. I also realize that mental health and well-being come first. If my stress level is high, I won't be able to take care of myself. Mental health and well-being come first for me. I feel very strong. I don't think of myself as having a condition. I don't let it get into my mind. Personally, I'm able to do the most important things that anybody can do. I don't think of having a disease and can do anything that others can do.

P12 said, “not feeling judged or not having a negative environment helps you to keep going every day. Also I’m able to call one of the peer members if needed”. P10 shared the experience of having the peers as more than a meeting group, providing advice and emotional support when needed:

> When you feel like giving up, you will get a sense of satisfaction from this group. It gets challenging at times, but when I need a break, I ask for help from family

> members. I can also get advice from my peer group members when needed. They are usually available for support and encouragement.

Theme 4: Peer Support and Family Members Provide Critical Help for CVD Management

Subtheme: Receiving Help and Support

Receiving help was critical to many participants, who have learnt and understood that seeking and obtaining assistance are important. They have reported positive and helpful aid from family members to prevent added stress, challenges, and CVD complications. As a group and community, participants push and support each other to meet healthy goals while currently engaging via online platforms. Telephone contacts, emails, and texting services are also being employed due to Covid-19 restrictions on meeting in person as a group. There was also the fear that some participants possess regarding their higher risk status, their vulnerability regarding Covid-19 infection, and their perceived susceptibility to medical complications. P12 said:

> I feel like online peer support networking gives you a real connection, like being on zoom sometimes with the peer support groups. I think I'm doing pretty good as I am exercising better, and my health is stable. I'm doing a good job in maintaining good mental health with the group. Before I joined the peer support group, I had a very negative attitude toward exercise. So, once I realized that other people in the group are engaging in exercise, even the older members, it really inspired me.

P6 thought is was most helpful and “a beautiful experience” having members sharing with each other and being there for each other. P9 found well-needed time for her self-care with her sister moving into her home to assist with childcare during the Covid-19 pandemic. P11 expressed her level of comfort in self-care and disease management toward the prevention of complications while receiving help and support from the peer-to-peer support group. She is aware that the group's help is always available when needed. P12 resides with her brother and obtains his help and support with her lifestyle journey and changes every day. She expressed that her family members are also available at night if needed, provides social and financial support, and is also "a great motivator and partner" with her exercises and care plan. Experiences of help-seeking and assistance from peers and family were also shared regarding challenging times such as during pregnancy with P2, and during rehabilitation from a stroke or cerebrovascular accident (CVA) with P7.

Theme 5: Lifestyle Adjustments are Essential for CVD Self-Care

Subtheme: Self-Care Management

Self-care management refers to individuals initiating and maintaining behaviors to manage and control health conditions. Most participants in this study felt confident enough to self-manage appropriately and seek medical help when needed to prevent cardiac complications. Adequate self-care requires lifestyle adjustments and maintenance. Participants were confident that the knowledge gained from their healthcare provider and the peer support groups equipped them enough to control their disease by prioritizing their self-care. Multiple participants verbalized that help and support were available from family members when needed. Many appreciated physical support more from family members and emotional support more from peers. Most participants also experienced multiple symptoms and medical challenges in earlier years and were now better educated and prepared to handle these challenges years later, especially with the support and guidance of peer-to-peer support groups. Some have learned their abilities and limitations.

Participants being able to share and engage with others in similar situations as one is experiencing can make a difference to behaviors and responses from peer support participants. Some found the elders in their support groups had much advice for younger members. Participants shared that peer support group members ‘checked up on each other’ and assisted with stress-coping strategies such as taking time for relaxation, providing a listening ear, and providing advice when necessary. Participants shared that a nonjudgmental environment is usually present with the peer support group, and that is needed for support of the women being assisted with challenges and uncertainties. There was a new normal level of activities of daily living as they adapt to recognizing and controlling symptoms. The lifestyle adjustment is perceived as within their control even though they are not in control of the outcomes.

Subtheme: Resilience

Participants have learned to survive despite medical and social challenges. Adjustment to a changed lifestyle required major changes with some participants. P01 reported having had to relocate and pursue alternate employment positions in order to gain better disease control. Following a more recent major medical episode involving difficulty breathing, chest pains, altered level of consciousness with coronary artery disease (CAD) and hypertension, she managed to find a different and better job working from home. This has allowed for increased rest periods, better control of her cardiac symptoms, and better quality of life. All participants (n=15) managed to avoid using the practices of smoking and alcohol intake and were aware that these habits and behaviors were unhealthy.

Some participants felt they were able to monitor their weight and blood pressure with ease after learning the skills from peer-to-peer encounters and skill training and development (P1, P5, P9). P9 reported her experience of relocating for a new job, then was forced to resign and relocate once more due to air pollution, loud noise disturbance, worsening of asthmatic symptoms, and poor quality of life that made her more vulnerable to ongoing ill-health. She was forced to adopt some flexibility in her journey to establish and maintain a stable cardiac status. P9 shared:

> For now, I mainly work with checking my blood pressure, doing frequent self-monitoring, and knowing when to be off work and when to take time to follow my self-care. I do have the blood pressure machine and know how to use it. I must call to have someone around or even go to the doctor's place if the blood pressure gets too high or low.

P1 shared, “I learned to remain positive and change lifestyle habits- with healthier diets, more frequent exercise routines, follow-up visits, taking medications when needed, and maintaining a positive environment and attitude”. P15 shared that she did not like making salads but has now learned that she can mix different preferred ingredients that she enjoys (especially ethnic ingredients) and not necessarily the traditional items she dislikes in order to obtain a healthy meal. She states that she has now become a “fan of preparing and eating salads”.

P12 shared: I’ve learned to be optimistic. I've learned to take a day at a time. I've learned to exercise and keep the workout routine”. She feels confident in better understanding how to control her cardiac symptoms and prevent cardiac complications such as heart failure.

Subtheme: Use of Alternative Treatment

Participants were aware of their cardiac disorders and current treatments for stabilization. None were critically ill at the time of interview, and none required hospitalization during the previous year. Some participants (n=6) reported taking pharmaceutical drugs for their heart disorders and hypertension (P3, P6, P7, P8, P13, P15) during the interview. Some took multiple medications in earlier years, which were now discontinued. They were instead focused on a strict diet intake, mainly fruits and vegetables, with moderate exercise and weight control. Some did not think the medications were necessary, others did not appear to be as concerned about continuing prescription medications, and some refused to take medications if the drugs created discomforting side effects. Only a few (n=3) participants (P7, P8, P10) admitted to using alternate treatment to assist with the healthy maintenance of their heart disease. For them, the desire for more natural treatment strategies for health solutions or control is important. Cultural and traditional treatment of herbal items such as garlic, ginger, turmeric, beetroot, herbal teas - were all seen as natural pathways to healing the body. These participants (n=3) focus on healthy diets and exercises and not on taking prescription medications. P07 shared that the use of the alternative drug Gingko Biloba was discussed with her medical provider, who guided caution on possible side effects and contraindications with other medications being taken at the same time:

My doctor said I could use Gingko biloba, alternative treatments, and herbal medicine for hypertension - like fresh garlic, ginger and teas. I use mostly fresh teas and lots of different herbal teas. I received many herbs from home. I use nuts and nutmeg, but I don't know the contraindications with other things, so I try to use those sparingly and not in the same way I use garlic, ginger, ginger tea.

P8 shared:

> I do practice fasting as well, but that's hard to do. I plan to make changes and fast on Saturdays and Sundays for better nutrition and weight loss. I'll start fasting at about 5pm in the evenings, and then on the weekends. Some healthier foods are more expensive, but I know I have to try harder. I will remain with the group and take advantage of the support and encouragement it provides.

Fasting is the process of intermittently restricting food intake to specific time periods during the day. It has become a popular diet trend, and it’s being used to assist with weight loss, improving health overall, improving sleep, improving quality of life as well as help in reducing the risk of obesity, diabetes, and heart disease (Endocrine Reviews, 2021). The use of intermittent fasting and its effect on obesity and metabolic diseases continue to be explored (Endocrine Reviews, 2021; Zhu et al., 2020).

Theme 6: Positive Interactions with Health Care Providers enhance CVD Management and Outcomes

Subtheme: Positive Interactions

All participants (n = 15) shared their respect and value for their primary care providers (PCPs). All shared about the support, encouragement, caring attitude, and strong involvement of their primary care provider in their disease management progress. The PCP was seen as being involved in the whole person experience, providing wrap-around services, and not focus solely on participants’ diagnoses and medical states. Most participants shared the importance of complying with frequent follow-up appointments, and some do benefit from reminders from the PCP's office as well as from peer group members. P13 said:

> I think she's the kind of person whom every person who has a heart condition would want because she has availability and is quite "Top Notch". I also feel like she's very supportive in terms of the care that I need and in terms of telling my family what support I also need from them.

P15 reported:

> I'm feeling better now but must stay consistent. On a monthly basis I must get an appointment with my doctor. I find it easier (to be consistent) as I have nothing much to concentrate on at times, so I can always remember. I get reminders from the PCP's office and from the peer support group.

P8 shared:

> My primary care physician? She's very good. If there are any problems, she will stand up for you, so she's available for you. She's understanding and she's supportive. My cardiologist is also very good and knows me very well. He knows my history and everything about me, so if anything happens, he's always there. I have that support.

P12 shared:

> She's also there to help me with mental health. So I feel like she fills the space for almost every need that I have, medical wise. She regularly comes to my house, especially now, with Covid-19. I'm the one to call her, especially if I'm feeling

> some symptoms. I have been with her for a very long time and trust her with my care.

P3 shared: "She is very kind and supportive, and ensures that my follow-up care is maintained. She is well informed and close to my family". P14 shared, "She's someone I can trust, someone who can tell me if it's ok or not."

Subtheme: Negative Interactions with Providers

P7 and P8 reported negative experiences they encountered in a recent Emergency Room visit, and with a health Insurance provider following her stroke diagnosis and rehabilitation process. P7 shared her long wait in the Emergency Room with chest pain and discomfort, was forced to advocate for herself, and was sent home after no assessment or medical care. P8 also thinks she was forced to fight with the Insurance company regarding her coverage for rehabilitation therapy benefits following a devastating stroke diagnosis which she perceived as an unsuccessful outcome despite her vigor in taking preventive measures with CVD.

Theme 7: Ongoing Challenges, Perceived Barriers and Threats exist

Subtheme: Stress and Trauma

Some participants indicated that there was a need for more than peer support to sustain required lifestyle changes along with handling ongoing stress and from the past. Managing self-care with past and present traumatic experiences and addressing current stressors are real challenges for some. Several participants (P2, P3, P4, P6, P11, P12, P13) expressed the challenges they faced being diagnosed with heart disease at a young age (15 to 20 years), and how that lingering trauma continues to affect them to the present time. They did not fully understand what heart disease and the presenting symptoms meant in younger years, but have gained knowledge and understanding over time, partly from peer-to-peer support engagements. Peer support has provided a space for these participants to obtain relief and reduce anxiety and stress with a format for venting and sharing. Some participants feel that peer-to-peer support has provided partial solution to managing post-traumatic stress, depression, anxiety, and feelings of isolation. Despite this support and assistance, participants feel more is needed as the CVD journey is ongoing and needs for adequate psychosocial support and therapy is rarely available or unavailable outside of peer support group members.

Recalling Heart Disease Trauma from Younger Years

With chronic heart disease diagnosed at such young ages (15 to 20 years), challenges with school attendance, being ridiculed by fellow students, poor engagement in physical activity, handling multiple hospitalizations, experiencing isolation and depressed states, and battling ongoing states of post-traumatic stress, loneliness, and depression, lasting into adult lives.

P2 reported that she missed out on much in her early \years of diagnosis -classes, school activities, homework engagement, and could not participate socially like a normal teenager. She shared the following as trauma and stress continue to linger as challenges with CVD self-care. She shared the difficulties she experienced as a teenager stating; "I had a difficult time as a teenager, felt isolated and alone, lonely and depressed at times. Some teachers were helpful and understanding, while others were not. Most students were understanding, but some were not".

P5 shared the importance of having social support and caring family members to assist with disease awareness and self-management:

> My parents explained as much as possible and did the best they could to help me. Mom took off from work often to care for me at home. She ensured that someone was always with me. I became tired easily and could not be active.

Some participants (P1, P2, P3, P5, P13) had difficulties engaging in physical activities and dealing with multiple hospitalizations in their younger lives, prior to using peer support and while having to maintain a schedule of taking multiple medications and avoiding certain food items. This memory remains with some participants as adults, who are now receiving emotional and social support from peer-to-peer engagements to ease the pain, fear, and uncertainty of chronic hypertensive heart disease.

P5 shared:

> I asked why me. Why not someone else? It’s good to know that there are others like you sharing similar experiences. Peer support group helps me to focus on myself and get what's best for me. It helps me to believe that I can achieve anything in life, just like anyone else.

Subtheme: Challenges with COVID-19

Some participants shared their experience of being negatively impacted by the COVID -19 pandemic, and its limitations and restrictions. There was an uneven impact, as most participants wished for covid pandemic to go away. Some feared contracting the disease, some wished to resume in-person peer support sooner than later, and many have also shared the benefits and challenges with online peer support groups, which became active with Covid pandemic and replaced in-person sessions. The deficits in social cohesion, having less group connection, and less gratification than with the in-person format were expressed by some participants (P2, P3, P4, P9, P12, P13, P15). They have tried adjusting to the online format and are benefiting from that involvement.

Lifestyle changes and adjustments which require long term behaviors (such as healthier and strict diet plans, and controlled exercises) may not be as easy to pursue for some participants. Additional barriers (such as the need for consistent help with parenting, childcare, transportation, finances) adjust harder for some participants, even with the support of peers. Challenges such as medication access, costs, side effects, obtaining help with childcare and housework were reported and could be possible drivers for using more alternative treatment strategies.

Summary

In this study, lived experiences of AA women with hypertensive heart disease from multiple geographic regions in the U.S. were used to address P2P support, and how this intervention has impacted their self-care management, self-efficacy, and disease outcomes. In-depth online interviews were conducted using a phenomenological approach with 15 interviewees.

