African American Women’s Perceptions of Coronary Artery Disease After a Myocardial Infarction: A Phenomenological Inquiry

by

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Acknowledgment

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Cardiology Associates of Mobile
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State of the Heart
Deaths due to diseases of the heart (United States: 1900–2010)
Cardiovascular disease mortality trends for males and females (United States: 1979–2010)
Introduction

- CDC (2012) estimated, that myocardial infarctions were accountable for 600,000 deaths and 2.5 million hospitalizations annually.
- African American women are more likely to die from complications of myocardial infarctions than any other group in the country.
- AA women deaths due to myocardial infarctions are linked primarily to modifiable risk factors that include elevated blood pressure, cigarette smoking, hypercholesterolemia, excess body weight, and sedentary lifestyle.
- Previous researchers reported that AA women have insufficient knowledge of CAD and its risk factors.
- Other studies indicated that AA women do not perceive themselves to be at high risk for an MI.
Statement of the Problem

- AA women’s post-MI treatment regimens continue to lag behind that of other racial and gender populations, which may be due to AA women not receiving proper treatment, or failing to effectively follow prescribed treatment regimens (Carey & Gray, 2012; Lee et al., 2009).

- Despite continuous research, there remains a scarcity in research on the unique needs and experiences of AA women post-MI.

- Researchers agree that the phenomenon of managing AA women with CAD post MI is complex and lacks clarity (Mosca et al., 2004; Smith et al., 2006).
Significance

This body of research was significant to:

- Gain an understanding of how AA women experience, understand, and manage their health in the post MI context.
- A better understanding of the experiences of AA women post-MI will better equip researchers and other health care providers to provide culturally appropriate management strategies for this high-risk population.
- The aim is to reduce the incidence of reoccurrence and reduce the knowledge gap concerning this population.
Purpose

- The purpose of this phenomenological study was to explore the lived experience of seven southern AA women, 50 years of age and older, post-MI.
- To gain an understanding of factors that may contribute to the disparities in the health outcomes of AA women post-MI.
Research Questions

The study addressed the following research questions in a sample of AA women who have experienced a myocardial infarction:

- What do these women know about risk factors for coronary artery disease?
- How do these women perceive coronary artery disease?
- How do these women manage coronary artery disease post-MI?
- How has having a myocardial infarction changed the lifestyle of these women?
A qualitative research design was used, described as:

A systematic, interactive, subjective approach to investigation of phenomena, utilized to describe life experiences of participants and how individuals give those experiences meaning.
The phenomenological interpretive design was used to generate participant’s rich descriptions of their lived experiences before, during, and after MI. In using the phenomenological approach, the investigator aimed to describe and interpret a certain phenomenon with the intention of understanding the study’s participant from the perspective of their personal experience and meaning attached to events.
Methodology

- **Sample:** Seven (7) purposeful selected African American Women 50 and over who had experienced MI.
- **Setting:** Mobile, Alabama.
- **Recruitment:** Through two cardiology practice locations.
- **Distribution of flyers which contained inclusion and exclusion.**
- The PI screened potential participants for eligibility in person or utilizing a telephone screening form.
- For those individuals meeting the inclusion criteria and who expressed a desire to participate in the study, the principal investigator scheduled a time to meet to complete written informed consent and the first interview.
- **Informed Consent:** Upon approval by IRB, written consent was obtained during a face-to-face meeting with the principal investigator at a mutually agreeable site.
- **Data Source:** The semi-structured interviews
Methodology (Continued)

Data collection included:

- Approval by the Institutional Review Board of the University of Alabama at Birmingham prior to data collection.
- Completion of a demographic data form.
- Audio-recorded semi-structured interview using an interview guide.
- To protect the identity of participants, participant identification codes were used instead of names or other identifying information.
- Follow up Interview 2 months after first interview.
Methodology (Continued)

Data analysis included following the 7 steps described by Colaizzi (1978):

- Acquired a sense of original transcripts
- Highlighted significant statements
- Formulated meanings
- Organized and developed theme clusters
- Write up all ideas (emergent themes, theme clusters, meanings)
- Credibility- member checks, reflective dairy, and outside expert reviewer.
Research Question 1: What do AA women know about risk factors for coronary artery disease?

Findings. The responses were inconclusive as to whether the participants had knowledge of the specific risk factors relevant to their heart diseases. Nevertheless, the participants identified what they believed were contributing factors of their heart disease.

The main contributing factor reported by most (n=4) of the participants was job and family related stress.

The overwhelming majority of the participants (6 of 7 [85%]) had at least two known cardiac risk factors which included hypertension, high cholesterol, a family history of CAD or heart attacks, smoking and obesity.
Results (Continued)

- **Research Question 2:** How do these AA women perceive coronary artery disease?

- **Findings.** The overwhelming majority of participants (6 of 7 [85%]) underestimated their risk factors for CAD prior to experiencing a MI, and their responses indicated that most of them never expected that they would have a heart attack.

- In contrast to underestimating their risk factors, most (5 of 7 [71%]) of the participants, were aware of early warning signs of a heart attack, such as chest pain, feelings of indigestion that was not relieved with medications, profuse sweating, and feeling tired.
Results (Continued)

- **Research Question 3:** How do these women manage coronary artery disease post-MI?