Summary of themes obtained from the shared experiences and responses to semi-structured questions and prompts reveal that peer support enhances self-care and self-efficacy, while reducing medical complications. Acute care episodes and hospitalizations were avoided with reported increase in confidence, and a more positive outlook by participants while they continue to live with and manage CVD. Also, peer support builds acceptance and resilience as participants learn to accept and understand CVD, it's possible origins and treatment, and learn to continue fighting and persevere, making necessary changes to survive.

Participants expressed satisfaction, gratitude, and appreciation for peer support groups (Perceived Benefits). They welcomed the experience, felt loved and supported, experienced improved cardiac literacy, increased awareness for mental wellness, and embraced the supportive community. The help and support received from peers and family members were reported as being most valuable and critical for the maintenance of self-care and disease management.

Lifestyle adjustments for self-care were appreciated and understood by participants but were not practiced as well by some. Most attempted to adjust to treatment regiments; some had more challenges with diet, weight loss, and exercises than other peers. Positive Interactions with health care providers were also necessary for continued guidance and maintenance of disease management. All participants shared positive relations with their primary care providers (PCPs), who acted as complete medical guides for participants. Two participants (P7 and P8) shared negative experiences encountered during an emergency room visit for acute cardiac symptoms, as well as receiving negative communication and health insurance services with one provider.

Ongoing challenges, perceived barriers, and threats remain a part of the CVD self-care management journey. Stress and trauma have continued for some participants since childhood, with periodic unpleasant recalls of illness and challenges shared by some. Also, the recent restrictions and social adjustments associated with Covid-19 pandemic have negatively affected some participants as they attempt to improve self-care and maintain CVD stability. In Chapter 4, I discuss the research questions, research setting, participant demographics, data collection methods, the data analysis process, trustworthiness, and results of the study.

Chapter 5 contains a summary of the research findings, limitations, conclusions, implications for future preventive and supportive programs for the study group, and recommendations for further studies.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative study was to examine lived experiences of AA women with hypertensive heart disease who are receiving P2P support to determine the effects of such strategies on their self-efficacy and self-care management as they strive to maintain healthy lifestyles. While there have been advances and more widespread use involving peer support strategies to improve self-management skills in CVD patients, these approaches have not reached AA women, who continue to die from heart disease at significantly high rates (AHA, 2022; CDC, 2022). This group experiences higher mortality rates from CVD compared to other groups and populations in the U.S., as well as high rates of hypertension, heart failure, and disability (Brown et al., 2017; Carnethon et al., 2017; Ferdinand &, 2016). Technological advances have supported rapid growth in applying genetics and genomics to address CVD (Reza et al., 2020; Scott et al., 2022), but most research has been conducted among European Americans and very little research involves vulnerable groups of AA women, thus leading to lack of benefits for this group. Lack of AA representation in research, and genomic sampling in particular, has limited progress in terms of equitably applying precision medicine tools, which will continue to lead to widening CVD disparities as this trend continues (Scott et al., 2022). Hypertension is most prevalent in AAs in the U.S. (AHA, 2022; CDC, 2022; DHHS, Minority Health, 2020), and hypertensive heart disease is a frequent CVD complication for AAs caused partly due to inadequate blood pressure control (CDC, 2022).

Understanding perspectives and experiences of participants in this study might help providers in terms of identifying specific and culturally relevant needs for this vulnerable population and lead to more appropriate interventions.

Chapter 5 includes key findings, interpretations of results, and limitations. The chapter also includes conclusions and recommendations based on study findings.

The research questions for this study were as follows:

RQ1: What are lived experiences of AA women with CVD who are receiving peer support?

RQ2: How do AA women with CVD experience effects of peer support on their self-care?

Theoretical Framework

The studies involved using the HBM and the SCLT. Individuals are strongly connected with their environments and health behaviors vary based on individual beliefs, culture, identity, and family dynamics. Themes that emerged from this study, helped to address significant factors that determine participant lifestyle changes, quality of life, group cohesion, commitment to culture and community of wellness, and struggles with receiving adequate support for symptom management, weight control, healthy nutrition, regular exercises, and self-care management as they strive to achieve optimal wellness within terms of heart disease. The study also includes challenges according to participants that create complexities involving their attempts to live healthy lifestyles. Chapter 5 presents key findings, interpretation of results, and limitations. The chapter also includes a conclusion, and recommendations based on study findings.

Key Findings

Study findings support concerns of researchers, public health practitioners, and healthcare providers regarding high prevalence of hypertensive heart disease among AA women. Findings involved experiences of participants in terms of maintaining healthy lifestyles. They confronted challenges of managing heart disease, long-term chronic disease care, and daily self-care management schedules and activities.

Study results revealed AA women living with hypertensive heart disease - residing in multiple locations in the U.S. who interacted via online cardiac peer-to-peer support groups and shared experiences involving their initial hypertensive heart disease diagnoses, and continuing with ongoing care as they sought treatment for their diagnosed disorders. Study findings and data obtained from responses to semi-structured interview questions and prompts include the following:

Peer support enhances self-care and self-efficacy and reduces medical complications.

Peer Support builds acceptance and resilience.

Satisfaction, gratitude, and appreciation for peer support groups were expressed.

Help from peers and family members was critical for health maintenance and progress in terms of hypertensive heart disease.

Some participants were challenged in terms of applying behavior changes and practices involving disease and self-care management.

Positive and negative Interactions with health care providers led to overall positive engagements and trust with primary care providers. Some were underinsured.

Sources of stress as reported by participants were mainly related to work, home, childcare, pregnancy, and disease management. Some continue to struggle with post-traumatic stress lingering from childhood.

Interpretation of Key Findings

Fifteen AA participants were interviewed for this qualitative phenomenological research study. With results indicating some agreement with

Study findings mainly correlate with the literature review in chapter 2. They include real experiences and challenges of this group of AA women receiving cardiac peer-to-peer support populations.

Theme 1: Peer support enhances self-care and self-efficacy, reduces medical complications.

Self-efficacy is belief in one's abilities to make health changes (LaMorte, 2019). Participants in this peer support study expressed improved comfort level involving self-care as receipt of P2P strategies and functions were shared. Sokol and Fisher (2016) found that more often, those with the most health needs are also the ones unavailable for program interventions. Sokol and Fisher (2016), showed that effects of peer support and peer support benefits were greater among individuals who were disadvantaged, such as those with low health literacy. In this study, participants admitted to gaining disease and health information to improve their abilities to understand the disease, required treatments, and self-care management.

Self-efficacy is also considered a predictor of empowerment and is a critical and important concept in the assessment and improvement of chronic conditions (Belil et al., 2018). Participants in this peer support study shared an increase in confidence levels and a strong sense of competence as they engaged more with their peer-to-peer support groups. This indicates a higher level of self-efficacy that likely facilitated clearer thought processes, better understanding, and improved feelings of hopefulness regarding self-care management and lifestyle changes, as suggested by Belil et al., (2018) and Bandura (1977). A low level of self-efficacy for a particular situation may be directly associated with depression and anxiety, which is usually about twenty percent higher in the African

American community than in other groups (ADAA, 2018). However, an average or higher level of self-efficacy, indicates a better ability to handle uncertainty, distress, and conflict (Belil et al., 2018; LaMorte, 2019). P8 shared that she felt comfortable in caring for herself with the resources and assistance available to her, despite the challenges she had already experienced, one being suffering a minor stroke in the recent past. Despite multiple challenges, she expressed a commitment to continue pushing herself and persevere towards a more stable cardiac status and well-being.

Most participants agree that lifestyle modifications are required in an optimal way to achieve desired goals and cardiac stability as reinforced by Lee et al. (2018) and Kumar (2019). Some study participants (P2 and P5, expressed a state of uncertainty, shock, being scared, disappointed and uncertain of what was happening at the time they were diagnosed, and unsure of what course would be taken for stability and long-term maintenance of their hypertensive heart disease. As these individuals have grown and matured over years, they learnt through various means, of the inflicting disease (hypertension, coronary artery disease, cardiomyopathy, peripheral artery disease, atherosclerosis, cerebrovascular disease/stroke), the treatment for their particular disorder, the chronic nature of the disorder, the need for ongoing care and follow up, challenges they may face as the disease progresses, restrictions and limitations relating to the disorder, and the best ways to self-manage. All participants have agreed that the introduction and involvement with peer support groups have significantly enhanced their understanding and awareness of self-care management and ways to mitigate complications with the actions they chose to take, or were forced to take, as cues for action were presented, to change quality of life and disease outcomes. Participant P15 shared that it was important to maintain the lifestyle changes required for health maintenance, and follow up with her medical provider as scheduled, to prevent complications that may be missed from poor vigilance of her condition.

Some participants shared the confidence and increase in self-efficacy, knowing that they had accomplished better disease control, symptom management, and self-care, with a supportive peer community as expressed by Belil et al. (2018), who addressed factors contributing to self-care, self-efficacy and empowerment in a study conducted with chronically ill individuals to assess different aspects of self-efficacy and empowerment. Patients who were identified as having a high level of self-efficacy were more confident about being empowered in doing self-care activities such as diet adjustments and engagement in physical activities. This current study's participants shared their experiences in continuing to live with their diagnosed cardiac anomaly, taking ownership of the disease, making necessary activity adjustments, engaging in healthier diets and exercise routines, as well as managing to cope with lifestyle changes and stressors, demonstrating a higher level of self-efficacy. This helps to predict disease outcomes as found by Thomet et al. (2018) in studying self-efficacy in individuals with acquired and chronic diseases.

With an overall improved self-efficacy, there can be modified health-related behaviors that affect the levels of attempts, performance, and engagement in healthy behaviors such as symptom management, physical activity, healthy eating, treatment adherence, rest, and activity adjustments. Participants verbalized their feelings on being able to self-manage, and reported with satisfaction, the support and influence of ongoing peer engagements, follow up provider visits and assessments, reminders and encouragements from peers, guidance from family and health care providers in helping to maintain disease stabilization and prevention of cardiac complications.

Awareness and Prevention of Heart Disease Complications

Participants were aware that their hypertensive heart disease can worsen if lifestyle practices and habits were not taken seriously (perceived severity). Also, they were aware and understood that close and frequent follow-up care and monitoring with health care providers was essential for stability and preventing complications. Barham et al. (2019) found that lower levels of self-efficacy and poorer patient-provider interactions are predictors of poor health-related quality of life. This was in complete contrast to findings from my current research study, as participants all reported close and valuable relationships with their primary care physician (PCP), maintenance of an encouraging and supportive positive environment, enhanced health literacy, awareness and understanding of their conditions and treatments, and with readiness to learn. Research studies (Macario et al., 2017; Xu et al., 2019) have also showed that clinical interventions based on self-efficacy theory could improve self-care abilities, quality of life for patients and possibly predict health behaviors, as was demonstrated with participants in this current peer support study.

Symptom control and frequent provider follow up calls and visits worked as a feedback loop to ensure medical checks on participants' health status. Most participants had not been admitted for medical challenges or complications in more than one year prior to the interviews. Most expressed confidence in their current regime of a healthy diet, exercises, having a positive attitude, maintaining engagement with the peer support group, obtaining adequate rest and maintaining follow up care with their provider will be able to sustain stability despite the frequent challenges encountered. With their knowledge and awareness of higher levels of disease severity and their susceptibility to medical complications, participants felt compelled to initiate or maintain actions for better cardiac outcomes (perceived susceptibility, cues to action).

Theme 2: Peer Support builds acceptance and resilience

Perceptions, thoughts, beliefs and attitudes regarding hypertensive heart disease and peer-to-peer support strategy varied with participants in this peer support study. Some participants (P6, P12, P15) did not consider themselves as having a chronic disease and felt 'in-control' of their current state and thought they could effectively manage themselves and meet their needs with the resources at their disposal (family, peers, health care providers, community resources). Some may remain in denial, and some participants believed that it is important to take ownership of their disorder to maintain better quality of life, learn and utilize effective self-care strategies (Abel et al., 2017), and prevent complications. So, some participants developed increased self-efficacy during their period of engagement with the peer support groups. Some admitted to acceptance of the disease and its challenges and have also taken necessary steps to prevent worsening conditions and complications such as heart failure. P7 expressed her knowledge and thoughts before and after suffering a stroke (or cerebrovascular accident -CVA), her proactive behavior with early symptom presentation, and wondered why she suffered a stroke anyway. P7 said:

I do have a family history of heart disease and hypertension and try to practice preventive measures as much as possible. I also took immediate action when my stroke presentation occurred. Unfortunately, I still suffered a stroke right there in the Emergency Room where I was being treated. I’m unsure what medications were given to me since I should have received prophylaxis. I did not expect this to happen with all the preventive measures I was taking.

This experience is significant, as this incident, along with perceptions surrounding treatments, disparities, and other negative experiences may help to strengthen the doubts and mistrust of the healthcare system by participants and communities. This unfortunate occurrence also leads to delay in seeking treatments, failure to follow advice from healthcare providers, giving of poor or inaccurate advice to others, and additional negative consequences.

Participants believed they were genetically predisposed to heart disease and its challenges. Many were not willing or eager to discuss this family matter, but mentioned other family members such as parents, aunts and grandparents who were also afflicted with hypertensive heart disease (P1, P6, P8, P9, P10, P12). The participants focused on accepting lifestyle practices as contributing factors and expressed a desire to engage more vigorously with healthy nutrition, regular exercises, weight loss, weight control and management of high-risk disorders such as hypertension, for cardiac wellness. Genetic predisposition is implicated in the development of cardiovascular diseases as noted by Pfeffer et al. (2020) and Kalinowski et al. (2019). Kalinowski et al. (2019) recommends the involvement and direct focus of African American women in genetic-environmental studies, and, those that are stress-related, in order to enhance knowledge, and help to provide answers for the persistent CVD prevalence in the African American population.

Ongoing Stress

This is a major contributing factor for CVD, and a common element in responses provided by participants regarding the effect of peer support on their self-care and disease management. Work-life, household duties, childcare, finances, self-care and daily responsibilities with families and health are major areas contributing to ongoing stress. According to the literature, some genetic variants associated with heart disease may also increase the risk for challenging cardiac symptoms such as chest pain, difficulty breathing, severe fatigue, fluid overload with weight gain (Pfeffer et al., 2020). With both environmental and genetic factors strongly involved in a predisposition toward cardiac dysfunction, which is also aggravated by other lifestyle factors, the evidence of prolonged stress and continuous disease burden becomes more apparent and hopefully better understood by healthcare providers (Brown, 2018; Carnethon et al, 2017; Kalinowski et al., 2019). This dilemma was in clear alignment with the responses from participants in this peer support study, indicating that ongoing stress, barriers and cultural elements play significant roles in the prevalence and sustainability of heart disease in the African American women population.

Pharmacological and Nonpharmacological Treatments

Participants shared that they trusted their medical provider and therefore largely followed guidance and directions towards health maintenance. None of the participants indicated that they ignored the orders from providers, but some stated that their long-standing medications needed adjustment at times due to the adverse effects associated with certain prescribed cardiac medications. So, some participants avoided taking medications when they thought they could go without those drugs, or some utilized alternative herbs instead. P9 shared that she preferred eating a healthy diet and engaging in exercises instead of taking prescribed medications. She did not consider herself as ill as others, so she thought her progress could continue without medications, considering her comfort level with self-care. Other participants shared similar sentiments and reported that these issues were routinely discussed in the peer support groups.

Alternative and Natural Remedies

Many participants are aware of lifestyle modifications to control Hypertensive heart disease, but few practice them well enough. As a result of multiple contributing factors, participants sense more vulnerability and resort to any assistance they are able to access. Some mentioned non-pharmacological treatment measures which may be utilized as alternatives to costly prescription medications and considered culturally significant for a healthy state, namely a healthy diet, weight loss, engaging in regular exercises, drinking adequate amounts of water and fluids daily, eating plenty fruits and vegetables, employing stress reduction techniques, and getting assistance with childcare and housework.

The natural inclination at times with some individuals in the African American group is to wait until there's a serious threat to health, and to cardiac health in this case, prior to seeking professional and medical intervention. Some study participants acknowledged that they called or visited their primary care provider or visited the Emergency Room when such a situation presented itself. So, in the absence of cardiac ill health or medical emergency, they did not consider their illness as being very serious or threatening (perceived threat, susceptibility, severity). Some participants also expressed concerns for the cost of medications, but also thought that the medications were not necessary all the time.

This dilemma and factors present an opportunity for health education and promotion, as beliefs and perceptions from cultures and communities can affect health outcomes significantly as echoed by Ananian et al. (2018). The study by Ananian et al. (2018) involved analysis of transcripts from fourteen focus groups, assessing for perception of disease risk, knowledge of cardiovascular disease (CVD) risk factors, nutrition, preventative behaviors, barriers and motivators to behavior change. Results indicated that the focus group members were open to modifying health behaviors if interventions incorporated the input of participants and were also culturally acceptable (Ananian et al., 2018).

Participants expressed the similarity in beliefs, actions, strategies, experiences with peer-to-peer support members that were fully appreciated as they all could relate to culturally appropriate and relevant activities that benefitted them and were inclusive of the input and decision making of group members. Rodriguez et al (2016) and Okoro et al. (2018) also emphasized the significance of member input, taking ownership of health strategies, and empowerment of members to enhance long-term, more applicable peer-based interventions that are generally with limited resources. Most participants in this current peer support study, as young adults, assumed full control of their disease management, but directly or indirectly voiced the need for more assistance. Some participants facilitated the peer support groups when the assigned regular facilitator was absent, and some peer groups utilized only peer support members to facilitate their group meetings, taking turns each week to conduct the meetings.

Learning to Live with CVD

Most participants perceived hypertensive heart disease as less challenging currently, as they have received health education and guidance, and wish to continue engaging in the community of wellness that has developed with the peer-to-peer support group, family members and healthcare provider network. This attitude was also found with a study conducted by Macario et al. (2017) with women of minority groups, afflicted with heart disease and received peer support to assist with their health maintenance, which is likely to be self-sustainable and managed over the long term. The participants of this current peer support study have accepted and resigned themselves to the medical conditions that exist and are willing to survive with assistance from available resources to optimize their long-term cardiac stability.

Feelings shared about hypertensive heart disease by participants indicate resignation and acceptance but questioned by some regarding the prevalence of heart disease in African American women. Participant P14 expressed that she agreed to volunteer, participate and share in this peer support research study “to give a voice with the dilemma of black women being burdened with so many diseases”. She wonders about the reason for an overall disease burden phenomenon, and she was not only focused on the prevalence of heart disease in African American women. This indicates that questions continue to linger, even those not asked openly. All participants in this research study (100%) shared episodes of cardiac symptom challenges, disease severity, and their general feeling of threat and compromise during multiple previous challenging medical episodes. Participant P1 shared her discomfort with other peer support members endorsing the belief that one’s faith in God will provide relief for the illness. She felt strongly against such sentiment but felt discomfort in sharing an opposing belief or thought with the cohesive group.

Awareness and Prevention of Heart Disease Complications

Participants were aware that their hypertensive heart disease can worsen if lifestyle practices and habits were not taken seriously. Also, they were aware and understood that close and frequent follow-up care and monitoring with health care providers was essential to help maintain stability and prevent complications. Carnethon et al. (2017) and Kalinowski et al. (2019) reminded stakeholders that African American women remain the matriarchs of their families, juggling multiple tasks and responsibilities, while struggling inadequately to tend to their health and health outcomes. My peer support study aligns with this concept of chronic stress and responsibilities as many participants are doubtful that their best efforts and goals may still be hindered by multiple barriers and challenges (Abel et al. 2017; Kohler et al., 2018) such as household responsibilities, careers, childcare, inadequate social support, the stress of pregnancy, and challenges from other diseases. P14 shared that as a first-time mother; she felt that the first six months in transition were rather challenging, adapting to the major changes with childcare, maintaining a housework schedule, and self-managing her heart disease. She was forced to obtain help to prevent worsening of her cardiac status and overall health. She was also forced to admit that the work and challenges involved were too overwhelming for her, and she was unable to do everything or accomplish all tasks effectively.

Most participants agree that lifestyle modifications are required in a serious way to achieve desired goals and optimal cardiac stability. Some participants expressed a state of uncertainty, shock, being scared, disappointed and confused with what was occurring at the time they were diagnosed, and unsure of what course would be taken for stability and long-term maintenance of their hypertensive heart disease. It was obvious and sometimes stated that some had little to no experience in caring for other family members or being around older adults undergoing medical challenges with heart disease, so they learned in real time with their own experiences, the strategies that were employed to help stabilize their emergencies.

As these individuals have grown and matured over years, they gained additional knowledge about the inflicting heart disease (hypertension, coronary artery disease, cardiomyopathy, peripheral artery disease, atherosclerosis, heart failure, stroke), the treatment for their particular disorder, the chronic nature of the disorder, the need for ongoing care and follow up, challenges they may face as the disease progresses, restrictions and limitations relating to the disorder, and the more effective ways to self-manage. All participants have agreed that the introduction and involvement with peer support groups have significantly enhanced their understanding and awareness of self-care management and ways to mitigate complications with the actions they chose to take as cues were presented, and the need for lifestyle changes became more apparent as was also found by Kohler et al. (2018). Participant P15 shared that it was important to maintain the lifestyle changes required (mainly diet, exercises and a positive attitude) and follow up with her medical provider as scheduled to prevent complications that may be missed with poor vigilance of her condition.

Supporting Theoretical Concepts

The HBM and SCLT were used for this study. The research study aligns with the elements of the HBM, inclusive of taking actions with cues prompted by perceived susceptibility and threats to an individual's wellbeing or furtherance in the severity of the hypertensive heart disease (LaMorte, 2019). Behavior changes are predicted based on the threat and severity of the disease, the barriers to change, the benefits of change, and the self-efficacy required (Jones et al., 2015; LaMorte, 2019). The participants endeavored to make changes to remain alive and functional and were determined not to have major cardiac crises that could endanger their lives. P2 shared that she was very scared and thought that she could possibly die from the distress she was experiencing periodically in earlier years (perceived severity). She has not had a similar acute experience since she joined the peer-to-peer support group and made lifestyle changes.

The SCLT plays a vital role in motivation for individuals initiating, processing, and maintaining behavior changes toward improved health outcomes. Along with social supporters in the form of friends, family, and community service providers, and stakeholders helping to organize, mobilize and reinforce wellness activities (Forthofer et al., 2016), the SCLT propels internal motivational processes leading to decision making, self-regulation, making choices, and self-managing for the underserved African b American women interviewed. The study findings are also in agreement with Imes et al. (2016) who supports the concept of the HBM and found that an individual may initiate and sustain a behavior despite barriers and obstacles, if self-efficacy is high.

Theme 3: Satisfaction, gratitude and appreciation for Peer Support Groups expressed (Perceived Benefits)

Peer support was reinforced as an effective strategy across diverse health problems and multiple populations by Sokol and Fisher (2016), with a systematic review of multiple strategies addressing different areas of health care. This includes providing ongoing support for complex health behaviors, prioritizing populations that are not easily reached, assisting in applying behavior change plans, and providing social and emotional support toward disease management or quality of life for individuals with multiple chronic conditions (Sokol & Fisher, 2016) . At times, those with the most health needs are also the ones unavailable for program interventions due to a variety of reasons. Most of the studies examined by Sokol and Fisher (2016) showed that the effects of peer support and peer support benefits were deemed greater among individuals who were disadvantaged, such as those with low health literacy (Sokol & Fisher, 2016).

In this current peer support research study, participants admitted to gaining disease and health information and skills (perceived benefit), to improve their abilities to understand the disease, treatments, and effective self-care management. Based on the sharing of experiences and responses to cardiac peer support questions with the study's participants, peer to peer support helped to enhance self-efficacy and reduce medical complications with these individuals as they clearly voiced the emotional, social, informational and positive changes obtained (Fisher et al., 2017; Kong et al., 2019), with the group's influence. Participants reported learning and understanding more about their disease and gaining the ability and confidence to self-manage and control their disease and wellness status. Most had not been admitted for medical challenges or complications in more than one year prior to the interviews and felt confident that their current regime of a healthier diet, more frequent exercises, having a positive attitude, maintaining engagement with the peer support group, getting adequate rest, getting assistance with physical duties, and maintaining follow up care with their primary care provider, could prevent adverse cardiac events and medical challenges.

Peer support's efficiency and cost-effectiveness in sustaining a lifetime of self-management in patients with chronic diseases has also been shown by past studies (Okoro et al., 2018; Patil et al., 2018). Peer-delivered self-management support has been used to reach low-income groups and the minority populations who suffer from health disparities and bear the highest burden of cardiac illness (Brown et al., 2018; Carnethon et al., 2017). Peer support interventions have demonstrated improvements in health behavior and significant reduction in biophysical measures such as blood pressure and blood glucose levels (Okoro et al., 2018; Patil et al., 2018). Some participants have shared their observed reduction in weight, stabilized blood pressure, increase in health education and understanding, and avoidance of emergency room visits and hospitalizations. Ongoing education, follow-up with challenges, reminders, encouragements and support with weekly meetings, zoom sessions, telephone contacts have provided peer support members with a sense of belonging to a caring wellness community.

In this current research study, all participants (100%) indicated that they had a trusting relationship with their primary care provider (PCP), and some felt comfortable sharing their health status with this provider (PCP), who had a long-standing. effective relationships with participants. This level of trust enabled optimal disclosure of health issues that could be addressed early enough to prevent avoidable challenges and complications. This is most helpful for the group as distrust of the PCP and health care system could negatively impact cardiac and health outcomes, as was seen by Dong, 2017, and Noonan et al., 2016.

Improved Cardiac Literacy

Health literacy was improved for most participants, enabling better understanding and decision-making abilities (Magnani et al., 2018) regarding CVD and self-care management. Multiple healthcare and CVD skills were learned and implemented (Kohler et al., 2018), including the preparation of more culturally accepted foods and salads, as shared by P15. Self-monitoring and disease ownership became her focus as she became empowered and gained higher self-efficacy (Kohler et al., 2018) for long-term care management and disease control. Family members and peers from the support group help, sharing platforms, and guidance for these cardiac participants, who were also aware that daily stressors add to medical instability, states of isolation, and depression. Some participants (P7, P8, P14, P15) suffered in silence with their depressed states, while P15 shared that she consulted with a psychologist for a period with referral from her primary care provider. She self-reported improvement in her mental wellbeing and continues to have frequent follow up with her PCP.

Concern for Mental Wellbeing

Most participants expressed awareness and knowledge of the importance of maintaining healthy mental well-being. Participant P15 shared her awareness and understanding of mental wellness and the importance of managing stress with family and peers as critical assistance in that aspect of care. Prayers from others were also shared as important in maintaining disease stability. Some participants mentioned depression while sharing, but in more general terms as a potential challenge from heart disease and not as a disease they owned. P7 shared that ‘without the assistance from family members with all her activities of daily living, depression was almost certain to ensue. P15 required expert consultation service from a psychologist due to depression. She reported having success with the therapy and shared that she was doing better and having fewer depressive episodes than when she started the therapy sessions. P4 reported losing her job with the Covid-19 pandemic and experiencing bouts of depression on and off. She received emotional and social support from the peer support group, which she found most helpful and cathartic, allowing for free expression of her fears, anxieties, and stressful state.

Depression and feelings of isolation while living with chronic diseases are not unusual for many in vulnerable populations, especially those with multiple comorbidities and lacking family and social support (perceived susceptibility and threats). Abel (2014) reinforced that African American (black) women have the highest prevalence of hypertension in the world and that both hypertension and depression are strongly connected. Patients with CVD have more depression than the general population, and persons with depression are more likely to eventually develop CVD, with a higher mortality rate than the general population (Abel, 2014; Hare, 2014). African American women in this current cardiac peer support study expressed isolation, depression, feelings of inadequacy, and ongoing stress as they attempted to manage their disorders daily. Some appeared reluctant to express these sentiments openly, but their stories reflected possible denial states. They also knew that failure to adjust behaviors and request support could worsen the hypertensive cardiac disorder (Abel, 2014; Hare 2021). P14 reflected on being overwhelmed at times and was forced to seek help from peers, friends, and family to ease the burden, stress, fatigue, isolation and overwhelming feelings of dread and uncertainty with hypertensive CVD.