- **Findings.** All of the participants perceived that prevention of risk was the key to preventing another heart attack, which included taking medications as ordered, eating properly, exercising regularly, decreasing stress, quit smoking, and getting regular checkups.

- **Findings.** All but one participants exercised at least three times a week.

- Only one participant mention cardiac rehabilitation.

- One participant mentioned support groups.
Research Question 4: How has having a myocardial infarction changed the lifestyle of these women?

Findings. All of the participants expressed that they have a heightened awareness of the symptoms and risk factors of CAD.

The women who smoked previously, no longer smoked. Most reported eating meals that were low in fat and salt and included plenty of vegetables.

With the exception of one person, they all (85%) engaged in at least 30 minutes of a moderate-intensity activity such as walking at least 3 or more times a week.

6 out of 7 participants appeared to be overweight.
The data analysis revealed six major themes:
- Life before myocardial infarction
- Contributing risk factors
- Early warning signs
- Life after the myocardial infarction
- Cardiac rehabilitation
- Family support
Life before an MI

- Three of the participants reported exercising before MI such as gliding, stationery biking, walking, cutting grass, and gardening.
- Four of the participants said they were regular smokers before their MI, but all acknowledged quitting since the MI.
- Most of the participants perceived that they ate normal diets before their MI, but admitted they did not keep track of them.
- Three participants indicated they tried to eat relatively healthfully by watching salt, fried food, and sugar intake.
- The majority (6 of 7) of the participants reported taking blood pressure medicines before their MI.
Contributing risk factors

- four of the participants believed that their MI was stress related, attributed to by the demands of juggling work and family responsibilities. For example, one participant noted that “Working retail is very, very stressful.” Another noted, “When you have a heart attack you have a lot on your mind.”

- most of the participants indicated that having high blood pressure might have been a factor.

- Although four of the participants were smokers prior to MI, none reported smoking as a possible risk factor.

- Four participants reported that they had a family history of MI, with family members having died from an MI.
Some participants had early symptoms that were ignored or undertreated.

One participant reported that she had an EKG performed one week prior to her heart attack and it was normal.

Participant F said, “I felt so tired. “I had a Thursday appointment with my heart doctor. “I went, I thought he was going to set me up for a stress test, but, I waited there and waited there and the nurse came back in and said you ready to go”. “So I went on home”. Friday night I had a heart attack in church.”

Participant A and C, were working and became ill, went to the emergency room and was sent home. Participant C stated, “I just started feeling bad, I thought I had gas or whatever”. “The doctor sent me to the hospital. The tests that they did said my heart was fine.” “I came home one day and the second after I got home, I got sick. They took me to the hospital and they ran more test. They got my blood work back and found out I had a heart attack”.

Perceptions of Early Warning Signs
Perceptions of Life after Heart Attack

- Eating a proper diet and regular exercising were common threads among all of the participants.

- Most participants reported diets low in salt, low fat, and high in vegetable intake. Fried food was replaced with baked foods as reported by most of the participants.

- Six of the participants said that since their heart attacks, they continued to exercise regularly and most exercises involved daily walks.

- One participant noted that because of her knee braces and problems with her joints, she was limited in what she could do.
The term cardiac rehabilitation was only mentioned by one participant; however, the related activities explained by some of the participants seemed to indicate that some form of post-MI education had taken place.

Three of the participants mentioned that they participated in supervised exercise sessions.

One participant said after her heart attack, she went for some therapy.

"Smoking cessation was also a part of her therapy. "I stopped smoking my doctor advised me to do."
All of the participants indicated they had strong family support.

Their family support included husbands, sons, daughters, and grandchildren. For example, Participant F said that her son and her sister carried her and walked with her around the house for exercise after heart attack. “

Participant B stated “ My granddaughter moved in with me after my heart attack”.
Implications for Future Research

- Measuring the amount of exercise participants are doing.
- Tracking actual dietary changes.
- Implementing diet and exercise interventions.
- Working with participants from primary or general practice offices.
- Working with participant's with less insurance coverage.
- Stress, spirituality and family related to MI.
- Mixed methods research.
Implications for Practice

Results of this study offer new insight into the experiences of AA women with CAD and post-MI. Findings from this study indicate that:

- Health care providers need to improve educational efforts for AA women at risk of CAD and post-MI.
- Creating culturally appropriate, feasible interventions is paramount for decreasing the rate and incidence of CAD and myocardial infarctions in AA women.
- Healthcare providers need to continually consider research results and base their patient interactions and education on lifestyle behaviors that have an enormous impact on heart health for AA women.
Study Limitations

- Self reported data on lifestyle changes.
- Small amount of participants
- Generalizability
- All participants from Cardiology practices.
Summary

- This study qualitatively explored lived experiences of seven AA women after they suffered an MI. Myocardial infarction is a major public health issue, leading to many negative health consequences that can be prevented. When women experience an MI, they are more likely to experience a second MI within 12 months, or experience sudden cardiac death than other populations (AHA, 2010).

- The interviews provided a foundation to inform future interventions targeting weight control, the recommended amount of exercise, and providing culturally based dietary changes. While this study begins to address the limitations in the current literature, it is also apparent that additional efforts are needed to decrease the rate of reoccurring myocardial infarctions in AA women.
Questions?
References