Hare (2021) indicated that the prevalence of depression seems to be increasing in the general population, and possibly more problematic for CVD patients in the post-COVID-19 pandemic era. Women are generally more depressed and those living alone are more prone to be depressed (Hare, 2014), especially if already struggling with CVD and comorbidities. Depressed people are also more likely to smoke, drink excessively, avoid exercise, and may also be less likely to take prescribed medications for heart disease (Hare, 2014). According to the literature, mental stress that comes with depression may increase plaque formation, increase the inflammatory response in the blood vessels, and cause damage to the lining of blood vessels in the circulation (Hare, 2014). This can further affect the blood pressure and stability of CVD. It is said that cardiologists rarely perform depression screening, so a recommendation from my current peer support study, could be most valuable for ongoing CVD patient care, and especially for female CVD patients to be screened for depression. P5 shared her awareness of the importance in obtaining advice, assistance to address self-care needs, decision making regarding schedules to meet her daily tasks, but thought that such tasks require much more than what she or other help may be able to appropriately provide. Her shared decision-making ability indicated that her taking ownership of the challenges required attempts at simplification of her workload, making a schedule relating to her daily tasks, the tasks for helpers as they are obtained, deciding when to use daycare. She obtained assistance from peers and family with the daily tasks of childcare, housework, and career. She stressed the importance of making a schedule that works for one's lifestyle and knowing when to take a break, when to seek help, and her limitations that exist.

Theme 4: Peer Support and Family Members Provide Critical Help for CVD Management

Assistance from peers and family members was critical for disease management. All participants (100%) shared experiences received from a wellness community including family members, peers from their support group and primary care medical providers (pcp), nurses and insurance companies. The social cognitive and learning theory posits that individuals can observe and learn behaviors from others. Emotional support was widely identified and accepted as one of the major benefits of peer support groups. Participants described the emotional support they received as what made them feel they belonged, connected, and understood. The peer support group activities were categorized under assistance with daily disease management, linkage to healthcare services and community resources, and ongoing support as items that made them feel emotionally supported. Participants felt that someone from the group was always available to guide, encourage, motivate, or just "provide a shoulder to lean on". P6 shared that the group could assist in uplifting and supporting those who are depressed and feeling down or needing financial assistance.

The group of African American women in their individual peer support groups were able to find commonality in multiple areas, including cultural practices, responsibilities, understanding of cultural nuances, experiences, and expectations. There was an expression of deeper and easier connections formed among those with similar cultural beliefs and practices. This peer support study found that participants also learned how to adapt cultural habits and activities such as food preparation, to meet their health needs. This added benefit of peer support programs can allow members to modify cultural habits and activities to better meet their health needs while maintaining feelings of authenticity with their cultural expression. As mothers, being a culture bearer is important, as this could lead to a larger shift in households and communities. Mothers, sisters, aunts, grandmothers, and cousins can influence other family members with positive changes, especially with nutrition, exercises, and avoidance of sedentary practices, as they learned from peer-to-peer engagement. Okoro et al, (2018) addressed cultural relevancy and appropriateness which aligns with the findings of my research study on peer-to-peer support.

Theme 5: Lifestyle Adjustments are Essential for CVD Self-Care

Perception of Self-Care Abilities

Participants have all shared the benefits, awareness, understanding, knowledge, and skills gained during their engagement with peer-to-peer support and its interventions. Most participants shared their overall outlooks, such as a positive attitude on life and a desire to learn and understand everything impacts their likelihood for optimal self-care management of heart disease (perceived susceptibility and severity). Functioning in an environment of positive attitudes while engaged in therapeutic discussions, sharing sessions, and guidance helped to encourage and motivate these participants receiving peer-to-peer support. This research study results indicated that online peer-to-peer communities (as well as in-person support groups), provide a platform for support and sharing of daily self-care concerns and activities, while stakeholders are reminded that traditional forms of support are not always adequate in providing individuals with the skills required to navigate the challenges of daily life with chronic illness (Kingod et al., 2017). This peer support research study aligned with the real-life findings from Kingod et al. (2017).

Participants were also able to observe and learn of other information related to heart disease that prompted behavioral changes. Most chose to adopt lifestyle and behavioral changes with diet, exercise, and maintaining a positive attitude and environment after learning more about heart disease and possible complications. P12 shared how much she disliked exercise but became inspired seeing others in the group, especially the elders, participate.

Some participants (P10, P12, P15) consider themselves not sick enough or feeling much better at this time in their lives while being engaged with peer-to-peer support. P12 shared that her heart disease was ongoing, but she felt confident in her improving condition since she joined the peer-to-peer support group. She felt that her condition had improved, she was more stable, and she intended to continue using peer support as it benefited her and guided her self-care management and self-efficacy. The participants above were managing to survive with their hypertensive heart disease but were all in need of something else - more support, employment, finances, more healthy periods, more assistance at home, desired weight loss, optimal cardiac status and overall health.

Self-Managing and Feeling Empowered

Participants stated their growth in self-care management as they joined and maintained membership with their peer-to-peer support groups. They reported learning and gaining an understanding of their disease, as well as improving their ability and confidence to self-manage and control the disease. Most participants had not been hospitalized for medical challenges or complications in more than one year before the interviews. They felt confident and in control of their current regime with a healthy diet, exercises, having a positive attitude with self-care, being vigilant and observant with their symptoms, maintaining engagement with the peer support group, receiving adequate rest and maintaining follow up care with their primary care provider, all helping to prevent adverse cardiac events and medical challenges. Barham et al. (2019) identified poor health-related quality of life was associated with poor provider-patient interactions. This was a strong point shared by participants in this peer-support research study, and participants stressed the importance of the physician-client relationship in guiding and maintaining disease stability. A supportive team of peers, family, and primary care physicians enhanced perceived control and confidence.

The need to plan activities, pace activities, and decrease social functioning has been reported as helpful strategies (Abel et al., 2017) but is not always feasible for some. Participants in this peer support study reported that they do need help but admit to being “fine” or “ok” as long as they have some control over their symptoms and are able to complete daily tasks. Emotional support was one of the many benefits reported by the study’s participants as they voiced appreciation for the support group, realized that they were not alone, and that the emotional encouragement received was most helpful as many face ongoing stress and challenges.

Theme 6: Positive Interactions with Health Care Providers enhance CVD Management and Outcomes

Positive Interactions with Primary Care Providers

All participants in this current study acknowledged having a positive physician-client relationship with their primary care physician (PCP). They also admitted that regular follow up visits were maintained with their PCP, and no participant admitted to ignoring the guidance and recommendations from their provider. Participants considered these interventions as relevant and necessary for health maintenance and prevention of cardiac complications. This indicated that participants were able to sense their vulnerabilities, consider the seriousness of their illness, and take appropriate actions to prevent complications. It is known that a positive relationship between health providers and PCPs leads to developing trust in the healthcare system and improves the perception of care delivery and perceived health outcomes (Honavar, 2018; Johnson, 2019). Participants expressed a feeling of trust and comfort in relating to their PCPs. Participants expressed awareness of cardiac complications such as heart failure and were motivated and committed to making the necessary lifestyle changes to prevent medical complications, disability, and death. P15 reiterated the importance of maintaining follow-up visits with her primary care provider saying, “I feel like my heart condition is getting better, and I am feeling better. I must stay consistent, so monthly, I must have my follow-up appointment”.

Macario (2017) studied the specific needs of women of color with cardiovascular disease by surveying women across five different ethnicities. She found that each group had different preferences, such as using message boards for group communication, finding transportation assistance, and knowing the locations of support groups for membership access. Among African American women, there was a preference for support groups facilitated by healthcare professionals that could provide education on disease management and self-care. My research study agreed with Macario (2017) in that some African American study participant accepted the role of healthcare professionals as the main facilitators of their peer support meetings and had nurses from the church or community performing that role. Other groups were self-directed, with participants taking turns facilitating group meetings while having a healthcare professional as an occasional guest and providing guidance as needed. All peer support groups reportedly met the educational and support needs by utilizing healthcare providers appropriately towards optimal disease and self-care management.

Negative Interactions with Other Health care Providers

P7 described concerns regarding the treatment of her health insurance company denying payments for services following a stroke and identified inequity in their discussions with her. Participant P8 expressed anger with poor treatment received in the Emergency Room in one of her recent visits with medical challenges surrounding hypertensive heart disease. She experienced chest pains, respiratory distress, and fatigue but was not seen and evaluated urgently or within a reasonable time period. She shared: ”When I finally saw a nurse and doctor, no one even performed an assessment such as listening to my chest, which should be done with complaints of chest pain”. Dong et al. (2017) addressed the disparities in the treatment of minorities in ambulatory care settings, including emergency and outpatient CVD care. As was experienced by participant P8, the review by Dong et al. (2017) demonstrates that significant racial/ethnic disparities persist with both process and outcomes in regard to the quality of ambulatory CVD care provided to poor, vulnerable minority groups.

The feelings of distrust with healthcare providers can result in less disclosure and transparency from clients regarding their cardiac and health information, as well as in sharing about barriers and challenges regarding treatment and compliance (Honavar, 2018; Johnson, 2019). The negative sentiments of healthcare providers shared by participants are a few important and significant barriers to accessing healthcare. All participants in this current research study verbalized having medical insurance and, thus, some access to healthcare. Most may not realize how inadequate some insurance coverages actually are, and that they were underinsured with limited access. Participant P7 expressed concern about restricted access and denials for necessary services following a stroke (CVA) she recently experienced. Her expression of the insurance company failing to consider that all individuals recover and respond differently, and at varying pace annoyed her as she shared: ‘they try to lump everyone together without consideration for specific needs of individuals. I have had to pay out of pocket for my physical therapy sessions”. The Insurance provider insisted on grouping her required treatment as a generalized need, requiring her to pay for all her rehab and physical therapy needs out of pocket based on their judgements, rather than on the actual recommendations of this participant’s therapist and medical provider. This is a reminder that “having insurance” does not mean adequate and appropriate access and coverage, as clearly noted by Sohn (2017) that inconsistent and unstable insurance coverage also has negative consequences. African American and Hispanics in the US are more likely to be uninsured or under-insured, and many in these groups are totally unaware that their coverage is substandard and inadequate.

Theme 7: Ongoing Challenges, Perceived Barriers and Threats exist

The need to plan activities, pace activities, and decrease social functioning has been reported as helpful strategies (Abel et al., 2017), but is not always feasible for some. More than half the participants felt they were leading a healthy lifestyle (perceived barrier). Most of the women expressed awareness of the necessity for regular exercise, but not all managed to get as much regular exercise as they should. Participant P7 expressed frustration as she had challenges adding exercises to her schedule. She was unable to tolerate walking the stairs at work, and she thought she might "just be lazy" for being unsuccessful with exercises and weight loss this far. Ananian et al. (2018), Beckie et al. (2018), and Roberts-Kennedy et al. (2017) have addressed self-care activation and long-term lifestyle behavior changes, which pose major challenges at times for the African American women group. Some lack interest, drive, or motivation to pursue regular exercise.

Participants shared stressors affecting their severity including work, medical challenges such as symptom management (breathing difficulties, chest pains, fatigue), emotional support, medication costs, and the need for assistance with childcare and housework. This is in full agreement with the literature (Ananian, 2018; Fisher, 2015), reinforcing the effectiveness of peer support strategies in response to multiple barriers and challenges. This includes addressing self-care management and obtaining needed community resources such as household help and childcare assistance. Issues such as transportation, the Covid-19 pandemic, being homemakers with small kids, and being primary home care providers created some limitations for many stay-at-home moms in this research study.

Challenging Symptoms

Participants described the presence of worrying symptoms to include fatigue, shortness of breath, headaches, tiredness, and occasional edema. These were changes from the normal state in feelings and physical sensations and required attention. Most participants monitor their weights to help determine fluctuations in weight and possible fluid imbalance. Participants P7 and P8 noted that what was happening in their bodies lent them helpless at times and described by one as “feeling so weak and having shortness of breath, especially with using stairs and completing some daily tasks”. P8 shared, “One could hear me breathing a mile away during and after using the stairs.” Her breathing becomes heavy, noisy, and difficult with distress, and she requires resting. This admission of cardiac compromise and activity intolerance indicates her awareness of the threat of complications such as heart failure and her willingness to continue with exercises within her physical and medical limitations.

P6 shared about experiencing physical symptoms and attempting to self-care with some challenges in explaining that some days are encountered with unwell feelings, which can be difficult to explain and creates confusion at times. These feelings and sensations warrant individual decision-making relating to medication intake or avoidance due to side effects. As a result, some are forced to observe a good diet and frequent exercising to help themselves in the best way towards a stable condition.

Fatigue was commonly reported as a feeling of extreme tiredness in the body and a forced desire to rest. A feeling of fatigue required rest breaks and physical assistance from others, which was not always possible, as some participants reported. Participants relied mainly on family members for physical assistance with childcare and household duties, while guidance, emotional support, and understanding were obtained mainly from peers. Participant P09 shared that she convinced her sister to stay with her family during school breaks, to assist with childcare and housework. Some participants (P13, P14) visited the emergency rooms lately due to extreme fatigue and hypertension that created compromise in activity tolerance, blood pressure levels, and performance of daily tasks and responsibilities.

Cues to taking action

This comes from the health belief model, which is described as being influenced by people, events or things that propel an individual towards making a behavioral change (Glanz et al., 2015; La Morte, 2019). Most of the women in this peer support study, chose to make behavioral changes to maintain better health, better tolerance with activities of daily living, and better quality of life, which also increases their longevity. Some participants provided examples of actions taken to assist with making lifestyle changes, such as making a daily schedule and trying to follow the same or making forceful attempts to obtain additional help at home from a nanny. P12 shared that she “worked out” with her brother with exercises, as this aspect of lifestyle change was difficult for her. Her brother became a great motivator, assisting as an exercise partner.

Perceived Severity of Illness

Participants shared that severe episodes of their hypertensive heart disease are likely to require additional inpatient admissions, frequent admissions, challenging episodic presentations, taking additional medications, having severe fatigue, having poor activity tolerance, feeling less controlled and more vulnerable. Some are currently feeling and expressing having a much better medical state while involved with peer-to-peer support groups. All participants (n=15) denied being a smoker or alcoholic, behaviors that Perceived severity refers to an individual's belief about the seriousness of being inflicted with an illness or disease or the severity of the consequences of leaving the disease untreated (LaMorte, 2019). This includes medical, physical, and social consequences (LaMorte, 2019). With an awareness and understanding of their disease and susceptibility, individuals can decide to take actions to prevent or avoid consequences that can be detrimental. Most of this peer support study participants had experiences and reasons that propelled them to take action for hypertensive heart disease control. This may not always be consistent with the premise of Okoro et al. (2018) who contends tha,t low self-efficacy and lack of social support among older African American women are strong barriers that may hinder or limit the adoption of healthy self-care behaviors such as changing lifestyle habits to control blood pressure and heart disease. An episode of medical severity and decompensation (severe threat) may be what it takes for drastic lifestyle change in an individual, as shared by some participants. P7 suffered a stroke despite what she thought was reasonable lifestyle and preventive practices. She became most aggressive in her recovery and rehabilitation, which may have led to causing further medical damage. She required adjustments and slowing of her aggressive rehabilitative actions and lifestyle activities. P7 shared the following regarding her illness, interactions online, disease challenges and preventative actions. She shared the possibility of having depression, dependency on others, failure to progress with recovery, as complications from hypertensive heart disease and lack of social support. As a result of these fears, she maintains an active state as much as she is able and increases her research on the topics of CVD and stroke.

Social Challenges

Many family and social gatherings in this ethnic group normally involve food consumption. Many times, these gatherings are with foods that are not the healthiest, usually higher in salt, fats, and sugar than is required for healthy nutritional intake. Managing hypertensive heart disease requires avoidance or limitation of those unhealthy practices to control blood pressure and avoid damage to the vascular system. In addition, the lack of support from family and friends to assist in healthy lifestyle engagements (such as eating practices) and relieve individuals from duties and responsibilities may also be missing. Most participants were not open to sharing their eating habits, but P8 expressed that it was difficult to ignore or avoid many of the delicious ethnic foods she has eaten all her life.

Managing and Controlling complications

Participants were aware of some complications of hypertensive heart disease. Most were also aware of their limitations medically and physically while living with this disorder. They were aware that factors such as exhaustion, dehydration, and physical overexertion could lead to worsening heart disease symptoms, heart failure, stroke and other cardiac challenges and disability. They were aware that controlling their blood pressures with regular exercises, medications, consuming a healthy diet, observing and limiting salt intake, limiting fried foods and other unhealthy food items could lead to such complications. The inability to obtain adequate rest periods and breaks from activities such as childcare and housework was shared by most women who stayed home with those responsibilities at all times. Some engaged in relaxation exercises, dancing, meditation, and sharing with others when able, as ways to help mitigate symptoms of hypertensive heart disease and instability. Participant P7 thought she could suffer another stroke if her blood pressure remained too high or was not well controlled. She expressed disappointment in her current state with CVD and stroke despite her efforts in practicing a healthy lifestyle and attempts to manage her blood pressure.

Perception of Peer Support Barriers

The majority of research participants believed that the ongoing long-term social, psychological, and financial stressors do have a significant impact on their blood pressure and heart disease, as well as their inadequate control of weight, diet, and regular physical exercises. It is known that these disorders and challenges are common with the African American women group, and are major risk factors for their heart disease (AHA, 2019; Kalinowski et al, 2019). This makes their attempts at peer support engagements, expected participation and psychological relief even more burdensome while struggling to make and sustain lifestyle changes.

Challenges in Obtaining Treatment

One major challenge shared by multiple study participants was financial issues, at times not very clearly expressed and understandably a topic of discomfort for some. Insurance coverages were available by all but limited. Some medications were expensive and out of reach for all in this targeted population. This reinforces that AA women are at a greater disadvantage than many others in regard to obtaining appropriate assistance to improve their medical situation (Ananian et al., 2018; Brown et al., 2018; Green et al.,2017). This is also why some minorities try to utilize herbal and natural remedies, which are generally not covered by health insurance but are normally more affordable by group members when compared with prescription medications and are considered culturally safe and beneficial. Participant P7 expressed her level of frustration from developing a stroke, lost time and wages due to absence from work, and has had many limitations placed on health care coverage from the insurance company involved with her case. Participants learn from each other about alternate therapies. A few admitted to using natural items such as garlic, turmeric, ginger, beetroots, spinach, ginkgo biloba, much fruits and vegetables to assist with maintaining appropriate blood pressure levels.

Some teachings and education from peer-to-peer support and networking may be antagonistic to normally practiced cultural habits and beliefs. Participants have been challenged with deciding between socially acceptable food engagements and adjusted lifestyle dietary changes, and practices against the norms, as in meal celebrations for social occasions.

Public Healthcare Services

In this research study, peer support groups addressed specific CVD-related needs of Women of Color with cardiovascular disease as also addressed by Macario et al. (2017). Multiple ethnic groups were surveyed about specific self-management needs. Findings were that different minority groups preferred different healthcare items and had specific needs for CVD self-management. AA women preferred professional health care facilitators to assist with education and understanding in their own language/culture, to obtain the details of care and what they needed to know. Some participants preferred the online format for its convenience with family and professional responsibilities. My study partially agreed with Macario (2017) in that participants expressed a preference for healthcare professionals to facilitate peer support meetings but were also indifferent to having their peers facilitate and provide guidance. In some groups, participants took turns facilitating group meetings and supporting each other. They also had guest healthcare professionals periodically to help provide healthcare guidance. In this case, medical guidance was provided by the church and community healthcare professionals, and from the primary care medical doctors and their services.

Many participants found the support groups most beneficial in helping individuals avoid feelings of isolation, as groups provided a space for mental uplifting and community cohesion. They could identify the relevance and culturally appropriate interventions offered and addressed to make a difference in the peer support strategies presented (Kingod, et al., 2017; Macario et al., 2017; Okoro et al., 2018). Peer support communities provide a supportive space for maintenance of daily self-care with chronic illnesses and help to provide a sense of group belonging and reduce feelings of isolation. These sentiments were clearly stated by participants in this current peer support research study. Online communities continue to increase, and research has shown that they help in supporting and strengthening social ties and knowledge exchange in medical, social, and everyday life and wellness concerns (Kingod et al., 2017). This was clearly demonstrated in my interviews with participants and aligned with past research studies.

Limitations of the Study

There are several limitations to this study. This study design included a nonrandom purposive convenience sample of African American women with a self-reported diagnosis of Hypertensive heart disease who were receiving peer-to-peer support for a minimal period of six months prior to being interviewed. The volunteers who participated in this study were fifteen women engaged in online peer support programs, ages 25 to 61. Most participants possessed a college degree, most were homemakers, and two were healthcare professionals. The areas of physical location were Washington DC, New York, New Jersey, and Texas. This means that the study's findings may not be representative of all African American women with Hypertensive heart disease and receiving peer-to-peer support online during the time of a pandemic COVID-19, and may not be generalizable to the larger population of African American women with this hypertensive heart disease in the United States. The covid-19 pandemic limited this research study to only an online format, so this condition partly restricted the study to individuals with online and email access.

Implications for Positive Social Change

The findings from this research study, have the potential for positive social change. Several women participants have expressed challenges in coping with the stress of self-managing with hypertensive heart disease and also managing their duties and responsibilities as mothers, housewives and with household duties. Providing community resources for assistance and guidance in those areas of responsibility and duties may be helpful for cardiac victims, and assist in preventing complications, healthcare expenses, emergency room visits, and hospitalizations. Diet and ethnic food consumed regularly can receive more focus by public health program providers and be incorporated into training for culturally sensitive dietary counseling, practices and individual behaviors. Incorporating regularly consumed ethnic food items in healthier salads and menus can help to relieve anxiety and feelings of guilt and failure and could impact participant mothers, sisters, daughters, aunts, cousins, and grandmothers to educate and guide their entire families and communities in healthier food indulgence. My study participants also expressed some frustrating experiences with medical providers in emergency units of hospitals and this was also supported by previous studies, hence a solution maybe sought for education and reinforcement to nurses, physicians and other public health care providers regarding customer service, cultural humility, and therapeutic communication, especially relating to service provision, empathy and caring attitudes. The results of this study have implications for positive social change for patients, health care providers, families, community residents, and hospital emergency room staff, as well as urgent care staff.

Recommendations

Recommendation is being made for depression screening, especially in women with a history of isolation, living alone, or those that express or demonstrate symptoms of anxiety or depression. An increased focus on online support groups that may produce more convenience and flexibility to mothers and caregivers while accessing education, self-efficacy and empowerment in self-care management of CVD would be a valuable intervention for minority communities, such as the African American disease management groups who are most vulnerable and resource deficient. Ongoing education and clarification of the importance of lifestyle changes for this population who lack adequate health education, awareness and understanding to fully grasp the threats and severity of their high disease risk status, and the potential for early demise and disability when behavioral changes are not adopted. Some cultural beliefs are engrained in ethnic groups, which pose a challenge for public health and healthcare providers attempting to improve medical outcomes in specific groups. Some participants also shared their experiences with in-person peer-to-peer support that was in operation prior to the personal contact restrictions placed on the public with the Covid-19 pandemic. Without these health restrictions, in-person peer support as well as online group engagements, could positively affect the lives of those afflicted with cardiac challenges in vulnerable minority groups.

Conclusion

The findings from my research study on peer-to-peer (P2P) support have the potential for positive social change. Peer-to-peer support has been used among preventive strategies for CVD, and has been helpful to some, but without full understanding of how and why. The use of this strategy in the African American (AA) women community, who are most at risk for hypertensive CVD also has not been documented in the literature. This research study aimed to obtain the lived experiences and direct words from AA women participants who have been engaged with P2P support strategies in their self-care and self-management journey. All participants appreciated the services and benefits provided by the peer support groups. Some preferred the in-person peer support groups that were operational and functioned prior to Covid -19 pandemic. Some participants developed a stronger liking for the online support group and appreciated the convenience and flexibility that was provided by the online formats.

Participants expressed some frustrating experiences with community health care, including health Insurance companies and hospital Emergency room provider services. Many participants mentioned depression and isolation as real challenges encountered as they attempt to navigate daily schedules and disease management. Mental Health screening and follow-up for these cardiac patients should be a recommended aspect of their overall care plan. Peer-to-peer support provided by other women with similar disease experiences may be partly helpful in enhancing social support for women with heart disease and helpful in improving their psychosocial well-being.

Medication adherence was questionable in this peer support research study. Some participants denied being on prescribed medications; some shared that medications were costly, and others shared about the discomfort from taking prescribed medications, leading to avoidance and non-compliance. Further qualitative research studies on CVD may elucidate the urgent need for awareness of the disease's existence, risk factors, and prevention of complications. Studies such as this highlight the need for immediate action taken by health insurance to become more involved in offering education and coverage on CVD and its complications for their clients. Lastly, these study findings may prompt public health practitioners and healthcare providers to utilize the advanced information and help with genomics and technology to recognize, diagnose and treat hypertensive CVD which remains a leading cause of disability and death in vulnerable populations in the United States and worldwide. Understanding the experiences, perceptions and beliefs of affected participants can better guide providers towards implementing appropriate, relevant programs and strategies to assist with accomplishing long-term sustained lifestyle changes and improved cardiac health for the African American women population.

References

Abel, W., Crane, P., & McKoy, T. (2014). Predictors of depression in Black women with hypertension. *Issues in Mental Health Nursing, 15*(3), 165 -174. https://doi.org/10.3109/01612840.2013.853331

Abel, W., Joyner, J., Cornelius, J., & Greer, D. (2017). Self-care management strategies used by Black women who self-report consistent adherence to antihypertensive medication. *Patient Preference Adherence, 11*, 1401-1412.

Abraham (2017). A phenomenological inquiry of nurses' lived experiences of implementing evidence in practice (Doctoral dissertation). Retrieved from Dissertations & Theses @ Walden University. (Order No. 10684118)

Agyemang, P., & Powell-Wiley, T. (2013). Obesity and Black women: Special considerations related to genesis and therapeutic approaches. *Current Cardiovascular Risk Reports, 7*(5), 378–386. https://doi.org/10.1007/s12170-013-0328-7

American Heart Association. (2023) - Cardiovascular health in African Americans. *Circulation, 136*(21), e393–e423. https://doi.org/10.1161/CIR.0000000000000534

American Heart Association. (2022). Heart disease in African American women. https://www.goredforwomen.org/en/about-heart-disease-in-women/facts/heart-disease-in-african-american-women

American Heart Association. (2020b). High blood pressure and African Americans. https://www.heart.org/en/health-topics/high-blood-pressure/why-high-blood-pressure-is-a-silent-killer/high-blood-pressure-and-african-americans

American Heart Association. (2020c). Racial disparities continue for Black women seeking heart healthcare. https://newsroom.heart.org/news/racial-disparities-continue-for-black-women-seeking-heart-health-care

American Psychological Association. (2020). APA Ethics Code addresses when obtaining informed consent from research participants is necessary. http://www.apa.org/news/press/releases/2014/06/informed-consent.aspx

Ananian, C., Winham, D., Thompson, S., & Tissue, M. (2018). Perceptions of heart-healthy behaviors among African American adults: A mixed methods study. *International Journal of Environmental Research in Public Health, 15*(11), 2433.

Anxiety and Depression Association of America. (2018). African Americans. https://adaa.org/african-americans

Arian, M., Campbell, M., Cooper, C., & Lancaster, G. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology, 16*, 10, 67.

Auld, A., Diker, A., Bock, A., Boushey, C., Bruhn, C., Cluskey, M., Edlefsen, M., Goldberg, D., Misner, S., Olson, B., Reicks, M., Wang, C., & Zaghloul, S. (2016). Development of a decision tree to determine appropriateness of NVivo in analyzing qualitative data sets. *Journal of Nutrition Education and Behavior, 39*(1), 37-47.

Bailey, R. (2020). Examining daily physical activity in community-dwelling adults with stroke using social cognitive theory: An exploratory, qualitative study. *Disability and Rehabilitation, 42*(18), 2631-2639. https://doi.org/10.1080/09638288.2019.1568591

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*-(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1982). "Self-efficacy mechanism in human agency". *American Psychologist, 37*-(2), 122–147.

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science, 9*-(3), 75–78. https://doi.org/10.1111/1467-8721.00064

Barr, P. (2016). Hospital Alliance promotes female heart disease awareness with women to women support. Hospitals and Health Networks, 2016. http://www.hhnmag.com/articles/6797-woman-to-woman-heart-care

Beckie, T., Campbell, S., Schneider, Y., & Macario, E. (2018). Self-care activation, social support, and self-care behaviors among women living with heart failure. *American Journal of Health Education, 48*(6), 355-365. https://c.ymcdn.com/sites/www.womenheart.org/resource/resmgr/Self_care_Activation_Social_.pdf

Belil,F., Alhani, F., Ebadi, A., & Kazemnejad, A. (2018). Self-Efficacy of People with Chronic Conditions: A Qualitative Directed Content Analysis. *Journal of Clinical medicine, 7* (11), 411.

Birt, L., Scott, S., Cavers, D., Campbell C., & Walter, F. (2016). Member Checking: A Tool to Enhance Trustworthiness or Merely a Nod to Validation? *Qualitative Health Research*. *26,* (13),1802-1811. https://doi.org/10.1177/1049732316654870

Boothroyd, R., & Fisher, E. (2010). Peers for progress: Promoting peer support for health around the world. *Family Practice, 27* (1), i62-i68

Boston Scientific Corporation (2018). Heart disease facts. Retrieved from http://www.your-heart-health.com/content/close-the-gap/en-US/heart-disease-facts.html

Boston University School of Public Health (2019). Behavioral Change Models: The Health Belief Model. Retrieved from http://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories2.htm

Boulware, E., Cooper, L., Ratner, L., Laveist, T., & Rowe, T. (2018). Race and trust in the healthcare system. *Public Health Reports, 118* (4), 358-365

Brewer, L., Balls-Berry, J., Dean, P., Lackore, K., Jenkins, S., & Hayes, S. (2017). Fostering African American Improvement in Total Health (FAITH!): An Application of the American Heart Association's Life's Simple 7™ among Midwestern African Americans. *Journal of Racial and ethnic Health Disparities, 4* (2), 269-281

Brown, A., Liang, L., Vassar, S., Escarce, J., Stein-Merkin, S., Cheng, E., Richards, A., Seeman, T., & Longstreth Jr, W. (2018). Trends in racial/ethnic and nativity disparities in cardiovascular health among adults without prevalent cardiovascular disease in the United States, 1988 to 2014. *Annals of Internal Medicine,168* (8), 541-549.

Bryman, A. (2016). Social Research Methods (5th ed.). Oxford, England: Oxford University Press

Candela, A. (2019). Exploring the function of member checking. *The Qualitative Report, 24* (3), 619-628. Retrieved from https://nsuworks.nova.edu/tqr/vol24/iss3/14

Cardinal Health (2018). *Matters of the heart: Addressing heart health disparities in women and minorities.* Retrieved from https://www.cardinalhealth.com/en/essential-insights/addressing-heart-health-disparities-in-women-and-minorities.html

Carnethon, M., Pu, J., Howard, G., Albert, M., Anderson, C., Bertoni, A., Mujahid, M., Palaniappan, L., Taylor, H., Willis, M., & Yancy, C. (2017). Cardiovascular health in

African Americans; A scientific statement from the American Heart Association. *Circulation. 2017,136,* 393–423. **https://doi.org/** 10.1161/CIR.0000000000000534

Cassel, J. (1976). The contribution of the social environment to host resistance. American *Journal of Epidemiology, 104* (2), 107-123. Received from http://aje.oxfordjournals.org/content/104/2/107.long

Centers for Disease Control and Prevention (CDC) (2022). African Americans heart disease and stroke fact sheet. Retrieved from http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_aa.htm

CDC (2022a). Chronic disease prevention and health promotion. Retrieved from https://www.cdc.gov/chronicdisease/resources/publications/factsheets/heart-disease-stroke.htm

CDC (2022b). About Heart Disease. Retrieved from https://www.cdc.gov/heartdisease/about.htm

CDC (2022c). Heart Disease Facts. Retrieved from https://www.cdc.gov/heartdisease/facts.htm

CDC (2020d). Racial and Ethnic Approaches to Community Health (REACH). Retrieved from https://www.cdc.gov/chronicdisease/resources/publications/aag/reach.htm

CDC (2022e). Wisewoman. Retrieved from https://www.cdc.gov/wisewoman/index.htm

CDC (2022f). Women and heart disease. Retrieved from https://www.cdc.gov/heartdisease/women.htm

CDC (2021) Smoking and tobacco use; Health effects of tobacco smoking. Retrieved from https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm#:~:text=Cigarette%20smoking%20harms%20nearly%20every%20organ%20of%20the,cause%20of%20preventable%20death%20in%20the%20United%20States.1

Cherrington, A., Martin, M., Hayes, M., Halanych, J., Wright, M., Appel, S., Andrea, S., & Safford, M. (2012). Intervention mapping as a guide for the development of a diabetes peer support intervention in rural Alabama. *Preventing Chronic Disease, 9,* 110053

Chinn, J., Martin, J., & Redmond, N. (2021). Health equity among black women in the United States. Journal of Women's Health, 30 (2). https://doi.org/10.1089/jwh.2020.8868

Clark, L., Watkins, L., Pina, I., Elmer, M., Akinboboye, O., Gorham, M., Jamerson, B., Mccullough, C., Pierre, C., Polis, A., Puckrein, G., & Regnante, J. (2019). Increasing Diversity in Clinical Trials: Overcoming Critical Barriers. *Current problems in Cardiology, 44* (5), 148-172.

Collins-Bowler, D. (2019). The lived experience of African American Women with lymphedema. *Annals of Breast Cancer and Therapy, 3* (1), 32-39

Colorafi, K. J., & Bronwynne, E. (2016). Qualitative descriptive methods in health science research. *Health Environments Research & Design Journal, 9* (4), 16-25 https://doi.org/10.1177/1937586715614171

Corbin, J., & Strauss, A. (2015). Basics of qualitative research: Techniques and procedures for developing grounded theory (4th Ed). Thousand Oaks, CA: Sage.

Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J.W. & Creswell, J.D. (2018) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage - Los Angeles, CA

Crossman, A. (2019). Pilot study in research. https://www.thoughtco.com/pilot-study-3026449

Cypress, B (2017). Rigor or Reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations. *Dimensions of Critical Care Nursing, 36* (4), 253-263, https://doi.org/10.1097/DCC.0000000000000253

Department of Health and Human Service (DHHS)[2018]. The Heart truth for women. Retrieved from https://www.nhlbi.nih.gov/health/educational/hearttruth/downloads/pdf/factsheet-actionplan-aa.pdf

Department of Health and Human Services, NIH (2018). Inclusion of women and minorities in clinical research. Retrieved from https://report.nih.gov/recovery/inclusion_research.aspx

Dong, L., Fakeye, O., Graham, G., & Gaskin, D. (2017). Racial/ethnic disparities in quality of care for cardiovascular disease in ambulatory settings: A review. *Medical Care Research and Review, 75* (*3*), 263-291

Egan, B., Li, J., Sutherland, S.E., Jones, D. W., Keith C Ferdinand, K. C., Hong, Y., Sanchez, E. (2020). Sociodemographic Determinants of Life's Simple 7: Implications for Achieving Cardiovascular Health and Health Equity Goals. *Ethnicity and Disease; 30* (4), 637-650. **https://doi.org/**10.18865/ed.30.4.637.

Endocrine Reviews (2021). Intermittent Fasting can help manage metabolic diseases. Retrieved from https://www.endocrine.org/news-and-advocacy/news-room/2021/intermittent-fasting-can-help-manage-metabolic-disease#:~:text=Eating%20your%20daily%20calories%20within,Endocrine%20Society%27s%20journal%2C%20Endocrine%20Reviews

Farley, H. (2020). Promoting self-efficacy in patients with chronic disease beyond traditional education: A literature review. *Nursing Open, 7* (1), 30-41. https://doi.org/10.1002/nop2.382

Faulkner, S., & Trotter, S. (2017). Data Saturation. Wiley online library. https://doi.org/10.1002/9781118901731.iecrm0060

Ferdinand, K. (2016). Cardiovascular risk reduction in African Americans: Current concepts and controversies. *Global Cardiology Science and Practice; 2016* (1); e201602

Fiscella, K. & Sanders, M. (2016). Racial and ethnic disparities in the quality of healthcare. *Annual Review of Public Health, 37*, 375-394

Fisher, E., Ayala, G., Ibarra, L., Cherrington, A., Elder, J., Tang, T., Heisler, M., Safford, M., & Simmons, D. (2015). Contributions of peer support to health, health care and prevention; Papers from peer for progress. *Annals of Family Medicine, 13* (Suppl1), S2-S8

Fisher, E., Boothroyd, R., Elstad, E., Hays, L., Henes, A., Maslow, G., & Velicer, C. (2017). Peer support of complex health behaviors in prevention and disease management with special reference to diabetes: systematic reviews. *Clinical Diabetes and Endocrinology, 3*, 4, https://doi.org/10.1186/s40842-017-0042-3

Fleury, J. (1993). An exploration of the role of social networks in cardiovascular risk reduction. *Heart and Lung: Journal of Critical Care*, 22 (2), 134-144.

Fors, A., Ulin, K., Cliffordson, C., Ekman, I., & Brink, E. (2015). The cardiac self-efficacy scale, a useful tool with potential to evaluate person-centered care. *European Journal of Cardiovascular Nursing, 14* (6), 536-543.

Forthofer, M., Burroughs-Girardi, E., Stoisor-Olsson, L., Wilcox, S., Sharpe & Pekuri, P. (2016). Use of formative research and social network theory to develop a group walking intervention: Sumter County on the move! *Evaluation and Program Planning, 58*, 28-34. https://doi.org/10.106/j.evalprogplan.2016.05.004

Garret, J. (2016). The relationship among social support, self-efficacy and medication adherence in adults with hypertension. Retrieved from Northcentral University, ProQuest Dissertations Publishing, 2016. 10164200.

Goldstein, K. & Oddone, E. (2019). Peer Support to Reduce Cardiovascular Risk among Women Veterans. Retrieved from https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/3576-notes.pdf

Green, S. (2017). Institute for women's policy research; Black women's access to health care improves but faces big risks. Retrieved from https://iwpr.org/black-womens-access-health-care-improves-faces-big-risks/

Hare, D., Toukhsati, S., Johansson, P., & Jaarsma, T. (2014). Depression and cardiovascular disease: a clinical review. *European Heart Journal;* 35(21):1365-72. https://doi.org/10.1093/eurheartj/eht462

Hare, D. (2021). Depression and Cardiovascular disease. *Current Opinion in Lipidology:* 32 (3), 167-174. **https://doi.org/**10.1097/MOL.0000000000000749.

Hassan, Z., Schattner, P., & Mazza, D. (2006). Doing a pilot study; why is it essential? *Malaysian Family physician, 1* (2-3), 70-73. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4453116/#s5title

Havranek, E., Mujahid, M., Barr, D., Blair, I., Cohen, M., Cruz-Flores, S., Davey-Smith, G., Dennison-Himmelfarb, C., Lauer, M., Lockwood, D., Rosal, M., & Yancy, C. (2015).

Social determinants of risk and outcomes for cardiovascular disease. *Circulation 132* (9), 873-898. Retrieved from http://circ.ahajournals.org

Healthy People 2020 (2020). Disparities. Retrieved from https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities

Healthy People 2020 (2020a). Social determinants of health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

Heisler, M. (2016) - Building Peer Support Programs to Manage Chronic Disease: Seven Models for Success. California Healthcare Foundation

Hennink, M., & Kaiser, B. (2020). Saturation in Qualitative Research. Sage Research Methods foundation, http://dx.doi.org/10.4135/9781526421036822322

Honavar, S. (2018). Patient–physician relationship – Communication is the key. *Indian Journal of Ophthalmology 66* (11):1527-1528, *DOI:* 10.4103/ijo.IJO_1760_18

Hospitals and Health Network (2017). Hospital Alliance promotes female heart disease awareness with women to women support. Retrieved from https://www.hhnmag.com/articles/6797-hospital-alliance-promotes-female-heart-disease-awareness-with-women-to-women-support

House, J.S. (1981). Work stress and social support. Reading, Mass: Addison-Wesley.

House, J.S. (1987). Social support and social structure. *Sociological Forum, 2* (1), 135- 146.

Hurtado, M., Spinner, J., Yang, M., Evensen, C., Windham, A., Ortiz, G.,Tracy, R., & Donnell Ivy, E. (2014). Knowledge and behavioral effects in cardiovascular health: Community health worker health disparities Initiative, 2007 -2010. *Preventing Chronic Disease, 11*;11:130250. http://dx.doi.org/10.5888/pcd11.130250

Imes, C., Novosel, L., & Burke, L. (2016). Heart disease risk and self-efficacy in overweight and obese adults. *Journal for Nurse Practitioners, 12* (10), 710 –716

In, J. (2017). Introduction of a pilot study. Korean Journal of Anesthesiology, 70(6): 601–605. https://doi.org/10.4097/kjae.2017.70.6.601

James, S. (2017). Invited Commentary: Cassel's 'The contribution of the social environment to host resistance'- a modern classic. *American Journal of Epidemiology, 185* (11), 1032-1034.

Jamshed, S. (2014). Qualitative research method-interviewing and observation. *Journal of Basic Clinical Pharmacology*, 5 (4), 87-88. doi:10.4103/0976-0105.141942

Johnson, T. (2019). The importance of physician-patient relationships communication and trust in health care. Duke Center for Personalized Health Care. Retrieved from https://dukepersonalizedhealth.org/?s=physician+patient+relationship&submit=Go

Jones, C., Jensen, J., Scherr, C., Brown, N., Christy, K., & Weaver, J. (2015). The Health Belief Model as an explanatory framework in communication research: Exploring parallel, serial, and moderated mediation. *Health Communication, 30 (*6), 566-576

Jones, M. (2018). HealthCare: How technology impacts the Healthcare Industry. Retrieved from https://healthcareinamerica.us/healthcare-how-technology-impacts-the-healthcare-industry-b2ba6271c4b4

Kalinowski, J., Taylor, J., & Spruill, T. (2019). Why are young black women at high risk for cardiovascular disease? *Circulation, 139* (8), 1003-1004.

Kangovi, S., Mitre, N., & Long, J. (2017). Community health worker support for disadvantaged patients with multiple chronic diseases: A randomized clinical trial. *American Journal of Public Health, 107* (10), 1660 -1667.

Kelsey, K. S., Kirkley, B. G., DeVellis, R. F., Earp, J. A., Ammerman, A. S., Keyserling, T. C., Shannon, J., & Simpson Jr, R. J. (1996). Social support as a predictor of dietary change in a low-income population. *Health Education Resesarch, 11*(3), 383-395. http://her.oxfordjournals.org/content/11/3/383.full.pdf

Kim, W., Kreps, G. & Shin, C. (2015). The role of social support and social networks in health information–seeking behavior among Korean Americans: a qualitative study. *International Journal for Equity in Health, 14* (40), **https://doi.org/**10.1186/s12939-015-0169-8

Kingdod, L., Cleal, B., Wahlberg, A., & Husted, G. (2018). Online-peer-to-peer communities in the daily lives of people with chronic illness: *A qualitative Systematic review. Qualitative Health Research, 27* (1), 89-99

Kohler, A., Tingstrom, P., Jaarsma, T., & Nilsson, S. (2018). Patient empowerment and general self-efficacy in patients with coronary heart disease: a cross-sectional study. *BMC Family Practice, 19*, 76, **https://doi.org/**10.1186/s12875-018-0749-y

Kokab F., Greenfield, S., Lindenmeyer, A., Sidhu, M., Tait, L., & Gill, P. (2018). The experience and influence of social support and social dynamics on cardiovascular disease prevention in migrant Pakistani communities: A qualitative synthesis. *Patient Education and Counseling,101*(4), 619-630

Kong, L., Hu, P., Yang, L., & Cui, D. (2019). The effectiveness of peer support on self-efficacy and quality of life in adults with type 2 diabetes: A systematic review and meta-analysis. *Journal of Advanced Nursing, 75* (4), 711-722.

Kumar, S.(2017). Cardiovascular Disease and Its Determinants: Public Health Issue. *Journal of Clinical Medicine and Therapeutics,1,* 1, 10

LaMorte, W. (2019). The Health Belief Model. Retrieved from http://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories2.html

Lauckner, H., & Hutchinson, S. (2016). Peer support for people with chronic conditions in rural areas; a scoping review. *Rural and Remote Health,16* (1), 3601

Lee, S., Schorr, E., Hadidi, N., Kelley, R., Treat-Jacobson, D., & Lindquist, R. (2018). Power of peer support to change health behavior to reduce risks for heart disease and stroke for African American men in a faith-based community. Journal of Racial and Ethnic Disparities, 5 (5), 1117. https://doi.org/10.1007/s40615-018-0482-1

Lincoln, Y., & Guba, E. (1985). Naturalistic Inquiry. Beverly Hills, CA: Sage Publications, Inc.

Loprinzi, P. & Ford, A. (2018). Effects of social support network size on mortality risk; Considerations by diabetes status. *Diabetes Spectrum, 31* (2), 189-192. https://doi.org/10.2337/ds17-0056

Luszcznska, A., Scholz, U., & Schwarzer, R. (2010). The General Self-Efficacy scale: Multicultural validation studies. *The Journal of Psychology, 139* (5), 439-457. https://doi.org/10.3200/JRLP.139.5.439-457

Macario, E., Montague, H., Campbell, S., Schneider, Y & Mieres, J. (2017). Understanding the support needs of minority women with heart disease. *Journal of Health Disparities Research and Practice, 10* (1), 97-110.

Magnani, J., Mujahid, M., Aronow, H., Cene, C., Vaughn Dixon, V., Havranek, E., Morgenstern, LB., Paasche-Orlow, MK., Pollak, A., & Willey, J. (2018). Health literacy and cardiovascular disease: Fundamental relevance to primary and secondary prevention: A scientific statement from the American Heart Association. *Circulation, 138* (2), e48–e74

Malmqvist, J., Hellberg, K., Mollas, G., Rose, R., & Shevlin, M. (2019). Conducting the pilot study: A neglected part of the research process? Methodological findings supporting the importance of piloting in qualitative research studies. *International Journal of Qualitative Methods, 18*, https://doi.org/10.1177/1609406919878341

Martinez-Garcia, M., Salinas-Ortega,M., Hernendez-Lemus, E., Garcia-Herrera, R., & Vallejo, M. (2018).A systematic approach to analyze the social determinants of cardiovascular disease. *Plos One, 13*(1):e0190960. **https://doi.org**/10.1371/journal.pone.0190960.

Mayo Clinic (2020). Heart Disease: overview. Retrieved from https://www.mayoclinic.org/diseases-conditions/heart-disease/symptoms-causes/syc-20353118

McEvoy, C., Moore, S., Appleton, K., Cupples, M., Erwin, C., Hunter, S., Kee, F., McCance, D., Patterson, C., Young, I., McKinley, M., & Woodside, J.(2018). Trial to Encourage Adoption and Maintenance of a Mediterranean Diet (TEAM-MED): Protocol for a Randomised Feasibility Trial of a Peer Support Intervention for Dietary Behaviour Change in Adults at High Cardiovascular Disease Risk. *International Journal of Environmental Research and Public Health, 15* (6), 1130. https://doi.org/10.3390/ijerph15061130

McGaghie, W., Bordage, G, & Shea, J. (2001). Problem statement, conceptual framework and research question. *Academic Medicine, 76* (9), 223-224.Retrieved from https://journals.lww.com/academicmedicine/Fulltext/2001/09000/Problem_Statement,_Conceptual_Framework,_and.21.aspx

Medical Dictionary for Healthcare professions and Nursing (2012. Retrieved from https://medical-dictionary.thefreedictionary.com/comorbid

Miller, P (2013). Principles of addiction. Elsevier inc. Charleston, SC. Doi https://doi.org/10.1016/C2011-0-07778-5

Morr, M (2019). Effects of social support on cardiovascular outcomes and mortality. Cardiology Advisor. Retrieved from https://www.clinicaladvisor.com/home/topics/cardiovascular-disease-information-center/impact-of-social-support-on-cardiovascular-outcomes-and-mortality/

Moustakas, C. (1994). *Phenomenological Research Methods.* Thousand Oaks, CA: Sage Publication, Inc.

Mudde, A., Kok, G., & Strecher, V. (1995). Self-efficacy as a predictor for the cessation of smoking: Methodological issues and implications for smoking cessation programs. *Psychology and Health, 10*, 353-367

Muncan, B. (2018). Cardiovascular disease in racial/ethnic minority populations: illness burden and overview of community-based interventions. *Public Health Review, 39* (32),

Munce, S., Shepherd, J., Perrier, L., Allin, S., Sweet, S., Thomasone, J., Nelson, M., Guilcher, S., Hossain, S., & Jaglal, S. (2017). Online peer support interventions for chronic conditions; a scoping review protocol. *BMJ Open, 7* (9), e017999. **https://doi.org/**10.1136/bmjopen-2017-017999

National Heart Lung and Blood Institute (2018). Ischemic heart disease. Retrieved from https://www.nhlbi.nih.gov/health-topics/ischemic-heart-disease

National Institute of health (NIH) (2016). Guiding principles for ethical research. Retrieved from https://www.nih.gov/health-information/nih-clinical-research-trials-you/guiding-principles-ethical-research

National Institute of Health (NIH) (2021). Hypertensive heart disease. Retrieved from https://medlineplus.gov/ency/article/000163.htm#:~:text=High%20blood%20pressure%20also%20leads,death%20from%20high%20blood%20pressure.

Nicks, S., Wray, R., Peavier, O., Jackson, S., McClure, S., Enard, K., & Schwartz, T. (2018). Examining peer support and survivorship for African American women with breast cancer. *Psycho-Oncology, 28* (2), 358-364

Nigatu (2017) Cardiovascular Disease Risk Factor Assessment and Lifestyle Adjustments in African Americans. Walden University Scholarworks 2017.

Ng, J., Ward, L., Shea, M., Hart, L., Guerino, P., & Scholle, P. (2019). Explaining the Relationship Between Minority Group Status and Health Disparities: A Review of Selected Concepts. *Health Equity, 3* (1), 47-60

Noble, H., Smith, J. (2015) Issues of validity and reliability in qualitative research. *Evidence Based Nursing, 18,* (2): 34-35.

Noonan, A., Velasco-Mondragon, H., & Wagner, F. (2016). Improving the health of African Americans in the USA: an overdue opportunity for social justice. *Public Health Review, 37* (12), https://doi.org/10.1186/s40985-016-0025-4

Nowell, L., Norris, J., White, D., & Moules, N. (2017). Thematic Analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16* (1), https://doi.org/10.1177/1609406917733847

Office of Minority Health (2020). Obesity and African Americans. Retrieved from https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=25

O'Gara, G., Tuddenham, S., & Pattison, N. (2018). Haemato-oncology patients' perceptions of health-related quality of life after critical illness: A qualitative phenomenological study. *Intensive & Critical Care Nursing, 44,* 76-84.

Okoro, F., Veri, S., & Davis, V. (2018). Culturally appropriate peer-led behavior support program for African Americans with type 2 diabetes. *Frontiers Public Health, 6,* 340, *https://doi.org/10.3389/fpubh.2018.00340*

Palant, A., & Himmel, W. (2019). Are there also negative effects of social support? A qualitative study of patients with inflammatory bowel disease. *BMJ Open;*9: e022642. **https://doi.org**/10.1136/bmjopen-2018-022642

Pannucci, C., & Wilkins, E. (2010). Identifying and avoiding bias in research. *Plastic Reconstructive Surgery, 126* (2), 619-625

Parrish, E., Cornelius, L. (2015). Perceptions regarding online support, illness, information, and awareness of women with cancer. *Journal of Behavioral studies in business, 8, 2015*. Retrieved from http://www.aabri.com/manuscripts/141984.pdf

Patil, S., Ruppar, T., Koopman, R., Lindbloom,E., Elliott, S., Mehr, D., & Conn, V. (2018). Effect of peer support interventions on cardiovascular disease risk factors in adults with diabetes: a systematic review and meta-analysis. *BMC Public Health, 18, 398*

Patton, M. (2015). Qualitative research & evaluation methods: Integrating theory and practice (4th ed.). Thousand Oaks, CA: Sage Publications

Peers for Progress (2019). Learn about peer support? Retrieved from http://peersforprogress.org/learn-about-peer-support/

Percy, W., Kostere, K., & Kostere, S. (2015). Generic Qualitative Research in Psychology. *The Qualitative Report, 20* (2), 76-85

Perez-Stable, E. (2018). Communicating the value of race and ethnicity in research. Retrieved from https://www.nih.gov/about-nih/what-we-do/science-health-public-trust/perspectives/science-health-public-trust/communicating-value-race-ethnicity-research

Peters, M., Potter, C., Kelly, L & Fitzpatrick, R. (2019). Self-efficacy and health-related quality of life; A cross-sectional study of primary care patients with multi-morbidity. *Health and Quality of Life Outcomes, 17* (37), https://doi.org/10.1186/s12955-019-1103-3

Pfeffer, T.J., Pietzsch, S., Hilfiker-Kleiner, D. (2020). Common genetic predisposition for heart failure and cancer. *Herz; 45* (7): 632-636. **https://doi.org/**10.1007/s00059-020-04953-9.

Pool, K., Ning, H., Lloyd-Jones, D., & Allen, N. (2017). Trends in racial/ethnic disparities in cardiovascular health among US adults from 1999-2012. *Journal of American Heart Association, 6* (9), pii: e006027, **https://doi.org/**10.1161/JAHA.117. 006027.

Psychology (2021). The Health Belief Model. Retrieved from http://psychology.iresearchnet.com/health-psychology-research/health-belief-model/

Psychology Research and Reference (2020). Self-Efficacy. Retrieved from http://psychology.iresearchnet.com/counseling-psychology/counseling-theories/self-efficacy-counseling/

Ramchand, R., Ahluwalia, Xenalis, S., Apaydin, E., Raaen, L., & Grimm, G. (2017). A systematic review of peer supported interventions for health promotion and disease prevention. *Preventive Medicine, 101,* 156-170.

Reza, N., Owens, A.T.(2020). Advances in the Genetics and Genomics of Heart Failure. *Current Cardiology Reports*; *22*, 132. https://doi.org/10.1007/s11886-020-01385-z

Riegel, B., Moser, D., Buck, H. et al. (2017). Self-Care for the Prevention and Management of Cardiovascular Disease and Stroke. A Scientific Statement for Healthcare Professionals from the American Heart Association. Journal of the American Heart Association, 6 (9), e006997. https://doi.org/10.1161/JAHA.117.006997

Richards, E., Woodcox, S., & Forster, A. (2020). Statewide Dissemination of an Evidenced-Based Email Walking Program Delivered Through Cooperative Extension. *Frontiers in Public Health, 8*, 78. **https://doi.org/** 10.3389/fpubh.2020.00078

Richard, S. (2016). African American Single Mothers' Perceptions of Physical Activity. Walden University Scholarworks. Retrieved from https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=3528&context=dissertations

Roberts-Kennedy, B. (2017). African American Women speak: A phenomenological study of African American women's beliefs and perceptions about compliance to treatment regimen in the healthcare system. *BRK Global Healthcare Journal, 1* (1),

Rodriquez, F., & Harrington, R. (2016). The role of peer support in attaining ideal cardiovascular health. *Journal of the American College of Cardiology, 67* (5), 486-7

Rogers, R. (2018). Coding and Writing Analytic Memos on Qualitative Data: A Review of Johnny Saldaña's the Coding Manual for Qualitative Researchers. *The Qualitative Report*, *23* (4), 889-892. Retrieved from https://nsuworks.nova.edu/tqr/vol23/iss4/12

Roller, M., & Lavrakas,P. (2015). Applied Qualitative Design:A total QualityFramework Approach. The Guilford Press, First Edition.

Rosenstock, I. (1974). Historical origins of the Health Belief Model. *Health Education and Behavior Monographs, 2* (4), 328-335.

Rudestam, K. E., & Newton, R. R. (2015). Surviving your dissertation: A comprehensive guide in content and process (4th ed.). Thousand Oaks, CA: Sage

Saran, A. & White, H. (2018). Evidence and gap maps; a comparison of different approaches. Campbell Systemic Reviews, 14 (1), 1-38. 018. https://doi.org/10.4073/cmdp.2018.2

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartiam, B…, & *Jinks, C. (2018)*. Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality and Quantity, 52*, 1893–1907 https://doi.org/10.1007/s11135-017-0574-8

Schunk, D., & DeBenedetto, M. (2016). Motivation and social cognitive theory. *Contemporary Educational Psychology, 60,* doi https://doi.org/10.1016/j.cedpsych.2019.101832

Scott, J., Cousin, L., Woo, J., Gonzalez-Guarda, R., Simmons, L (2022). Equity in Genomics -A Brief Report on Cardiovascular Health Disparities in African American Adults. *The Journal of Cardiovascular Nursing: 37* (1); 58-63. **https://doi.org/**10.1097/JCN.0000000000000725

Shen, Z., Zheng, F., Zhong, Z., & Wang, L. (2019). Effect of peer support on health outcomes in patients with cardiac pacemaker implantation: A randomized, controlled trial. *Nursing and Health Sciences, 29* (2), 269-277

Shepherd, S., Willis-Esqueda, C., Paradies, Y., Sivasubramaniam, D., Sherwood, J., Brockie, T. (2018). Racial and cultural minority experiences and perceptions of health care provision in a mid-western region. *International Journal for Health Equity Review*, 17, 33.

Singh, K., Meyer, S., & Westfall, J. (2019). Consumer facing-data, information and tools; Self-management of health in the digital age. Health Affairs, 38 (3), 352-358. **https://doi.org/**10.1377/hlthaff.2018.05404

Social and Behavior Change Communication -SBCC (2020). Social Cognitive Learning Theory. Retrieved from https://sbccimplementationkits.org/sbcc-in-emergencies/social-cognitive-learning-theory

Sokol,R. & Fisher, E. (2016). Peer Support for the Hardly Reached: A Systematic Review. *American Journal of Public Health; 106 (*7), 1308.

Stuckey, H (2018). Three types of interviews: Qualitative research methods in social health. Journal of Social Health Diabetes, 1(2), 56-59

Tang, P, (2013). A brief history of peer support: Origins. Retrieved from http://peersforprogress.org/pfp_blog/a-brief-history-of-peer-support-origins/

Tang, P., & Fisher, E. (2020). Enhancing Peer Support Interventions in Diabetes Care. Behavioral Diabetes. https://doi.org/10.1007/978-3-030-33286-0_27

Temple Health (2019). Peer Support group for women with heart disease. Retrieved from https://www.templehealth.org/patients-visitors/support-groups/womenheart-support-group

The Community Guide (2017). What Works? Cardiovascular disease prevention and control. Retrieved from https://www.thecommunityguide.org/sites/default/files/assets/What-Works-Factsheet-CardiovascularDisease.pdf

Thomet, C., Moons, P., Schwezermann, M., Apers, S., Luyckx, K., Oechslin, E, & Kovacs, A. (2018). Self-efficacy as a predictor of patient reported outcomes in adults with congenital heart disease. *European Journal of Cardiovascular Nursing, 17* (7), 619-626.

Thorpe, Jr, R., Feshazion, R., Parker, L., Wilder, T., Rooks, R., Bowie, J., Bell, C., Szanton, S., & LaVeist, T (2016). Accelerated health declines in African Americans in the USA. *Journal of Urban Health, 93* (5): 808–819. **https://doi.org/**10.1007/s11524-016-0075-4

Trochim, W. (2020). Research methods knowledge base; Qualitative Validity. Retrieved from https://conjointly.com/kb/qualitative-validity/

Tufford, L., & Newman, P. (2010). Bracketing in Qualitative Research. *Qualitative Social Work, 11* (1), 80-96. **https://doi.org/**10.1177/1473325010368316

Turkson-Ocran, R., Nmezi, N., Botchway,M., Szanton, S., Hill Golden, S., Cooper, L., & Commodore-Mensah. (2020). Comparison of Cardiovascular Disease Risk Factors Among African Immigrants and African Americans: An Analysis of the 2010 to 2016 National Health Interview Surveys. *Journal of the American Heart association, 9* (5), https://doi.org/10.1161/JAHA.119.013220

US Department of Health and Human Services, National Heart, Lung, and Blood Institute (NHLBI) [2017]. Heart Failure. Retrieved from https://www.nhlbi.nih.gov/health-topics/heart-failure.

US Department of Health and Human Services, Office of Minority Health (2016). Heart Disease and African Americans. Retrieved from https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=19

US Department of Veterans Affairs, 2020). Veterans Health Library; Peer support services in VA. Retrieved from https://www.veteranshealthlibrary.va.gov/142,41684_VA

Women Heart (2020a). Our Story. Retrieved from https://www.womenheart.org/our-story/

Women Heart (2020b) Heart Sisters Online. Retrieved from https://www.womenheart.org/find-support/sistermatch/

World Health Organization (WHO) (2020). Obesity: Preventing and managing the global epidemic; Report of a WHO Consultation (WHO Technical Report Series 894). Retrieved from https://www.who.int/nutrition/publications/obesity/WHO_TRS_894/en/

Wright, K. (2016). Social Networks, Interpersonal Social Support, and Health Outcomes: A Health Communication Perspective. *Frontiers in Communication.* 1:10. https://doi.org/10.3389/fcomm.2016.00010

Wu, F., & Sheng, Y. (2019). Social support network, social support, self-efficacy, health-promoting behavior and healthy aging among older adults: A pathway analysis. *Archives of Gerontology and Geriatrics, 85* (103934), https://doi.org/10.1016/j.archger.2019.103934

Xu, S., Zhang, Z., Wang, A., Zhu, J., Tang, H., & Zhu, X. (2017). Effect of Self-Efficacy intervention on quality of life of patients with intestinal stoma. *Gastroenterology Nursing, 41* (4), 341-346

Zhao, D., Post, W., Blasco-Colmenares, Cheng, A., Zhang, Y., Deo, R., Guallar, E. (2019). Racial Differences in Sudden Cardiac Death -Atherosclerosis Risk in Communities Study (ARIC). *Circulation, 139* (4), 1688-1697.

Zhu, S., Surampudi, P., Rosharavan, B., & Chondronikola, M. (2020). Intermittent fasting as a nutrition approach against obesity and metabolic disease. Current Opinion in Nutrition and Metabolic Care. **https://doi.org**/10.1097/MCO.0000000000000694

Appendix A: Invitation Flyer

Lived Experiences with Self-efficacy in African American Women

Receiving Cardiac Peer Support

School of Health Services Walden University

African American Women Participants are needed for Research in Peer Support

and

Self-management of Heart Disease

I am a Doctoral student in Public Health at Walden University looking for African American Women receiving peer support, who are willing to share their lived experiences over the course of an interview. All interviews and responses will be confidential.

The interview will last at most 90 minutes.

Thanks for your interest in the study. Please leave a voice mail at the number below with your first name, different days and times for best contact for a brief screening.

As a token of appreciation for your time and effort, you will receive a $20 gift card.

Contact Name: Shurnett Barrett

School of Health Services, Walden University

Phone: 703-362-6085

Email: shurnett.barrett@waldenu.edu

The study has been reviewed and approved by the Institutional Review Board (IRB) of Walden University.

Appendix B: Interview Questions

Thank you for your time and participation in this interview on peer support heart disease community study. The results of this study and your contribution may be used to inform chronic disease management in your communities.

RQ1. What are the lived experiences of African American women with heart disease who are receiving peer support to affect self-efficacy?

1. Please share with me an average day with your activities at home or work. Also, share with me your experience with heart disease since you were diagnosed.
2. Tell me your understanding of heart disease as explained to you by your Doctor.
3. Share your experience and involvement with peer support group while attempting to manage your heart disease (When referred, who provided referral, what type, frequency of attendance).

Perceived Susceptibility and threats

1. Share with me how you felt when diagnosed with heart disease.
2. Describe how and where you received medical care for heart disease (health insurance).
3. Share some of the treatments you have received for heart disease this far.
4. Share with me your experience in taking prescription and non-prescription (over the counter) medications for your disease.
5. Share with me your thoughts and feelings of having to take medications for a long time (side effects, costs, adherence, using alternate meds).
6. Share with me how working with other women, friends or family with heart disease changed your opinion of using alternative medications for your heart condition.
7. Tell me your feelings about habits like diet, smoking, and exercise affecting your heart disease. What are your thoughts on these habits?

8. Tell me about any other medical conditions you have (such as hypertension, diabetes, chronic lung disease, asthma).
9. Describe your experience working with your Doctor (trust, keep follow up appointments)
10. Share with me your feelings on expressing heart disease concerns with your doctor.
11. Share with me your feelings on being able to express health and heart disease concerns with your peers.
12. Describe barriers that you consider in the way or preventing you leading a heart healthy lifestyle.
13. Explain any limitations you have had in your activities since being diagnosed with heart disease (having shortness of breath with long walks or climbing stairs, playing with kids).
14. Explain the steps you would take when changes in your heart condition require you to call or visit the doctor or urgent care clinic (eg if you become short of breath or experience chest pains, is transportation available).

Perceived Severity

15. Explain any restrictions that have been placed on your activities since being diagnosed with heart disease (performing household chores, work, shopping, Dr's appointments).
16. Describe concerns you may have about your heart condition possibly getting worse (adherence to meds, weight control, diet).
17. Tell me your feelings about attempting to prevent worsening of heart problems when new situations or problems arise (do you feel confident in handling unexpected issues?).
18. Explain what would make you seek urgent care from a healthcare provider.
19. Share with me your thoughts and beliefs about what could go wrong if your heart disease is not well controlled (adherence of meds, diet, exercise).

20. Please tell me about anyone outside your home who may support you in making the changes you want to make for your best health and wellness states.
21. Describe the help you received in the past from that person or other persons (prompt-informational, emotional, social support).

RQ2. How do African American women with heart disease experience the effect of peer support on their self-care?

1. Please share with me your ability to access community resources such as clinics, urgent care centers, physicians' offices, supermarkets for healthy foods and medications.
2. Tell me about lifestyle changes you have made to maintain cardiac health, including diet practices and exercise (choosing diet, shopping, cooking, setting reminders, walking, daily exercise, exercise groups, gym membership)
3. Describe your experience in learning about or preparing healthy meals with your peer support group, friends or family.
4. Please share your understanding of the importance of engaging in regular exercise and healthy nutrition for your best heart health.
5. Describe some of the help at home you received from others (prompt -help with house cleaning, grocery shopping, retrieving medications, paying bills, contacting family members/church family as needed, etc).
6. Describe any quality time spent with neighbors, friends and peers when they were asked to assist and provide support.
7. Tell me about the cardiac information you received from other peers, friends and family.
8. Tell me about the emotional encouragement you received from peers, friends and family.

9. Describe your feelings and thoughts after receiving additional information and education on heart disease and managing your condition.
10. Explain how you can stay without having medical distress during times of stress.

Self-Efficacy

11. Share with me some of your heart disease symptoms and how you are (or aren't) able to control them, eg weight gain, having shortness of breath or chest pains.
12. Tell me how you are feeling about having someone you can count on to provide you with emotional support (talking over problems or helping you make a difficult decision).
13. Describe your feelings and beliefs of having someone available that you can count on to listen when you need to talk.
14. Tell me about your ability to afford the health care you need to prevent your heart condition getting worse.
15. Share with me your thoughts on the causes or sources of your stress.
16. Tell me how you attempt to control stressful situations that may increase your heart disease symptoms.
17. Share your thoughts and beliefs on feeling confident in taking your blood pressure, weighing yourself daily, preparing healthy meals, avoiding alcohol intake and avoiding smoking.
18. Share with me your thoughts on the process of learning these skills from peers or family.
19. Tell me about your feeling regarding having someone available to give you good advice about a problem or concern (prompt for details -tell me more).
20. Tell me about your feeling regarding having someone available to help make healthcare decisions for you. Tell me more about this.

21. Share with me your thoughts and feelings about having peers providing support, education, skills, self-care work, and encouragement for those who need this service.
22. Tell me about your ability to continue working (if employed) with heart disease symptoms, and how the support from peers assist with work challenges.
23. Share with me any help you obtain from others with your duties of caring for kids or other family members at home (if applicable).
24. Please feel free to share or describe any other experience or thoughts you have on receiving information, education, and support from peers.
25. Are there any questions or suggestions you have for me regarding this interview, your heart condition, or your involvement with peer support? Thank you.

Thanks for your time in completing this interview today, and for being part of this study. I appreciate you taking the time to share your story with me, and your significant contribution to this study toward social change. If you wish to reach me with any further information, questions, or concerns, or if you wish to receive a record of the information you shared with me, please do not hesitate to call or email me. My contact information is:

Shurnett Barrett,
Email address; shurnett.barrett@waldenu.edu, Ph -703-362-6085.

Appendix C: Respondent Screening Form

Demographic Information

Name of Interviewee: ______________________________

Date of Birth: __________________ Age: _____

Address: ____

Phone Number: _______________________

Email: __________________________________

Inclusion Criteria:

DMV Resident: _Yes _No   Online: Yes_   No__

Age group 20-75: _Yes _No

Heart Disease diagnosed in year:

Treatment Received: _Yes _No

Using Peer Support/Group since:

Eligibility met: Yes_ No_

Authorized to be recorded during the interview: Yes_ No_

Date________________

PRN_______________

Appendix D: Confidentiality Agreement

Name of Signer:

During the course of my activity in transcribing data for this research: 'Lived experiences with self-efficacy in African American women receiving cardiac peer support', I will have access to information which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant’s name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.

7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

   Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Signature: Date: