

2019

# Cultural Factors Affecting African Americans of Caribbean Descent with Type II Diabetes

Ruth Runette Aguy-Paulsaint  
*Walden University*

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# Walden University

College of Health Sciences

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Ruth Aguy-Paulsaint

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2019

Abstract

Cultural Factors Affecting African Americans of Caribbean Descent with Type II  
Diabetes

by

Ruth Aguy-Paulsaint

MSN, Regis College, 2008

BSN, University of Massachusetts Boston, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

June 2019

## Abstract

Type II diabetes is a significant problem in the United States that had affected almost 10% of the American population and over 13% of African Americans. Although culturally competent diabetes education and treatment programs have been significantly more successful, little is known about the cultural factors affecting type II diabetes in African Americans of Caribbean descent (AACD). The purpose of this qualitative, phenomenological study was to explore the cultural factors relevant to the treatment and prevention of type II diabetes among AACD. The theoretical framework for the study consisted of cultural adaptation theory and the transtheoretical model. Data collection consisted of in-depth, qualitative semistructured interviews. For the first research question, findings indicated that AACD viewed dietary and exercise regimens as challenging to implement. For the second question, findings indicated that AACD viewed medical advice related to diabetes as valuable and helpful, and AACD fully appreciated and perhaps even exaggerated the seriousness of diabetes, a factor that might incentivize preventative behaviors. Findings from the present study could inform new diabetes treatment and education for AACD that addresses specific cultural factors, which could lead to lower diabetes rates for this population.

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## Dedication

When I looked back and reflected on the depth of the African proverb, “Be a mountain or lean on one,” I realized its impact on my life. My contribution was this dissertation, a tribute of thanksgiving and gratitude to many “mountains” for whom I have leaned on. None of this would have been possible without them.

First, to the God I serve faithfully and wholeheartedly. This journey, as much as it was academic, was also spiritual. My faith and trust in God have been reaffirmed at each passing turn. All credit for this work is due to Him.

I dedicate this dissertation to my tribe, my community, whose strength, experiences, and inspiration are written in every word of every page. To the rock of my life, husband/best-friend, Edner; and my children, Ed Rashad, Eline, and Marc Aguy for being my second eyes. I am forever grateful for your unwavering love and selfless assistance; without your understanding and supports I would never made it this far.

I dedicate this to my parents, Elielie Jean and Nedulia Aguy. With minimal education, you worked hard to ensure all your children were literate, educated, and respected. To my adoptive mom, Delphine Jean Noel. As an immigrant in America at the age of 12, you took up the mantle of my biological parents. From fostering a respect and desire for education, to serving people in my community, I am forever indebted. To all my siblings and their families, Pastor Calerbe, Hogla, Anderson, Gardie, Bethler, and Johanne Aguy; my aunts and cousins’ Merita, Esmene, Lurene, Emmanuella, Kethia, Islene, Eric, Guirlene, Amos and Joe thank you for your support. My cousin, who is more

like a sister, Weslyne Antoinette Thomas Coleman, who saw the light at the end of the tunnel, who held on to the vision even when I had moments of despair.

To Pastor Othnel Pierre, who is more like an older brother and spiritual advisor, for making yourself available and supporting me through this process. To my spiritual parents who treated me like their own, Marie Carmelle and Gerard Eustache, thanks for your prayers, support, and love.

To Dr. Nadia and her husband, Edwin, my friends and business partners, for your prayers and encouraging thoughts. My friends, Marie A Meronvil (Doune), Enide Louine Ghislaine Guillaume, Marie Claire Lorius, and Jeanette Mesidor whose support has been invaluable in more ways than one. To my colleagues, Dr. Marlene, Dr. Pearlean, Dr. Myriam, and Dr. Ruthe Edmond, thanks for your advices and moral support. WE'VE MADE IT, Y'ALL!

Lastly, I would like to dedicate this dissertation to two pillars in my community: Gerard Laurent, a statesman in our Haitian community, whose support has been felt for many decades by many despite blindness due to complications of diabetes, inspired me to research the effects of diabetes in African American communities of Caribbean descent. To Dr. Colbert Calixte—though no longer with us, you have been inspirational and integral in the completion of this dissertation. Your service to our Haitian, Christian Community lives on through the research presented in this dissertation.

Without these “mountains” to lean on, I wouldn't be the mountain myself that I am today—a force for change.

## Acknowledgments

This dissertation, its research, and its development would not of have been possible if not for colleagues, advisors, and mentors whose expertise in my subject matter were readily availed to me and invaluable. First, I would like to acknowledge my chair Dr. Patrick Dunn, content expert; Dr. Sriya Krishnamoorthy, method expert; and Dr. Ahmet Sapci, URR. Thank you for your assistance through each phase of this process.

I thank the director of the church for this study for making it accessible to conduct research. To Dr. Jean Claude Nau, mentor and colleague, for adding so much value to my career as a nurse and my matriculation to this point as a doctor. Thank you for pushing me toward success and excellence as your own daughter. Your undivided attention in this process, your support till the end, and your advice is the reason this dissertation came to completion.

To all my African American of Caribbean descents with diabetes: “Take charge of your health!”



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## Chapter 1: Introduction to the Study

Type II diabetes is a health issue in the United States that affects nearly 10% of Americans and can influence quality of life and overall health (American Diabetes Association, 2015). Some specific populations, such as African Americans, are more likely to have this condition compared to the general populous (American Diabetes Association, 2015). Although rates of diabetes are 13% for African Americans overall, some cultural subsets of this population may be even more likely to suffer from diabetes (Tappen, Engstrom, & Outlander, 2015). Over 80% of African Americans of Caribbean descent (AACD) either have type II diabetes or are at a medium-high risk of developing this condition, making it essential to investigate the cultural factors that make AACD susceptible to type II diabetes (Tappen et al., 2015). Diabetes education and treatment that addresses cultural differences is more effective than treatment that does not address cultural differences (Creamer, Attridge, Ramsden, Cannings-John, & Hawthorne, 2016; Weaver, Lemonde, Payman, & Goodman, 2014); thus, cultural factors that made AACD more susceptible to type II diabetes were investigated (see Tappen et al., 2015). Findings from the present study could inform new diabetes treatment and education for AACD that accounts for cultural factors, which could lead to lower diabetes rates for this population.

The following chapter serves as an introduction to the present study. First, a background on the topic of the study is reviewed. Next, the problem statement is provided, and then the purpose of the study is discussed. Next, the research questions that guide this study are provided before the theoretical framework is examined. The nature of the study is also described, and the definitions essential to understanding the present

study are reviewed. After, assumptions of the study are discussed. Then, the scope and delimitations of the study are examined, followed by the limitations of the study. Next, the significance of the study is discussed before the chapter ends with a summary.

### **Background**

Preliminary researchers have identified differential health outcomes and perceptions for AACD in comparison to the United States populace or African Americans in general (Hirving & Swann, 2015; Tappen et al., 2015). Over 80% of AACD either have type II diabetes or are at a medium-high risk for developing the condition (Tappen et al., 2015). Although there was a lack of literature concerning the prevalence of certain health problems for AACD, these results indicated a need for this type of research (Tappen et al., 2015).

Cultural attitudes and perceptions about health may explain the relatively high prevalence of type II diabetes among AACD (Hirving & Swann, 2015). For example, Hirving and Swann (2015) examined perspectives of Black participants of Caribbean descent in the United Kingdom to understand their perceptions of health better. Overall, participants recognized that an increasing body mass index (BMI) indicated poorer health, but they did not see higher bodyweights as indicative of poor health. Additionally, participants indicated the importance of physical activity for their health more than they recognized the importance of a healthy diet (Hirving & Swann, 2015). These findings indicated that some culturally held views of health common among Caribbean descendants, coupled with risk factors common among African Americans, might contribute to the prevalence of type II diabetes among AACD (Hirving & Swann, 2015).



Hirving and Swann (2015) and Tappen et al. (2015) did not study cultural factors specific to AACD and way these individuals were more susceptible to diabetes than African Americans in general. Thus, I studied these cultural factors for the prevalence of diabetes among AACD to be reduced through culturally competent diabetes education and treatment (see Creamer et al., 2016; Weaver et al., 2014). I addressed this phenomenon by exploring cultural factors relevant to the treatment and prevention of type II diabetes among AACD.

### **Problem Statement**

Type II diabetes is a significant problem in the United States, influencing almost 10% of the American population and over 13% of African Americans (American Diabetes Association, 2015). Although culturally competent diabetes education (Creamer et al., 2016) and treatment (Weaver et al., 2014) programs were significantly more successful, little was known about the cultural factors affecting type II diabetes in AACD (Tappen et al., 2015). Over 80% of this population was either at medium-high risk of type II diabetes or exhibited bloodwork indicative of having the condition already (Tappen et al., 2015). In addition, this segment of the population might hold inaccurate views about what would constitute a healthy weight (Hirving & Swann, 2015). Thus, conducting this study was important to understanding and mitigating cultural factors that could place some people at an increased risk for diabetes and other life-threatening conditions (see Tappen et al., 2015).

### **Purpose of the Study**

The purpose of this qualitative, phenomenological study was to explore the cultural factors relevant to the treatment and prevention of type II diabetes among AACD. This research was approached using the post-positivist paradigm, which Ponterotto (2005) defined as seeing reality and phenomena as objective but hard to capture through research methods. This method was an effective lens through which to approach the present research. The influence that cultural factors had over diabetes prevalence and treatment for AACD was objectively identified; however, differential health outcomes that could occur between samples depending on different variables meant that this study did not result in a list of cultural factors that objectively determined diabetes prevalence and health outcomes for AACD.

### **Research Questions**

I aimed to explore the cultural factors that could influence culturally appropriate treatment and prevention of type II diabetes in the context of AACD. Accordingly, the following overall research questions guided the study:

Research Question 1: How do African Americans of Caribbean decent perceive issues of type II diabetes and how does their culture contribute to this perception?

Research Question 2: How might the perceptions of African Americans of Caribbean descent and related cultural issues play a role in type II diabetes prevention?

### **Theoretical Framework**

The theoretical framework for the study consisted of cultural adaptation theory (Barrera, Castro, Strycker, & Toobert, 2013) and the transtheoretical model (Prochaska &

DiClement, 1982). Cultural adaptation theory, unlike many theories based on the work of a single scholar, arose based on the need to apply public health programs to a wider audience (Barrera et al., 2013). Many public health programs are developed with only the majority demographic in mind; ideally, these program leaders should serve a wider base, which often requires cultural adaptation to make programs compatible with minority cultures (Barrera et al., 2013). Thus, cultural adaptation theory represents the myriad ways in which these programs can be adapted, including translation or adaptation of the content itself (Tabak et al., 2015). Although the methods employed may differ from culture to culture and program to program, these are tied together by the general desire to bring public health to a wider audience through culturally sensitive methods and by a growing corpus of results that indicate how this process may be done. I contributed knowledge of potential ways to adapt diabetes treatment and prevention for AACD in line with the intent of cultural adaptation theory.

Additionally, I used the transtheoretical model (e.g., Prochaska & DiClement, 1982). Prochaska and DiClement (1982) developed this model in the 1970s as a comprehensive theory of behavior with respect to changing. They developed the name transtheoretical because it draws on many aspects of psychology. The transtheoretical model presents a six-stage model for making behavioral changes: precontemplative, contemplative, preparatory, acting, maintaining, and terminating. In the first stage, people have not yet acknowledged that a change is needed. In the second, they have acknowledged the need and considered it; in the third, they have accepted the need and prepared to act on the need. Thus, the fourth stage represents making the change, whereas

the fifth entails keeping these changes in place and avoiding relapse. The final stage represents the changes having become complete (Prochaska & DiClemente, 1982). The transtheoretical model framed the changes necessary for either prevention or treatment of type II diabetes, allowing me to contextualize participants' perceptions of cultural issues.

### **Nature of the Study**

The study was qualitative in nature, which was a descriptive type of research. Researchers have often used qualitative studies to explore issues through the perceptions of participants, although they are not necessarily limited to this step (Merriam & Tisdell, 2015). Unlike quantitative research with statistical power and larger samples, the method involves thorough investigations of a phenomenon with a small sample (Merriam & Tisdell, 2015). Thus, qualitative research was good for exploring open-ended questions—research questions of *what* or *how*—or probing new areas of inquiry. This aspect made it appropriate for the study, which involved exploring a subjective area, culture, within a population, which had rarely been studied with respect to its health needs (see Tappen et al., 2015). In this context, I used qualitative inquiry to explore perceptions of participants, laying theoretical groundwork for later quantitative work to determine specific relationships between variables identified in the results of this study.

The specific qualitative methodology was that of a phenomenological study. Moustakas (1994) defined phenomenology as a qualitative approach aimed at understanding a phenomenon through the lived experiences of those who experienced it. Thus, in a phenomenological approach, the researcher sets aside his or her own experiences to engage with the participants from a position to understand their

experiences as they do (Moustakas, 1994). I reduced these experiences to depict the core phenomenon that the participants experienced. This focus on perceptions and shared experiences made phenomenology ideal for capturing the essence of what it meant to experience type II diabetes in the context of a specific culture. Through phenomenology, I engaged with participants and their experiences. Then, I explored the essence of both individual experiences and shared experiences that represented the meaning of type II diabetes in the cultural context of AACD. Based on meta-analysis, an initial sample of 20 participants was close to average for PhD-level research using a phenomenological approach.

Data collection for the study consisted of in-depth, semistructured interviews. Qualitative interviewing was a strong method for collecting data regarding the opinions or perceptions of the study's participants (see Turner, 2010), and perceptions were the primary focus of the study. The interviews lasted 30 to 60 minutes with each participant and were directed by an interview guide. I prepared the interview guide in advance, which contained sample questions and a general list of topics to be covered (see Turner, 2010). The interview did not adhere to a list of questions because it was semistructured. Instead, the interview guide was flexible, allowing interviewees to digress onto relevant topics or for me to ask probing questions when appropriate to gather further data (see Turner, 2010).

To ensure its appropriateness in terms of ability to answer the research questions, three experts in diabetes treatment/prevention reviewed the interview guide. Interviews were scheduled in advance and held in an undisclosed location. Potential participants

were recruited through a single Seventh-day Adventist congregation actively serving many AACD, as well as other congregations in the area found to have a high attendance in terms of AACD.

### **Definitions**

*Type II diabetes:* Type II diabetes is a form of diabetes, a chronic disease that involves an elevated sugar level in the blood that manifests clinically with polydipsia, polyphagia, and polyuria and can lead to severe complications in the eyes, kidney, heart, and lower extremities. This variety is most common among adults (Centers for Disease Control and Prevention, 2015).

*Cultural factors:* Cultural factors are specific aspects of the shared background and worldview of a group of people, such as traditions, foods, religion, or worldview (Newby & Gray, 2016).

*Culturally competent treatment:* Culturally competent treatment is any form of treatment for a medical issue or disease, such as diabetes, that accounts for differences that occur between cultures of patients to improve treatment success rates (Creamer et al., 2016; Weaver et al., 2014).

### **Assumptions**

As with all research, some assumptions guided the basis of the study. First, I assumed that all participants were honest and detailed in their interview responses. This must be assumed because phenomenological interview methods were the most suitable for better understanding the cultural factors that affected diabetes treatment and prevention for AACD (see Moustakas, 1994). Another assumption was that cultural

factors—and not other variables specific to AACD—were what differentiated type II diabetes prevalence between AACD and the African-American populace. I made this assumption because other types of factors that differentiated the health of AACD from the health of all African Americans had yet to be suggested or identified with empirical evidence during previous studies.

### **Scope and Delimitations**

The scope of the present study involved exploring the cultural factors that influenced type II diabetes treatment and prevalence in AACD (see Tappen et al., 2015). These factors were unknown at the time of this study; gaining this understanding could explain why AACD had a high prevalence and risk of type II diabetes in comparison to other African Americans (see Tappen et al., 2015). The results of this study were intended to only be applied to understanding influential cultural factors for AACD; the results of this study were not considered applicable to understanding the cultural factors that influenced diabetes prevalence in other African American populations, as these factors varied between cultures.

Other theoretical frameworks, such as Bandura's (1974) theory of behavioral change, were considered for this study; however, Bandura's theory was not considered a good match because it relied on self-efficacy as the sole mechanism by which change occurred. Instead, the transtheoretical model offered six stages of behavioral change that could be influenced by a myriad of factors at any time (see Prochaska & DiClement, 1982); this model accounted for more reasons that behavioral change might occur, which

was more useful for describing how cultural factors could influence health behavior in the present study.

### **Limitations**

Research comes with its unique set of limitations. First, the small sample size of the study limited the number of perceptions that were gathered by me. To ensure this limitation did not limit the validity of the findings, I used thick descriptions to ensure data saturation was reached (see Moustakas, 1994). Another potential limitation was that participants of AACD were selected from church congregations with large populations of AACD. To ensure cultural factors that were uncovered were not also related to the religion of participants, I asked participants to answer interview questions with only the influence of their cultures and cultural backgrounds in mind to consider their religions as separate entities from their culture as AACD.

### **Significance**

This study can benefit theory, practice, and social change. Regarding theory, it was known that sociocultural factors influenced both the development and treatment of type II diabetes, but many specifics of this relationship had yet to be explored (see Mendenhall, 2016). Thus, I contributed to this gap in the literature by improving the understanding of this relationship in the context of AACD. AACD was a population at risk for type II diabetes because of obesity rates; a preliminary study indicated that only 23% of this population was of normal weight, whereas over 40% were obese (Tappen et al., 2015). However, little was known about how the culture of this population, many of



whom were not born in the United States, might influence diabetes prevention and treatment (see Hirving & Swann, 2015).

Additional research should be conducted on how diabetes prevention and treatment interventions should be culturally tailored to individual groups (see Tabak et al., 2015). Thus, I bridged this gap in the literature, exploring the cultural aspects of type II diabetes in the context of AACD to understand how culturally relevant diabetes prevention and treatment programs might be designed to reach patients. Helping to bridge this gap had practical applications because the gap was motivated by the need for knowledge to create better interventions in practice. These culturally appropriate interventions were repeatedly, empirically suggested to have better results in many minority culture contexts compared to standardized interventions developed for the majority culture (e.g., Creamer et al., 2016; Pottie, Hadi, Chen, Welch, & Hawthorne, 2013). For example, leaders of culturally competent type II diabetes education programs have consistently created improved glycemic control and improved diabetes knowledge 24 months after completion (Creamer et al., 2016). Further, evidence has shown that culturally tailored group appointments can improve type II diabetes management for African Americans (Newby & Gray, 2016).

The practical, culturally appropriate interventions developed for AACD with the help of the results of this study contribute to social change for several reasons. For example, understanding cultural factors can uncover barriers to effective care, such as cultural stigma against diagnosis (Woo & Mehta, 2017). Additionally, the specific study population has an increased risk for diabetes (Hirving & Swann, 2015; Tappen et al.,

2015). Many African American ethnic groups have strong food traditions (Newby & Gray, 2016), which helps understand what is essential for proper diabetic education and treatment (Sunni et al., 2015). Therefore, the results of this study served to help a meaningful and growing faction of American society to deal better with the dangerous condition of type II diabetes (see Tappen et al., 2015).

### **Summary**

To summarize this chapter, type II diabetes is a health issue in the United States that affects nearly 10% of Americans and can greatly influence quality of life and overall health (American Diabetes Association, 2015). To address the reasons why AACD were susceptible to type II diabetes, the unknown cultural factors that made them more susceptible than the general African-American populace were investigated (see Tappen et al., 2015). The purpose of this qualitative, phenomenological study was to explore the cultural factors that were relevant to the treatment and prevention of type II diabetes among AACD. The theoretical framework for the study consisted of cultural adaptation theory and the transtheoretical model.

The qualitative methodology chosen was phenomenology (Moustakas, 1994). Data collection for the study consisted of in-depth qualitative semistructured interviews. Qualitative interviewing was a strong method for collecting data regarding the opinions or perceptions of the study's participants (see Turner, 2010). I contributed to the present gap in the literature by developing new understandings of how cultural factors influenced the prevalence and treatment of type II diabetes among AACD. The following chapter

contains a review of literature relevant to the cultural factors that influence the prevalence and treatment of type II diabetes among AACD.

## Chapter 2: Literature Review

### **Introduction**

Cultural factors specific to AACD make this population susceptible to type II diabetes in comparison to the general African-American populace, who have been at a 3% greater risk for diabetes than Americans in general (Tappen et al., 2015). Attridge, Creamer, Ramsden, Cannings-John, and Hawthorne (2014) defined diabetes as a metabolic disorder that could influence health and quality of life, and they cited diabetes as the fifth leading cause of death worldwide. Although the importance of culturally competent diabetes education and treatment has been understood, there was a lack of understanding concerning the factors that made AACD more susceptible to diabetes than other African Americans (see Creamer et al., 2016; Tappen et al., 2015). Thus, the purpose of this qualitative, phenomenological study was to explore the cultural factors relevant to the treatment and prevention of type II diabetes among AACD.

I use this chapter to review literature relevant to the topic of the study. The chapter begins with a review of the theoretical framework of the study: cultural adaptation theory and the transtheoretical model (Prochaska & DiClement, 1982). Next, articles relevant to the study are reviewed categorically. First, culturally competent healthcare, culturally adapted health programs and the process through which they are adapted, and culturally adapted diabetes education, treatment, and prevention are examined. Next, diabetes education, treatment, and prevention adapted to serve African Americans are explored. Then, cultural views of diabetes are discussed as these relate to a

myriad of cultures. After, diabetes-related health factors and perceptions within African-Caribbean cultural groups are explored. Last, a summary is provided.

### **Literature Search Strategy**

I used Google Scholar and EBSCOHost databases to review literature and find articles relevant to the topic of this study. The following search terms guided the literature search: *diabetes, type II diabetes, African Americans of Caribbean Descent, cultural health factors, culturally competent diabetes treatment, culturally competent diabetes education, African American health, and cultural diabetes factors.*

### **Theoretical Framework**

The theoretical framework for the study consisted of cultural adaptation theory and the transtheoretical model. Researchers developed cultural adaptation theory based on the need to apply public health programs to a wider audience (Barrera et al., 2013). Leaders developed many public health programs with only the majority demographic in mind; therefore, cultural adaptation was needed to make these programs compatible with minority cultures (Barrera et al., 2013). Thus, cultural adaptation theory represents the ways leaders can adapt these programs, including translation or adaptation of the content (Tabak et al., 2015). The methods may differ, but these are all intended to bring public health to a wider audience through culturally sensitive methods and evidence that shows how this process may occur. I contributed knowledge of potential ways to adapt diabetes treatment and prevention for AACD in line with the intent of cultural adaptation theory.

Authors have previously used cultural adaptation theory as a framework for examining diabetes treatment and prevention. For example, Tabak et al. (2015) reviewed

literature concerning the translation of the Diabetes Prevention Program using cultural adaptation theory. The Diabetes Prevention Program was a lifestyle modification program designed to prevent type II diabetes by emphasizing healthy lifestyle choices. In total, Tabak et al. identified 15 on the cultural adaptation and translation of the Diabetes Prevention Program, and they determined that implementation efforts for the Diabetes Prevention Program could result in greater participation, satisfaction, and relevance when cultural adaptation and translation were incorporated.

Additionally, I used the transtheoretical model as a foundation for this study (see Prochaska & DiClemente, 1982). Prochaska and DiClemente (1982) developed this model in the 1970s as a comprehensive theory of behavior about changes that incorporated many aspects of psychology. The transtheoretical model presents six stages for behavioral changes: precontemplative, contemplative, preparatory, acting, maintaining, and terminating. In the first stage, people have not yet acknowledged that a change is needed, which they do in the second stage. In the third stage, they have accepted the need and prepare to act on it. Thus, the fourth stage involves making the change, and the fifth entails keeping it in place and avoiding relapse. The final stage represents the change having become complete (Prochaska & DiClemente, 1982). I used the transtheoretical model to frame the changes necessary for either prevention or treatment of type II diabetes to contextualize the influence of participants' cultural factors on their health behaviors.

Researchers have previously used the transtheoretical model to examine the health behaviors of those with type II diabetes. For example, Tseng, Liao, Wen, and Chuang

(2017) used the transtheoretical model to examine how stages of change and knowledge mediated the relationship between glycemic control and health literacy for those with type II diabetes. Tseng et al. employed cross-sectional survey methods with 232 diabetes patients and found that poor glycemic control was significantly related to low health literacy. Additionally, participants were often motivated to progress further along the stages of health behavior change when they had enough knowledge of what constituted a healthy diet. Based on their findings, Tseng et al. recommended the clinical promotion of diabetes self-management by means of improving glycemic control habits.

### **Review of Relevant Literature**

#### **Culturally Competent Healthcare**

Taylor (2014) defined culturally competent healthcare as a process by which healthcare professionals consistently tried to deliver effective care that fit the cultural context of a community, family, or individual through efforts toward cultural awareness. The cultural competency displayed in a healthcare setting directly influences the satisfaction of patients (Brunett & Shingles, 2017). Thus, the foundation of culturally competent healthcare is knowledge of a patient's culture, as well as the ability and desire to incorporate that culture into their care. Leaders of healthcare facilities should seek to make patients of all cultural backgrounds feel equally important through employing knowledge of cultural traditions, beliefs, values, foods, and other cultural factors (Taylor, 2014).

Although culturally competent care could be improved across a variety of cultures that are prevalent in the United States, researchers have noted that studies concerning

culturally competent care are more prevalent for some cultures and ethnic groups than others. For example, Taylor (2014) noted the lack of studies regarding the cultural competency of healthcare treatment for Hispanic women. The number of studies regarding the cultural competency of healthcare for specific cultural groups often reflects the susceptibility of certain cultural groups to having specific health concerns. For example, researchers have focused on culturally competent diabetes care for African Americans because African Americans are disproportionately influenced by diabetes (American Diabetes Association, 2015; Lee et al., 2013).

### **Culturally Adapted Health Programs**

Health programs often demonstrate a greater rate of success when program coordinators understand and address the variations in culture among their subjects (Barrera et al., 2013). Barrera et al. (2013) defined culture as a multi-faceted construct that is transmitted or constructed socially. Culture is comprised of symbols, norms, artifacts, practices, and ideas.

The cultural adaptation of health programs and interventions should happen in a staged and organized fashion to account for all aspects of the program that need to be adapted. For instance, Barrera et al. (2013) proposed a five-stage model for adapting health programs and interventions to serve people from many cultures. Stage 1 involves determining the necessity of culturally adapting an intervention by testing subcultural differences within intervention groups prior to the start of the intervention. Stage 2 involves taking information from the first stage and making initial changes to the original intervention. Stage 3 involves pilot testing of the newly adapted program, and feedback



should be gathered to ensure program efficacy. Stage 4 involves adaption refinement, where changes are made to the original program based on feedback gathered in the previous phase. Finally, Stage 5 is when the culturally adapted intervention undergoes an empirical trial to determine its effectiveness. By completing such cultural adaptations of health programs and interventions, a rigorously tested and culturally effective program can be produced (Barrera et al., 2013).

Researchers have reviewed culturally adapted health interventions to determine their efficacy among specific cultural populations. For example, Kong, Tussing-Humphreys, Odoms-Young, Stolley, and Fitzgibbon (2014) examined 28 interventions involving African-American women and found that 17 resulted in significant improvements in weight and/or diet for the treatment group. The strategies to culturally adapted interventions included constituent involving, which drew from experiences of a group, and sociocultural, which reflected the beliefs and values of a group. Despite significant findings on strategies to culturally adapt interventions, Kong et al. requested further research to determine the cultural adaptation strategies' specific effects on health outcomes following a program.

Other researchers have focused on how various factors involved in culturally adapted interventions have influenced the efficacy of an intervention (Kridli et al., 2017). Kridli et al. (2017) examined how involving teen mentors rather than adult leaders influenced the success of a culturally-adapted lifestyle intervention for Arab-American children in third, fourth, and fifth grade. Participants who were individually mentored by teens improved their self-efficacy and intentions to be physically active more

significantly than the group of participants led by an adult leader. This finding indicated that culturally adapted interventions for children might be more effective when teens led the intervention (Kridli et al., 2017). These findings indicated that many factors could influence the efficacy of a culturally adapted health program aside from how well it was adapted to fit the cultures of its subjects.

### **Culturally Adapted Diabetes Prevention, Education, and Treatment**

Within culturally-adapted health programs intended to educate, treat, or prevent illness, diabetes programs are relatively common because some ethnic and/or cultural minorities are more susceptible to type II diabetes (American Diabetes Association, 2015). Thus, researchers have examined the efficacy of culturally-adapted diabetes programs (Creamer et al., 2016; Newby & Gray, 2016; Tabak et al., 2015). The following subsections include examinations of culturally adapted diabetes programs with the intent of prevention, education, and treatment.

**Diabetes prevention.** Diabetes prevention programs are often culturally adapted to improve success rates (McCurley, Gutierrez, & Gallo, 2017; Tabak et al., 2015). Research has indicated that the content of culturally-adapted programs have been most commonly subject to revision prior to program adoption (in 13 of 15 cases); although revisions are often necessary, program adoption is the most frequently assessed outcome (Tabak et al., 2015). These results indicate that a multi-stage cultural adaptation model may be the most effective, as revisions are often necessary following a pilot trial.

Studies have indicated positive results for culturally adapting programs to specific cultural needs. McCurley et al. (2017) reviewed 12 studies regarding diabetes prevention

programs intended to help those of Hispanic descent lower their risk of developing type II diabetes. Nine programs reduced the weight of participants, and two helped participants significantly with their glucose regulation. The greatest effect sizes were produced from participation of friends or family, experiential learning, cultural diabetes beliefs, structured community input, and Hispanic foods and recipes.

Another study involved the cultural competence of diabetes prevention programs regarding Asian Indian Sikh communities in New York (Islam et al., 2014). The participants completed surveys before and 6 months after the pilot intervention. Following the pilot intervention designed to culturally fit the Asian Indian Sikh community, the treatment group showed significant changes to glucose, blood pressure, BMI, physical activity, weight, diabetes knowledge, and food behaviors (Islam et al., 2014). Thus, both examples showed how culturally tailoring diabetes prevention programs might help those at risk of diabetes within specific ethnic populations.

**Diabetes education.** Researchers have also studied culturally adapted health education for ethnic minorities with type II diabetes to determine efficacy (Creamer et al., 2015). Creamer et al. (2015) performed a meta-analysis of 28 trials and determined that participants in these trials demonstrated improved diabetes knowledge and glycemic control after 24 months. Thus, culturally adapted diabetes education programs had higher success rates in comparison to programs that were not culturally adapted (Creamer et al., 2015).

Similarly, Pottie et al. (2013) conducted a meta-analysis of randomized control trials of culturally adapted type II diabetes education programs and suggested that

successful interventions tended to use health workers from the same cultural group as the program subjects. Additionally, the promotion of culturally traditional food choices was considered a crucial factor for program success. Significant health improvements through program participation were linked to programs that provided incentives, adopted a flexible learning approach, and adopted an informal one-on-one teaching style.

Further, Al-Bannay et al. (2015) investigated health outcomes following a pilot version of a type II diabetes education program tailored to the cultural context of Saudi women, and they found that most participants in the culturally adapted intervention group demonstrated improved walking distances, blood sugar, quality of life, and knowledge of diabetes. These findings indicated the importance of specific cultural factors linked to culturally-adapted program success, as well as factors unrelated to culture that improve the performance of culturally-adapted health programs (Pottie et al., 2013).

**Diabetes treatment.** In addition to prevention and education, diabetes treatment programs are sometimes adapted to suit diverse cultural identities (Ricci-Cabello et al., 2014; Whitegoat, Vu, Thompson, & Gallagher, 2017). Though few conclusive results exist, face-to-face and individually delivered interventions may be the most effective for helping with glycemic control (Ricci-Cabello et al., 2014). Overall, when diabetes self-management interventions are tailored to suit ethnic and racial minorities, patients often improve self-management knowledge and glycemic control as a result (Ricci-Cabello et al., 2014).

Some trials and evaluations of culturally adapted diabetes programs have indicated previously unidentified needs or influential factors that should be addressed to

make diabetes services culturally competent (Whitegoat et al., 2017). Whitegoat et al. (2017) investigated diabetes programs that incorporated the treatment of mental health disorders for Alaska Native and American Indian populations because these populations were susceptible to both type II diabetes and mental health disorders. One reason for this susceptibility was the negative impact of modernization of their lifestyle habits, such as diet and exercise (Whitegoat et al., 2017). However, few programs treated both concerns, emphasizing the importance of addressing comorbid conditions also prevalent in cultures susceptible to diabetes.

Sometimes, instead of measuring the efficacy of culturally-adapted diabetes programs, researchers have sought to determine the cultural competence of diabetes treatment in a given region. Zeh, Sandu, Cannaby, Warwick, and Sturt (2015) sought to measure the cultural competence of diabetes services offered in the United Kingdom between November 2011 and January 2012. One in three patients who identified as diabetic in the survey were ethnic minorities, and nearly 30% of the surveyed facilities stated that the prevalence of diabetes among their patients was between 55% and 96% for ethnic minorities. Additionally, 10 of the surveyed practices stated that the percentage of diabetic patients who showed up to their annual checkup was higher for White patients than those who were ethnic minorities. The most commonly reported barriers to the delivery of culturally competent health services were a lack of culturally diverse language and food (Zeh et al., 2015), which indicated the importance of cultural factors that could influence the efficacy of culturally competent treatment.

### **Diabetes Education, Treatment, and Prevention for African Americans**

Some diabetes education, treatment, and prevention programs have been specifically adapted to help African Americans, who are at an elevated risk for diabetes (Guariguata et al., 2014; Ng et al., 2014), with varied success (Newby & Gray, 2016). Newby and Gray (2016) studied the cultural tailoring of type II diabetes treatment to African Americans. They noted that African Americans were disproportionately influenced by diabetes compared to other racial/cultural groups and suggested the need for a better way of treating this group. Newby and Gray conducted a quantitative and retrospective study; they utilized a cohort that had trialed a culturally adapted group appointment approach. In total, data from 250 African American participants were included; half of these participants took part in culturally tailored medical appointments to manage their diabetes, while the other half took part in traditional medical appointments. Newby and Gray found that the culturally tailored appointments were significantly more likely to help participants control their glycemic levels. This finding underscored the results of previous studies that showed culturally-adapted diabetes treatment and programs were significantly more effective in comparison to programs and treatments that were inconsiderate of subjects' cultures (e.g., Creamer et al., 2015; Tabak et al., 2015).

Tang, Funnell, Sinco, Spencer, and Heisler (2015) compared outcomes from two diverse types of intervention programs designed to educate African Americans about diabetes self-management. Tang et al. compared outcomes from a diabetes self-management education program that lasted 3 months to a similar program with an

additional component of a 12-month intervention designed to provide peer support. In total, 106 African American participants took part in this study. Tang et al. found that facets of diabetes management became worse for the control group at the 15-month mark following the intervention, while the treatment group who received peer support remained the same or improved. Tang et al. noted that future studies should be used to investigate the most effective means of communication to maximize the positive influence of peer support within diabetes treatment programs. These findings indicated that peer support might be an integral part of effective culturally adapted diabetes treatment, particularly for African Americans.

Miller et al. (2014) examined how effectively a motivational interviewing and nutritional therapy program treated obese women of African American descent who had diabetes. Five diabetes education and intervention sessions occurred that primarily targeted diet and nutrition. The 24 participants were primarily middle age, with a mean age of 50.8. Although glycemic hemoglobin levels and dietary confidence in choices of food eaten at restaurants were observed, both returned to preintervention levels following the study. Miller et al. concluded that while the findings regarding glycemic control and confidence in restaurant choices did not stay at improved levels following the study, all participants said they would recommend participation in the study to others who were eligible. Additionally, participants reported increased confidence in their dietary self-care habits, overall.

To summarize this section, some diabetes education, treatment, and prevention programs were specifically adapted to help African Americans at an elevated risk for

diabetes (Guariguata et al., 2014; Ng et al., 2014), with varied success (Newby & Gray, 2016). Newby and Gray (2016) found that the culturally tailored diabetes medical appointments were significantly more likely to help participants control their glycemic levels; this finding underscored the results of previous results that showed that culturally-adapted diabetes treatment and programs were significantly more effective in comparison to programs and treatments that were inconsiderate of subjects' cultures (Creamer et al., 2015; Tabak et al., 2015).

Tang et al. (2015) compared outcomes from two diverse types of intervention programs designed to educate African Americans about diabetes self-management. Their findings indicated that peer support might be an integral part of effective culturally adapted diabetes treatment, particularly for African Americans. Miller et al. (2014) examined how effectively a motivational interviewing and nutritional therapy program treated obese women of African American descent who had diabetes. The researchers concluded that although their findings regarding improved glycemic control and confidence in restaurant choices did not stay at improved levels following the study, all participants would recommend participation in the study to others who were eligible. Additionally, the participants reported increased confidence in their dietary self-care habits.

### **Variation in Cultural Views of Diabetes**

The cultural views held by certain cultural communities may influence perceptions and treatment behaviors of those with diabetes (Sunni et al., 2015). Sunni et al. (2015) investigated the cultural attitudes regarding diabetes held by Somali children



with diabetes between the ages of 12 and 19. In total, 24 child-parent pairs participated in this study. Sunni et al. collected medical histories through medical records and verbal accounts from participants. The mean age of participants was 12.2, and the sample was approximately two-thirds male and one-third female. Most parents who participated (71%) indicated that their child did not act much differently in comparison to before they were diagnosed with diabetes. The participating children who had one or more nondiabetic siblings did not appear treated differently. Although the participating children noted that diabetes management was difficult, difficulty was not associated with cultural factors most of the time. However, a noted exception was that respondents found it difficult to keep track of the carbohydrates in traditionally Somali foods. Glycemic control for the participants in this study was worse on average in comparison to their non-Somali peers (Sunni et al., 2015). Overall, Sunni et al. (2015) demonstrated that although diabetic Somali children and their parents had positive attitudes about diabetes education and treatment, some markers of diabetic health reflected less effective diabetes management in comparison to non-Somali subjects (Sunni et al., 2015).

Jacobs, Kemppainen, Taylor, and Hadsell (2014) investigated personal meanings and beliefs regarding diabetes and adherence to prescribed medication within the Lumbee Indian tribe, a cultural group in North Carolina. Included in the sample for this study were 20 females and 20 males with a mean diabetes diagnosis length of 9.82 years. Ninety percent of those who participated noted that diabetes ran in their families. Most participants believed the perceptions that diabetes was a chronic and life-altering condition. Diabetes medication was a necessary and positive aspect of most participants'

diabetes management routine; participants indicated they were more comfortable adhering to prescribed medications than making changes that would influence their lifestyles for extended periods (Jacobs et al., 2014). These findings indicated that cultural perceptions of diabetes were often multi-faceted; indeed, people belonging to certain cultures did not usually see diabetes as good, bad, serious, or unimportant. Rather, they usually viewed some aspects of diabetes management as more important compared to others.

Similarly, Patel et al. (2015) studied perceptions of diabetes among another cultural population known to have a relatively high prevalence of diabetes. Patel et al. examined how beliefs about illness attributable to sociocultural context influenced diabetes self-management among British South Asians. The researchers employed mixed methods; 37 participants participated in interviews, while 67 completed a questionnaire to measure fatalism, demographics, illness beliefs, and health outcomes. The researchers found that sociocultural context influenced health outcomes, emotional distress, and perceived concern regarding diabetic condition. Patel et al. concluded that the sociocultural context surrounding participants' British South Asian identities significantly influenced most participants' perceptions about diabetes self-management. Thus, sociocultural context might have influenced perceptions regarding diabetes in other cultural contexts, as well (Patel et al., 2015).

Majeed-Ariss, Jackson, Knapp, and Cheater (2015) investigated the sociocultural-related perceptions of Black and ethnic's minority subjects' regarding type II diabetes self-management. Specifically, they examined factors that they believed were facilitators

or barriers to diabetes self-management. In total, the authors synthesized findings from 57 studies that contained 1,735 participants. The authors found that three themes became apparent through analysis: being understood by others, the importance of identity, and how diabetic condition was made sense of. All three themes were connected conceptually to a larger “sense of self” theme (Majeed-Ariss et al., 2015). By keeping these themes in consideration when adapting diabetes programs to suit African American subjects, program coordinators could improve subjects’ sense of self and their relationships to their diabetic condition.

To conclude this section, the cultural views held by certain cultural communities may influence the perceptions and treatment behaviors of those with diabetes (Sunni et al., 2015). Glycemic control for the participants in Sunni et al.’s (2015) study was worse on average in comparison to their non-Somali peers. Although diabetic Somali children and their parents had positive attitudes about diabetes education and treatment, some markers of diabetic health reflected less effective diabetes management in comparison to non-Somali subjects (Sunni et al., 2015).

Cultural perceptions of diabetes were often multi-faceted; indeed, people belonging to certain cultures did not usually see diabetes as good, bad, serious, or unimportant. Rather, they usually viewed some aspects of diabetes management as more important than others (Jacobs et al., 2014). The sociocultural context surrounding British South Asian identity might significantly influence perceptions about diabetes self-management. Thus, sociocultural context might have influenced individual’ perceptions regarding diabetes in other cultural contexts, as well (Patel et al., 2015). Factors that

specifically influenced African American women might serve as facilitators or barriers to diabetes self-management. Three themes were apparent among these barriers and facilitators: being understood by others, the importance of identity, and how diabetic condition is made sense of. By keeping these themes in consideration when adapting diabetes programs to suit African American subjects, program coordinators could improve subjects' sense of self and their relationship to their diabetic condition (Majeed-Ariss et al., 2015).

### **Diabetes within African-Caribbean Descendent Culture**

The need to research diabetes-related health factors that influence those of African-Caribbean descent was underscored by the relatively high prevalence of diabetes within this population (Tappen et al., 2015). Tappen et al. (2015) conducted a brief, preliminary report concerning a study from 2015 on the prevalence of type II diabetes among AACD. Findings indicated that over 80% of AACD either had type II diabetes or were at a medium-high risk for developing it (Tappen et al., 2015). Although Tappen et al. (2015) noted a distinct lack of any other literature concerning the prevalence of certain health problems for AACD, their results indicated a need for this type of research.

Where individuals of African-Caribbean descent choose to reside may influence their likelihood of developing diabetes (Mbanya et al., 1999). Mbanya et al. (1999) explored the prevalence of glucose intolerance among those of African-Caribbean descent living in Jamaica, Britain, and Cameroon. Mbanya et al. collected data through local census measures in the studied regions. The researchers found that mean BMIs were highest in Manchester and Cameroon, the two urban areas studied. Additionally, impaired

glucose tolerance occurred the most frequently in Jamaica. The indicated that regardless of whether people were descendants of or belonged to the same culture, the environment they lived in often determined their likelihood of developing diabetes more than genetics (Tappen et al., 2015). Thus, when considering the cultural factors that made AACD likely to develop diabetes, researchers should recognize that living in America might influence diabetes likelihood just as much.

Perceptions of certain facets of health within the AACD and Black-Caribbean cultural community might influence this community's susceptibility to diabetes (Hirving & Swann, 2015). Hirving and Swann (2015) examined perspectives of AACD who resided in the United Kingdom to understand better their perceptions of health. Overall, participants recognized that an increasing BMI indicated poorer health past the generally accepted healthy range, but they did not see bodyweights that were considered unhealthy as indicators of poor health. Additionally, participants indicated the importance of physical activity for their health more than they recognized the importance of a healthy diet (Hirving & Swann, 2015). These findings indicated that some culturally held views of health common among Caribbean descendants, coupled with risk factors that were common among African Americans, might contribute to the prevalence of type II diabetes among AACD (Hirving & Swann, 2015).

The need to research diabetes-related health factors that influence those of African-Caribbean descent was underscored by the relatively high prevalence of diabetes within this population (Tappen et al., 2015). Over 80% of AACD either had type II diabetes or were at a medium-high risk for developing it (Tappen et al., 2015). Although

there was a distinct lack of literature concerning the prevalence of certain health problems for AACD, results study indicated a clear need for this type of research (Tappen et al., 2015). Perceptions of certain facets of health within the AACD and Black-Caribbean cultural community might influence this community's susceptibility to diabetes (Hirving & Swann, 2015). Some culturally held views of health common among Caribbean descendants, such as ideas about healthy bodyweight, coupled with risk factors common among African Americans, might contribute to the prevalence of type II diabetes among AACD (Hirving & Swann, 2015).

### **Summary**

In conclusion, Tayler (2014) defined culturally competent healthcare as a process by which healthcare professionals consistently tried to deliver effective care that agreed with the cultural context of a community, family, or individual by concerting effort toward cultural awareness. The cultural competency displayed in a healthcare setting directly influences the satisfaction of patients (Brunett & Shingles, 2017). Within the realm of culturally-adapted health programs intended to educate, treat, or prevent illness, diabetes programs are relatively common.

Researchers have examined the efficacy of culturally-adapted diabetes programs (Creamer et al., 2016; Newby & Gray, 2016; Tabak et al., 2015). Researchers have linked significant health improvements through diabetes program participation to programs that provided incentives, adopted a flexible learning approach, and adopted an informal one-on-one teaching style (Pottie et al., 2013). Comorbid conditions that are prevalent in cultures highly susceptible to diabetes must be addressed; therefore, diabetes treatment,

prevention, or education will be effective (Whitegoat et al., 2017). In Coventry, a city in the UK, the most commonly reported barriers to the delivery of culturally competent health services included a lack of culturally diverse language and food (Zeh et al., 2015). This finding served as a preliminary conclusion regarding specific cultural factors that could influence the efficacy of culturally competent treatment.

Some diabetes education, treatment, and prevention programs have been specifically adapted to help African Americans at an elevated risk for diabetes (Guariguata et al., 2014; Ng et al., 2014), with varied success (Newby & Gray, 2016). Culturally tailored diabetes medical appointments are significantly more likely to help participants control their glycemic levels (Newby & Gray, 2016). Peer support may be an integral part of effective culturally-adapted diabetes treatment, particularly for African Americans (Tang et al., 2015).

Cultural views held by certain cultural communities can affect the perceptions and treatment behaviors of those with diabetes (Sunni et al., 2015). Although diabetic Somali children and their parents had positive attitudes about diabetes education and treatment, some markers of diabetic health reflected less effective diabetes management in comparison to non-Somali subjects (Sunni et al., 2015). Cultural perceptions of diabetes were often multi-faceted, and some aspects of diabetes management were more important than others (Jacobs et al., 2014).

The need to research diabetes-related health factors that influenced those of African-Caribbean descent was underscored by the relatively high prevalence of diabetes within this population (Tappen et al., 2015). Where individuals of African-Caribbean

descent chose to reside might influence their likelihood of developing diabetes (Mbanya et al., 1999). Regardless of if people were descendent of or belonged to the same culture, the environment they lived in often determined their likelihood of developing diabetes more than genetics. Thus, when considering the cultural factors that made AACD likely to develop diabetes (Tappen et al., 2015), researchers should recognize that living in America might influence diabetes likelihood just as much.

The following chapter outlines the methodology used in the present study. First, the research design and rationale are reviewed. Next, the role of the researcher is examined. Then, the methodology is reviewed, including participant selection logic, instrumentation, procedures followed, and the data analysis plan. Next, issues of trustworthiness are reviewed, followed by the ethical procedures. Lastly, a summary is provided.



## Chapter 3: Research Method

### **Introduction**

The purpose of this qualitative, phenomenological study was to explore the cultural factors that were relevant to the treatment and prevention of type II diabetes among AACD. The following chapter includes the research methods used in the present study. First, the research design and rationale for the design are discussed. Then, the role of the researcher is examined. Next, the methodology is reviewed before a discussion of any issues of trustworthiness. The chapter ends with a summary.

### **Research Design and Rationale**

The following research questions guided the present study:

Research Question 1: How do African Americans of Caribbean decent perceive issues of type II diabetes and how does their culture contribute to this perception?

Research Question 2: How might the perceptions of African Americans of Caribbean descent and the related cultural issues play a role in type II diabetes prevention?

I conducted this study to explore cultural factors relevant to the treatment and prevention of type II diabetes among AACD. Centers for Disease Control and Prevention (2015) defined diabetes as a chronic disease that involved an elevated sugar level in the blood that manifested clinically with polydipsia, polyphagia, and polyuria and could lead to severe complications in the eyes, kidney, heart, and lower extremities. Newby and Gray (2016) defined cultural factors as specific aspects of the shared background and worldview of a group of people, such as traditions, foods, religion, or worldview.

I chose the phenomenological research tradition because it was a qualitative inquiry approach aimed at understanding a phenomenon through the lived experiences of those who have experienced it. Thus, in a phenomenological approach, the researcher sets aside his or her own experiences and engages with participants from a neutral position, understanding their experiences as they do (Moustakas, 1994). Participants' experiences are then reduced to create a depiction of the core phenomenon that participants experienced. This focus on perceptions and shared experiences made phenomenology ideal for capturing the essence of what it meant to experience type II diabetes in the context of a specific culture; in this study, I used phenomenology to examine the lived experiences of AACD with type II diabetes.

### **Role of the Researcher**

As a researcher in this study, my role involved interviewing participants, as well as organizing and analyzing the resulting data. I did not attend the church congregation that participants were selected from, and I did not interact with participants prior to the start of the study. To ensure that no researcher bias tainted the data, I reminded participants that their responses were confidential, and they could opt out of the study at any time if they were uncomfortable with any part of the interview process.

### **Methodology**

#### **Participant Selection Logic**

Participants consisted of AACD recruited from a local Seventh-day Adventist congregation, a group with a relatively high number of AACD, as well as similar local congregations with a high prevalence of AACD. I used purposive sampling to recruit

participants for this study. Purposive sampling is a sampling method that involves recruiting participants based on specific criteria (Robinson, 2014). I determined this process as the most appropriate sampling strategy because participants needed to have firsthand experiences being both AACD and having diabetes, so data collected for this study could be used to address the research questions. For this study, I recruited voluntary participants from the selected church congregations on the basis that they were AACD diagnosed in a clinical setting with type II diabetes. I attempted to obtain an equal number of male and female participants during recruitment.

In total, I recruited six male and six female participants. The selection logic of 12 participants centered around what was necessary to reach data saturation in qualitative research; previous research indicated that data saturation could be reached with only six participants if they were interviewed (Fusch & Ness, 2015). Though quantitative research requires a larger number of participants to reach data saturation, qualitative research necessitates collecting detailed data from a smaller number of participants (Fusch & Ness, 2015). To help qualitative researchers reach data saturation when using interviews as a data collection method, participants must be asked the same general guiding questions for data saturation to be reached (Fusch & Ness, 2015). Thus, the sample of 10 participants was asked the same semistructured questions to maintain consistency.

### **Instrumentation**

Instrumentation for this study consisted of an interview protocol designed by me to address the research questions that guided this study (see Appendix). I created semistructured questions within the protocol to allow participants to provide detailed

answers regarding their lived experiences. To ensure that I created an interview protocol to address the research questions, I used Castillo-Montoya's (2016) interview protocol refinement framework. This framework was created to give researchers a systematic means of evaluating and improving their interview protocol prior to using it for data collection. The steps in this framework included (a) ensuring the research questions aligned with the interview questions, (b) constructing the interview protocol based on inquiry, (c) gathering feedback on the interview protocol, and (d) conducting pilot interviews using the developed protocol. By using Castillo-Montoya's framework, I ensured the validity of the interview protocol developed for this research.

### **Procedures for Recruitment, Participation, and Data Collection**

I collected data using semistructured interviews. I contacted leaders of local church congregations with a high prevalence of AACD to ask if they would like to participate in the study. After one or more church leaders consented by way of submitting a letter of informed consent, I attended a service at the consenting churches and informed members of the congregation about the nature of the study verbally at the conclusion of the service. I gave congregation members who expressed interest in participating a flyer explaining the study more in-depth and the criteria for participation. The flyer indicated that if a churchgoer who obtained a flyer was both AACD and had type II diabetes, they should contact me if they would like to participate. I included my e-mail and phone number on the flyer, and I asked participants to reach out by those means.

I conducted all interviews with participants. Each participant participated in one interview lasting between 30 to 60 minutes. I recorded interviews using an audio

recording device, and I transcribed these electronically after data collection concluded. If 10 participants could not be sourced from a single local church congregation, I repeated the recruitment procedure at multiple church congregations. Prior to their interviews, I asked participants who signed a provided letter of informed consent to call or email me to set up an interview date and time. I held interviews in a private meeting room at the respective church of each participant.

After completion of the data collection phase, I asked participants to review their transcribed interview responses to correct or clarify any statements that did not accurately reflect their lived experiences as AACD with type II diabetes. I stored all electronic data in a password-protected computer accessible only by myself. I used NVivo software to store, organize, and analyze the data.

### **Data Analysis Plan**

I used interview data to address all research questions contained within this study. I used thematic analysis to analyze the data resulting from the semistructured interviews. Thematic analysis involved identifying reoccurring patterns and themes found within the data, and then interpreting these in the context of the research topic (see Braun & Clark, 2006). In the context of this study, I used interview data to determine themes and patterns that related to how AACD perceived issues of type II diabetes, how their cultures contributed to this perception, and how the perceptions of AACD and related cultural issues played a role in type II diabetes prevention. I used NVivo software to store and analyze data; therefore, all items remained organized.

I used concept coding to code data. Concept coding entailed using words or phrases to represent larger themes and ideas prevalent within data (see Saldaña, 2015). I coded results from each interview in this way; then, I compared the words and phrases that arose from coding each interview between interviews. I used this coding method in tandem with thematic analysis to identify cultural themes and factors that arose in multiple interviews; in this way, I used these combined coding and analysis procedures to determine which cultural factors influenced the lived experiences of diabetic AACD individuals the most.

### **Issues of Trustworthiness**

To ensure the results of this study were trustworthy, the transferability, credibility, dependability, and confirmability of the research must be addressed. Within qualitative research, transferability references the applicability of research findings to varied participant populations or research contexts (Anney, 2014). To address transferability, I used thick description techniques when collecting data. Thick description entailed recording as much detail and context as possible when collecting data to answer research questions in the most informed way (see Anney, 2014). By collecting data in such a way, I had ample information to determine how applicable findings from the present study were to other populations and research contexts (see Anney, 2014).

Qualitative credibility refers to the confidence level of the researcher regarding how well their results reflect reality (Anney, 2014). I employed systematic member checking to ensure credibility. By allowing participants to confirm and/or clarify any

confusing responses, I was sure that interview data were truly a reflection of participants' lived experiences (see Anney, 2014).

The dependability of qualitative research was characterized by the longitudinal stability of its results (see Anney, 2014). I used the audit trail method to confirm dependability. I kept a detailed written record of every step taken during this research during the audit trail for future researchers to replicate this study and ensure comparable results could be achieved, regardless of the time (see Anney, 2014). Lastly, confirmability referenced how effectively the findings of a study could be confirmed (or replicated) by another researcher. Keeping an audit trail effectively addressed confirmability; I recorded all steps for easy replication (see Anney, 2014). I established intercoder reliability by allowing another qualified researcher to examine the codes developed by the primary researcher; therefore, I ensured the reliability of the established codes (see Anney, 2014).

### **Ethical Procedures**

To ensure I conducted this research in an ethical way, I followed certain procedures. All participants and leaders of participating organizations signed and returned a provided letter of informed consent to me prior to data collection. The identities of participants remained anonymous in the final study, as pseudonyms (Participant A, Participant B, etc.) replaced their names during the coding phase. All participants were informed that they could withdraw from the study at any time if they felt uncomfortable. Interviews occurred in a private meeting area in each participant's church to ensure privacy. All electronic data were stored in a password-protected

computer, and all physical documents were stored in a locked file cabinet for the duration of the study.

### **Summary**

To conclude this chapter, the purpose of this qualitative, phenomenological study was to explore the cultural factors that were relevant to the treatment and prevention of type II diabetes among AACD. I had no participation in the study, outside of interviewing participants. Participants consisted of AACD who were recruited from a local Seventh-day Adventist congregation, a group with a relatively high number of AACD, as well as similar local congregations with a high prevalence of AACD. I used purposive sampling to recruit participants. Purposive sampling is a sampling method that involves recruiting participants based on specific criteria (Robinson, 2014).

In total, I recruited 10 participants. I contacted leaders of local church congregations with a high prevalence of AACD to ask if they would like to participate. Instrumentation for the study consisted of an interview protocol that I designed to address the research questions that guided this study. Questions within the protocol were semistructured to allow the participants to provide richly detailed answers regarding their lived experiences. Each participant participated in one interview lasting between 30 to 60 minutes. Interview data were used to address all research questions contained within this study. Thematic analysis was used to analyze the data resulting from the semistructured interviews. Concept coding was used to code the data.

The following chapter presents the results of the study. Chapter 5 then concludes the study. Chapter 5 presents conclusions and analysis of the findings.





## Chapter 4: Results

### **Introduction**

The purpose of this qualitative, phenomenological study was to explore the cultural factors that are relevant to the treatment and prevention of type II diabetes among AACD. Two research questions were used to guide the study:

Research Question 1: How do African Americans of Caribbean decent perceive issues of type II diabetes and how does their culture contribute to this perception?

Research Question 2: How might the perceptions of African Americans of Caribbean descent and related cultural issues play a role in type II diabetes prevention?

Chapter 4 includes a description of the setting of data collection, followed by a description of the sample's demographic characteristics. Next, this chapter includes descriptions of the implementation of the data collection and data analysis procedures described in Chapter 3, followed by a discussion of the evidence of the trustworthiness of the study's results. This chapter then proceeds with a presentation of the results of the data analysis. Chapter 4 concludes with a summary.

### **Setting**

I conducted interviews in a private meeting room at the church that participants attended. I used private meeting rooms to assure participants that their identities would not be disclosed, and I used the familiar church to help participants feel as comfortable as possible, so they would be more likely to provide full and rich responses to the interview questions. I used the church where participants were members to ensure the location would be accessible to participants. I scheduled interviews at a date and time chosen by

participants; therefore, participants would be more likely to give detailed responses without feeling pressured to attend to other obligations.

### **Demographics**

Participants were a purposive sample of 12 AACD who had been diagnosed in a clinical setting with type II diabetes. Participants were recruited from a Seventh-day Adventist congregation, a group with a relatively high number of AACD. The sample size of 12 was chosen because data saturation was achieved with 12 participants. Data saturation was achieved when additional data collection and analysis yielded no new themes or insights (see Fusch & Ness, 2015). In the present study, analysis of the 11th and 12th interviews yielded no new codes or themes. Thus, data saturation was achieved, and data collection was concluded. The last code to emerge was *everybody is different*, which was identified during analysis of Participant 10's interview in a description of the perception that different people perceived diabetes differently. The sample size of 12 participants was in accordance with the recommendation that a qualitative study should include at least six participants (see Fusch & Ness, 2015).

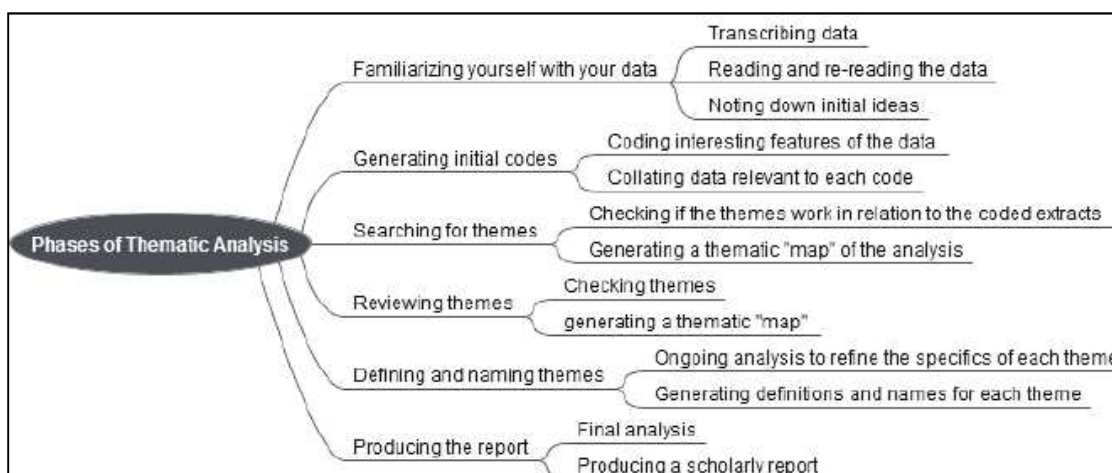
Six out of 12 participants were female, and six participants were male. The mean age of participants at time of study was 48 years, with a range from 37 to 61 years. At the time they received the diagnosis of type II diabetes, the mean age of participants was 41 years, with a range from 28 to 51 years. Ten out of 12 participants were employed full time, and the remaining two out of 12 participants were self-employed. No female participants were pregnant at the time of study.

## Data Collection

I collected semistructured interview data from 12 participants. I interviewed each participant once in a meeting room at the church of which the participant was a member. The average duration of the interviews was 30 minutes. Interviews were audio-recorded using a digital recording device. I did not deviate from data collection procedures described in Chapter 3, and I did not encounter unexpected circumstances during data collection.

## Data Analysis

I transcribed recorded interview data verbatim and uploaded these into NVivo 12 software for analysis. I coded interview data thematically, using the concept coding method described by Saldaña (2015) in conjunction with the thematic analysis procedure described by Braun and Clarke (2006). Braun and Clarke described a six-step thematic analysis process. Figure includes a description of the data analysis process.



*Figure.* Phases of thematic analysis. Adapted from “An Integrative Review of Literature on Learners in the Digital Era,” by E. E. Gallardo-Echenique, 2014, *Studia Paedagogica*, 19, p. 165.

In the first step, I conducted an in-depth review of the collected data to become familiar with its content. The second step consisted of me generating initial codes based on key descriptive words and phrases, referring to the most basic elements of the data that could be evaluated in a meaningful way. I used the concept coding method described by Saldaña (2015), using words or phrases to represent larger themes and ideas that were prevalent in the data. I conducted a full evaluation of the collected data to identify repeated patterns in the data used for coding purposes. The third step consisted of searching for themes; I used the codes developed in the previous phase to develop potential themes in the data. This process included an analysis of the codes, and I used the similarities between different codes to form themes. The fourth step consisted of reviewing the themes; I refined the themes developed in the previous step by reviewing the included data to ensure these were properly grouped with similar data. The fifth step consisted of defining and naming themes with reference to the research questions; I further refined while defining the themes. Last, the sixth step consisted of producing the presentation of results, as presented in this chapter in the Results section. Table 1 indicates the major themes and the number of times each theme occurred in the dataset (i.e., theme frequency).

Table 1

*Theme Frequencies*

| Theme   | <i>N</i> of times theme appeared in data | % of data grouped into theme ( <i>n</i> = 134) |
|---|--|--|
| Theme 1: Physicians' advice is perceived as valuable  | 42                                       | 32%  |
| Theme 2: Lifestyle changes are perceived as difficult to achieve                                    | 30                                       | 22%  |
| Theme 3: Cultural factors are perceived as lowering compliance with medication and dietary regimens | 30                                       | 22%  |
| Theme 4: Diabetes is perceived as a serious condition   | 32                                       | 24%  |

**Evidence of Trustworthiness**

To ensure the results of this study were trustworthy, I addressed the transferability, credibility, dependability, and confirmability of the research. In the following subsections, I discuss procedures used to enhance each of these elements of trustworthiness.

**Credibility**

Qualitative credibility refers to the confidence level of the researcher regarding how well their results reflect reality (Anney, 2014). I used systematic member checking to ensure credibility. By e-mailing interview transcripts to participants with a request that they would review and offer any feedback to make data more accurately reflect their lived experiences, I ensured interview data reflected those experiences (see Anney, 2014).

**Transferability**

Transferability within qualitative research references the applicability of research findings to other participant populations or research contexts (Anney, 2014). To address transferability, I presented descriptions of the study population and sample profile. Thus, future researchers will have ample information to determine how applicable findings from the present study are to other populations and research contexts.

**Dependability**

The dependability of qualitative research is characterized by the longitudinal stability of its results (Anney, 2014). I created an audit trail method to enhance dependability. Keeping a detailed written record of every step taken during this research, as done during an audit trail, will allow future researchers to replicate this study and ensure comparable results can be achieved regardless of time.

**Confirmability**

Confirmability references how effectively the findings of a study can be confirmed (or replicated) by another researcher (Anney, 2014). Keeping an audit trail addressed confirmability as well as dependability; I recorded all steps for replication. In addition, I used member checking to enhance confirmability.

**Results**

This presentation of the results of the data analysis is organized by research question and within research question by theme. Data associated with Research Question 1 indicated how AACD perceived issues of type II diabetes and how their culture contributed to their perceptions. In relation to Research Question 2, results indicated how

the perceptions of AACD and related cultural issues might play a role in type II diabetes prevention.

### **Research Question 1**

Research Question 1 was “How do African Americans of Caribbean descent perceive issues of type II diabetes and how does their culture contribute to this perception?” Two themes emerged during data analysis to answer the research question. Each theme is discussed in the following subsections and is supported with evidence from data in the form of direct quotations.

**Theme 1: Lifestyle changes are perceived as difficult to achieve.** All 12 participants reported they found it challenging to make the lifestyle changes that their doctors recommended, particularly changes related to diet, medication, and exercise. However, all participants reported they were trying to make these lifestyle changes. This finding was consistent with Themes 1 and 2, which indicated that participants perceived medical advice as valuable and diabetes as a serious condition.

Participant 1 stated, “I try to control my diet and I exercise at times.” Participant 3 also reported trying to comply with medical advice: “I change my diet. I try to stay on top of it. I do a little exercise, and I take my medicine.” Participant 5 stated, “I do a little exercise, and watch my dietary, what I eat.” Participant 6 was careful about diet: “I check my sugar regularly, take my medication, watch my diet and exercise.” Participant 8 reported trying to make as many healthy choices as possible: “I try to eat as healthy as possible or make better choices, when it comes to food and diet, exercise.” Participant 9 spoke of following dietary advice: “I stay away of products containing sugar, I try to eat



more vegetables.” Participant 12 had also undertaken dietary improvements and exercise: “I changed my eating habits and I exercise. When I can I walk.”

Participants reported that making the lifestyle change of exercising more was difficult due to time constraints. Ten out of 12 participants reported the perceptions that they did not exercise as often or as much as they should. Participant 2 undertook exercise, “not as often as I should.” Participant 8 expressed faith that current laxity in diet and exercise would improve with time: “I believe I should exercise more, which I know that can be a great help, [and] fix a little bit my diet, eat a little bit more green, I am sure those things will improve.” Participant 1 stated, “I don’t exercise as I should because of time.” Participant 7 responded, “Time,” when asked why the current amount of exercise was insufficient. Participant 9 also referred to time as a barrier: “[The doctor] asked me to exercise morning and night, twice a day, [and] sometimes I can, but other days I don’t have time. If I have time to exercise, I think it would be helpful for me.”

Participants perceived lifestyle changes related to diet as difficult to achieve because of taste. Participant 3 referred to the challenge of changing a diet and also to the perceived importance of doing so: “The challenges are ... changing your diet, changing everything, your lifestyle, is very stressful but you have to do what you have to do to maintain your life, your healthy life.” Participant 10 reported that tastes made dietary changes challenging: “My biggest challenge is eating. I never like to eat salad, now I find myself eating a lot of roughage and vegetables.” Participant 11 referred to the potential consequences of indulging tastes instead of eating healthy foods: “Depending on what

you eat, you can crash down and end up in the hospital, these are very, very tough challenges.”

**Theme 2: Cultural factors are perceived as lowering compliance with medication and dietary regimens.** Eight out of 12 participants expressed perceptions that AACD culture might interfere with medication compliance in AACD diagnosed with diabetes because the culture encouraged the use of herbal rather than pharmaceutical medicines. Participant 1 stated, “Some of us believe in alternatives medications like herbal tea.” Participant 4 said the following of AACD: “We tend to focus more on herbs, that certain herbal tea or products are good for diabetes.” Participant 11 related to low medication compliance to a belief in the superior efficacy of herbal medicines: “Some people missed taking their meds, do a lot of herbs, a lot of tea from home. It does work.” Participant 12 reported the same cultural inclination toward herbal medicines but indicated disagreement with it: “People from my culture, they usually like taking natural medicine instead of doing what the doctor asks them to do. But, to me, they should follow the doctor.” Participant 2 reported witnessing the perceived failure of herbal medicines:

I grew up with family members who are diabetic. Quite a lot of them tried the herbal things, and they failed. I am not 100% sure why, but sometimes it might do more harm than good, just sticking with one thing for too long, sitting there drinking the same tea over and over again might end up creating something else in our stomach, same thing as taking the pills. But in my culture, we tend to go for the tea first and figure out if that doesn't work, we go to the doctor.

Four out of 12 participants perceived AACD cultural factors related to food as impacting diabetes in two ways. First, participants viewed the heavy carbohydrate intake associated with the diet as increasing the risk of diabetes. Second, participants perceived the diet as influencing habit and taste in such a way that recommended dietary changes were more difficult to achieve after diabetes was diagnosed. Participant 2 said the following of AACD culture: “The type of cooking is very different, we eat a lot of fried food, fried dough, all these things contribute to the increase in [diabetes incidence], and the percentage of people we see who are diabetic.” Participant 8 stated,

I am from the Caribbean, [and] we’re not accustomed to really eat the healthy lifestyles. We eat what we get, basically if your parents or family cook this, this is what it is, you eat it, healthy or not, this is what they can put on the table [and] you don’t have no choices to eat it. So that has a great impact on a lot of diabetic patients coming from the Caribbean, cause of the way we cook, we tend to cook with a lot of salt, a lot of grease, a lot of starch. We love the dough, our bread, and rice.

### **Research Question 2**

Research question 2 was “How might the perceptions of African Americans of Caribbean descent and related cultural issues play a role in type II diabetes prevention?” Two themes emerged during data analysis to answer the research question.

**Theme 3: Physicians’ advice is perceived as valuable.** Participants reported that their physicians advised them to manage their diabetes with lifestyle changes, including frequent exercise, medication, and dietary changes. As an example, Participant 1 received

the following recommendations: The doctor recommended “to change my diet, eat more vegetables, and less carbohydrates, to keep the sugar on a low side.” Participant 4’s physician offered advice regarding the following: The doctor recommended “diet, exercise and lifestyle modifications, to change the way I eat.” Participant 9 received advice about the following: The doctor recommended “taking your medication, exercise, change your diet, and avoid meat, soda, and things like that.” Participant 11 received medical advice about nutrition and medication: “Medication, take your medication on time, [doctors] encourage you to exercise and also they want me to see a nutritionist to help me with food choices.” Participant 6 had been told to “always check your blood sugar before you eat, because that will give you a good idea of what you should and shouldn’t eat.”

All participants perceived their physicians’ advice as helpful. Participant 8 said the following concerning advice from the doctor about medication:

She is doing a good job, managing it, prescribing me the right meds, sometimes, if it’s [*sic*] need to be increased, she increases it, and it need [*sic*] to be decreased, she decreases it; so far, she is doing a good job.

Participant 5 said the following of physicians: “They are very helpful, they care about me, if they don’t see me every three months, they send me a text message [saying] you need to come down, asking me to come down to check your diabetes.” Participant 3 perceived abiding by medical advice as the way to be healthy: “To be able to maintain a healthy life you need to follow exactly what your doctor ask you to do. Taking your medication, exercise, change your diet, and avoid meat, soda, and things like that.”

Participant 9 indicated that life depended on following medical advice: “I have been trying to follow exactly what [the doctor] asked me to do ... I try to do what I can because life is more important than anything else.” Participant 7 stated, “I think [the doctor’s] recommendations are helpful.” Participant 12 had previously not followed medical advice but had noticed the positive difference that came with compliance:

My views of medical treatment and medical recommendations [are] always follow your doctor’s instructions, because it is good to do. I have that experience when there was a time with my busy life, I was kind of not taking care of myself, not checking my sugar, not taking my medications, [and] it was hard on me. My doctor would encourage me to take [care of myself], and when I start following her recommendations, I see a big difference.

**Theme 4: Diabetes is perceived as a serious condition.** All 12 participants perceived diabetes as a serious and even life-threatening condition. Participant 1 stated, “My view [is that] diabetes is a big problem; I see people who become blind, lost their limbs and lost their kidneys.” Participant 3 referred to the potential duration of the condition: “Diabetes is a bad thing, when you get it in your system, it will take time to get it out, or you have to live with that disease for the rest of your life.” Participant 4 spoke emphatically by saying, “Diabetes is like a death sentence.” Participant 5 also described the consequences of diabetes as potentially fatal: “Diabetes is very dangerous, like a killer; it’s a killer; it takes people’s vision right away.”

Participant 8 reported the perception that the seriousness of diabetes was becoming more widely recognized among AACD; some were taking preventative

measures: “I am sure right now people are taking it more seriously, at least myself. We noticed the increase in diabetic patients, I am sure a lot of people are starting to make some lifestyles changes.” Participant 11 expressed the perception that life was more precarious for people with diabetes: “Type II diabetes is very fragile, very concerning; people have to be very cautious with it. That’s how I describe it: People have to be cautious with it.” Participant 12 referred to the difficulty of taking the necessary precautions: “This sickness, it’s a really hard one.”

### **Summary**

The purpose of this qualitative, phenomenological study was to explore the cultural factors that are relevant to the treatment and prevention of type II diabetes among AACD. To achieve this purpose, I conducted semistructured interviews with 12 AACD who had been diagnosed in a clinical setting with type II diabetes. Two research questions were used to guide the study:

Research Question 1: How do African Americans of Caribbean decent perceive issues of type II diabetes and how does their culture contribute to this perception?

Research Question 2: How might the perceptions of African Americans of Caribbean descent and related cultural issues play a role in type II diabetes prevention?

For the first research question, findings indicated that AACD viewed dietary and exercise regimens as challenging to implement. Exercise regimens were challenging to implement due to time constraints, and dietary restrictions were challenging due to taste. Participants reported that cultural factors might lower compliance of AACD with medication and dietary regimens. Specifically, a cultural preference for herbal medicines

over prescribed medications might lower medication compliance, and a cultural preference for culinary choices, such as fried food and dough, might inhibit dietary compliance. For the second question, findings indicated that AACD viewed medical advice related to diabetes as valuable and helpful, and AACD fully appreciated and perhaps even exaggerated the seriousness of diabetes, a factor which might incentivize preventative behaviors. Chapter 5 includes discussion, interpretation, and implications of these results.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

Attridge et al. (2014) defined type II diabetes as a metabolic health issue and cited the condition as the fifth leading cause of death worldwide. In the United States, nearly 10% of Americans are influenced by type II diabetes, which has influenced the overall health and quality of life of sufferers (American Diabetes Association, 2015). The incidence of type II diabetes is not the same for all population groups—13% African Americans are diabetic, and over 80% AACD are either diagnosed with type II diabetes or are at risk of developing the condition (Tappen et al., 2015). Investigating the cultural factors that might lead to this high incidence of diabetes among AACD was essential to prevent further rise in the number of cases (see Tappen et al., 2015). Although rates of diabetes are 13% for African Americans overall, some cultural subsets of this population may be even more likely to suffer from diabetes (Tappen, Engstrom, & Outlander, 2015).

Leaders may use diabetes education, especially culturally competent education and treatment, to mitigate the number of diabetes cases and address cultural factors that can lead to more people developing this condition (Creamer et al., 2016; Weaver et al., 2014). However, there is a lack of understanding of the factors specific to AACD that make this population more susceptible to diabetes than other African Americans (Creamer et al., 2016; Tappen et al., 2015). Adherence to the diet and lifestyle changes that make up an important part of type II diabetes treatment takes dedication and cultural attitudes and perceptions regarding health may influence AACD patients' success rates in following education guidelines. A better understanding of the reasons why AACD are



more susceptible to type II diabetes can result in new diabetes treatment and education for AACD to lower diabetes rates for this population (Tappen et al., 2015). For example, AACD living in the United Kingdom have not associated being overweight with poorer health and recognized physical activity more than following a healthy diet. This finding has indicated that Caribbean descendants may have held views on health that can increase their risk of developing type II diabetes (Hirving & Swann, 2015).

I addressed cultural factors that were specific to AACD and made this population susceptible to type II diabetes compared to the general African American populace. Tappen et al. (2015) showed this population was at a 3% greater risk for diabetes compared to the general American population. The purpose of this qualitative, phenomenological study was to explore the cultural factors relevant to the treatment and prevention of type II diabetes among AACD. The findings of the current study can contribute to current knowledge of AACD's perspectives on health and diabetes and provide ways to adapt diabetes education for this population group.

In this chapter, I present a summary of the conclusions and review the findings in relation to the research questions. Thereafter, I discuss the results and interpret findings from previous research, using related findings to confirm the results and give explanations where results are different. I also discuss limitations and provide recommendations for further research. I offer recommendations for action and implications for social change and a summary to conclude this study.

### **Summary of Key Findings**

I conducted semistructured interviews with 12 AACD participants diagnosed with type II diabetes. I gathered in-depth information of some of the cultural attitudes and practices regarding diabetes treatment. I identified four themes based on interview responses. The first two themes included (a) AACD regarded medical advice as important and beneficial, but (b) the lifestyle changes were hard to follow. The argument against exercise was that it took too much time, which the participants found limited their engagement in exercise despite realizing the need for exercising. The third theme showed how the diet did not fit into the cultural taste preferences of the AACD nor did it comply with their food preparation practices. These factors complicated following the prescribed diet, in addition to a need to fit in culturally, which meant participants tended to eat what was available. Regarding medication, the AACD were in favor of their herbal medicine and tea to treat diabetes; therefore, many did not take prescribed medications. In answering the second research question as the fourth theme, participants indicated they regarded type II diabetes as a serious condition. This view of diabetes might act as an incentive to follow the treatment prescribed.

### **Interpretation of the Findings**

The theoretical framework for the study consisted of cultural adaptation theory (Barrera et al., 2013) and the transtheoretical model (Prochaska & DiClement, 1982). Researchers of the cultural adaptation theory have acknowledged the need for cultural adaptation of health training programs to increase compatibility with minority cultures (Barrera et al., 2013; Tabak et al., 2015). The transtheoretical model is a comprehensive

psychological theory of behavior pertaining to change (Prochaska & DiClement, 1982). As proposed by those using this theory, I used the six stages of change to interpret the findings from this study. I identified the first three themes during the analysis, and these concerned answering the first research question “How do African Americans of Caribbean decent perceive issues of type II diabetes and how does their culture contribute to this perception?”

### **Theme 1**

Theme 1 indicated that the participants regarded the advice given by physicians as valuable. This finding indicated the AACDs’ appreciation of medical advice but did not indicate their willingness to follow advice. Participants valued that they were called by the treatment centers and that health practitioners showed concern. Although the AACD participants’ attitudes toward physicians were positive, these positive attitudes did not necessarily lead to compliance with the lifestyle guidelines provided. This finding was like Sunni et al.’s (2015) findings that indicated Somali participants’ attitudes toward the diabetes education program were positive, but their health outcomes were no better than the non-Somali peers in the study. Other researchers have focused on health outcomes after culturally adapting diabetes education (Creamer et al., 2015; McCurley et al., 2017; Tabak et al., 2015). For example, culturally embedded changes in intervention strategies and providing incentives for program compliance formed the focus of Pottie et al.’s (2013) study. Kridli et al. (2017) similarly found that program facilitators made a difference in the successfulness of the outcomes, and Kridli et al. recommended that teens and children should be taught by teens and not adults.

I did not find references in the literature pertaining to the value that diabetes patients attached to the information presented by physicians. Therefore, this finding extended current knowledge on diabetes education of AACD. The positive attitude toward physicians' intervention might indicate AACD valuing physicians' time and knowledge more and preferring to be consulted by this healthcare group. Leadership should address this aspect to increase the professional standing of other healthcare providers, indicating the knowledge levels are equal among these providers. In addition, this finding indicated cultural issues weighed stronger than physicians' advice, even though participants appreciated the advice. Thus, future researchers might explore the root of cultural preferences and practices, which should be included in lifestyle advice for diabetes patients and their caregivers.

## **Theme 2**

The second theme concerned the lifestyle changes needed in managing type II diabetes, which participants indicated were hard to follow. All the participants indicated that the changes in diet, exercise, and medication were hard to follow despite trying to make the needed changes. Although participants mentioned that these three areas of lifestyle change were difficult to follow, other researchers found that patients often complied with at least some of the suggested lifestyle changes. For instance, Jacobs et al. (2014) found that participants preferred to take the prescribed medicine but did not want to comply with the lifestyle changes. In studying the Alaska Native and American Indian populations, Whitegoat et al. (2017) found that modernization of participants' lifestyle habits elicited some negativity from participants.

The two major elements of the lifestyle changes to manage type II diabetes included increased exercise and following a healthy diet with glycemic control (Hirving & Swann, 2015; Kong et al., 2014; Sunni et al., 2014; Whitegoat et al., 2017). In their study on Black participants from Caribbean descent, Hirving and Swann (2015) found that participants understood the need for dietary control and healthy choices but regarded physical activity as more important than dietary control. However, researchers have focused on studying adaptations to the culturally efficient programs and outcomes, rather than studying participants' reasons for adhering to diet and physical activity guidelines. For instance, Newby and Gray (2016) found that the culturally tailored diabetes medical appointments were significantly more likely to help participants control their glycemic levels. Findings of the current study showed participants deemed exercise too time consuming, thereby extending the current knowledge found in the literature, as I found no other researchers who focused on this aspect. Furthermore, the participants' discussions of their social eating habits, tastes for food items, and cooking methods contributed to existing knowledge. Participants explained that people might not choose what they would eat; in the AACD society, food was scarce, and they had to eat what was prepared. These insights contributed to the current knowledge on AACD perceptions and attitudes toward prescribed lifestyle changes.

### **Theme 3**

The last theme of Research Question 1 pertained to cultural factors being perceived as lowering compliance with medication and dietary regimens. Pertaining to the cooking habits and preferred tastes, participants explained that the AACD preferred

fried food made with flour, which was not low in glycemic index. Due to this cultural preference and the social norm of having to eat what was served, the AACD type II diabetic population might not be able to follow dietary guidelines. However, researchers have found that culturally tailored diabetic education programs are more successful; evidence has shown participants' knowledge and program compliance has increased significantly due to such programs (Newby & Gray, 2016; Ricci-Cabello et al., 2014; Whitegoat et al., 2017).

Another important aspect of diabetes management involves patients taking the prescribed medication regularly. Participants explained that AACD regard their traditional herbal remedies and tea as highly beneficial. This belief led to them first using the herbal medicines before taking any prescribed medication. Both in terms of prevention and treatment of type II diabetes, this cultural belief kept sufferers of diabetes from taking their prescribed medications. However, I could not assume that all minority groups had similar attitudes toward prescription medications. In studying the Lambee Indian tribe, Jacobs et al. (2014) found that the tribe regarded prescribed medication as necessary and that they would rather take the medication than embark on lifestyle changes. The literature review for this study did not yield studies focused on type II diabetes participants' use of home remedies and their beliefs about prescribed medications; thus, this finding extended current knowledge on the topic of AACD type II diabetes management and prevention.

**Theme 4**

The second research question was “How might the perceptions of African Americans of Caribbean descent and related cultural issues play a role in type II diabetes prevention?” Answers to this question could provide guidelines for developing diabetes education that was culturally effective to AACD. The fourth theme yielded by data answered this research question.

According to participants, AACD perceived diabetes as a serious condition. Certain cultural communities could hold views that might influence the views and treatment behaviors of patients with diabetes (Sunni et al., 2015). Some participants considered diabetes a death sentence, while others mentioned loss of limbs and eyesight in substantiating their perceptions of diabetes. Despite their perceptions that diabetes was a serious condition, only one participant mentioned lifestyle changes should be made. People belonging to diverse cultures do not see diabetes in a simplistic light of good, bad, serious, or unimportant. Rather, individuals may consider some elements of diabetes management more important than others (Jacobs et al., 2014).

Sunni et al. (2015) stated that their Somali participants faced difficulties keeping track of the carbohydrate load of their meals due to dietary customs. A similar finding surfaced in the current research, as participants noted how much they loved greasy, salty, and starchy foods. Jacobs et al. (2014) highlighted that participants viewed diabetes as serious; therefore, many followed the prescribed treatment regime. In the case of this research, participants viewed diabetes as a serious condition; however, this perception did not provide enough incentive to follow the suggested lifestyle changes. This finding must

be studied in more detail so that cultural adaptations to current diabetes teaching practices can be made.

Cultural groups' beliefs about illness and diabetes can influence self-management of diabetes (Patel et al., 2015). According to Patel et al. (2015), the sociocultural context influenced health outcomes, emotional distress, and perceived concern regarding diabetic conditions in the group studied. Majeed-Ariss et al. (2015) found that the cultural perceptions of diabetes type II influenced participants' sense of self, which influenced their self-management of the condition. In the current research, it was not clear whether participants expressed their opinions of diabetes together with cultural opinions or only an opinion. Participants exhibited a serious and somewhat exaggerated view of diabetes as being an illness that causes loss of limbs, eyesight, and death. Diabetes education should have an optimistic message that efficient self-help and prevention is possible. The finding that the AACD participants considered diabetes a serious condition indicated confirmation for previous research but should be further explored.

The theoretical framework of this study consisted of the cultural adaptation theory (Barrera et al., 2013) and the transtheoretical model (Prochaska & DiClement, 1982). The findings of this study yielded information pertinent to the culture of AACD. Practitioners could use these findings when developing new diabetes education for the prevention and self-management of this condition. Thus, the findings extended the existing knowledge of AACD's food preparation and social conventions about eating and diet that had implications for the self-management of type II diabetes. Indications of the AACD sociocultural context that could influence diabetes self-management included the



perception that diabetes was a serious condition, although it was unclear from responses if this was representative of a cultural view or participants' personal views only. The extant literature did not include specific information about AACD's cultural attitudes and beliefs on diabetes; therefore, the findings of this study extended the knowledge in this regard.

The transtheoretical model contains six steps, as depicted in Table 2. Although participants were not yet demonstrating full compliance with the treatment regime, they indicated they appreciated the physicians' advice and viewed diabetes type II as a serious illness. The last two stages of the transtheoretical model, maintaining and terminating did not get corresponding evidence from the participants. In addition, the acting stage was not yet fully implemented due to cultural interference as could be seen from the food preparation and eating conventions of AACD.

Table 2

*Six Stages of the Transtheoretical Model With Corresponding Research Themes*

| Stages of Transtheoretical Model | Perception of needed change          | Themes from the research  |
|----------------------------------|--------------------------------------|---|
| Pre-contemplative                | Not convinced of needed change       | Advice important & helpful;<br>follow-up from doctors seen to stress the importance of treatment and demonstrate care<br>Cultural herbs & teas preferred<br>Need exercise & dietary change  |
| Contemplative                    | Acknowledge & consider change        |   |
| Preparatory                      | Accepted & prepare to act            | Exercise takes time<br>Food – clashes with taste, availability, tradition   |
| Acting                           | Making the change                    | 1. medication—herbal teas and traditional herbs interfere<br>2. testing—indications that participants intended / did perform regular testing and follow-up visits<br>3. diet—indications of willingness to change although cultural habits, taste, and practices interfered<br>4. exercise—participants showed willingness to ‘try’ to get more exercise, used restricted time as an excuse |
| Maintaining                      | Sustaining change<br>prevent relapse |   |
| Terminating                      | Change having become complete        |   |

**Limitations of the Study**

Although the results of this study indicated pointers toward a better understanding of AACD’s culture and its relationship with diabetes self-management, this study had limitations. I recruited participants at a church with many AACD in the congregation. Participants might have adopted a more church-like character; moreover, participants

might not have been as involved culturally. Although participants' lived experiences gave a better understanding of their diabetes self-management as representative of AACD, a larger and more representative sample inclusive of different parishes and possibly clinical settings with various educational levels would make the results more generalizable to AACD populations within the United States.

To achieve trustworthiness, I conducted a phenomenological study to collect thick and rich data from participants to illuminate their cultural beliefs and the impact thereof on their diabetes self-management. Data saturation was achieved when additional data collection and analysis yielded no new themes or insights (see Fusch & Ness, 2015). In the present study, analysis of the 11th and 12th interviews yielded no new codes or themes. Thus, data saturation was achieved, and data collection was concluded. Although saturation was achieved, results of the data analysis indicated participants did not embark explicitly on discussing cultural issues. Instead, they elaborated on personal perceptions and practices with some references to culture. Therefore, results of this study were limited to the AACD group studied, and caution should be used when transferring conclusions to other AACD groups or cultural groups.

Methodologically, this research was a phenomenological study where I used individual interviews to collect data. Those data were limited to narratives obtained from the interviews alone. The inclusion of focus group discussions might have yielded more cultural information compared to interviews alone.

A further limitation was that I did not use follow-up interviews; only one interview per participant was conducted. Using a second interview might have yielded

more in-depth data on cultural attitudes and practices. One issue was that participants did not exercise enough, even though they perceived exercise as important. The only explanation provided was the time needed for exercising, but this issue was the case for many people who still exercised. The possibility that there was a cultural taboo about exercising must be considered.

Lastly, researcher bias was an inherent part of phenomenological research. I used bracketing, theoretical frameworks, and semistructured interview questions as strategies to overcome bias. Bracketing served to prevent my personal views from contaminating the data collected from participants. I used both the theoretical frameworks and interview questions to focus the interviews. Although I used these strategies, my presence as a researcher could have influenced participants' responses.

### **Recommendations for Action**

Based on the results of this study, I recommend that physicians should continue and increase providing advice to the AACD type II diabetes patients and demonstrating care through follow-up calls or cell phone messaging; participants valued this behavior. Demonstration of concern indicated diabetes self-care was important, thereby increasing the odds of patients following through with self-care. AACD type II diabetes participants indicated they valued physicians' advice and demonstrated care; therefore, by continuing and upscaling this process, practice physicians could be instrumental in patients following advised lifestyle changes to combat diabetes. The involvement of physicians in providing information on diabetes II self-care and follow-up on medical visits was demonstrated as a strength that should be maintained and expanded.

Al-Bannay et al. (2015) demonstrated that culturally adapted diabetes education programs were successful in various cultures. Physicians should target AACD females, mothers, and older women to provide information on the influence of diet and food preparation practices, including herbal remedies. Therefore, physicians could facilitate understanding of the impact of patients' cultural practices on the prevalence and treatment of type II diabetes in AACD communities.

### **Recommendations for Further Research**

Researchers, interested in conducting further studies on the cultural influence of AACD on the prevalence and treatment of type II diabetes, can use a mixed method design to include a larger and more diverse sample by administering surveys and individual/focus group interviews for in-depth information. Furthermore, I suggest that researchers first get to know people belonging to this cultural group. In this way, researchers may gain participants' confidence, as it might be regarded as improper by AACD to share intimate cultural issues with a stranger.

Researchers have shown that physicians using culturally adapted diabetes education have delivered good results regarding prevention and treatment (Al-Bannay et al., 2015; Creamer et al., 2015; Pottie et al., 2013). Researchers who want to develop new diabetes training programs adapted for AACD may target both individuals and larger groups of the AACD population when dealing with information about medication, dietary choices, and other lifestyle changes. Moreover, researchers can target the AACD decision makers or those persons responsible for the continuation of cultural practices. Only by obtaining cultural information from the AACD core cultural group and targeting this

group by providing culturally based diabetes education can the larger AACD population be effectively educated and motivated to make the needed lifestyle changes. Considering the sizable percentage of AACD already suffering from type II diabetes, targeting a larger group with diabetes education may empower them to deal better with cultural issues that keep them from following the treatment regime (see Al-Bannay et al., 2015; Creamer et al., 2015; Pottie et al., 2013).

### **Implications for Practice**

A healthy population is the overall mission of public health. Therefore, governments must play a pivotal role in providing excellent, convenient, and affordable health care to all cultural groups in the country. This role and responsibility do not take away individuals' responsibility to adopt healthy practices and access the healthcare facilities made available by the government. Thus, the AACD population group should be made aware of the existing facilities, services rendered, and benefits of utilizing these facilities in dealing with type II diabetes.

At the individual level, an implication of social change entails developing the knowledge base of healthcare providers dealing with AACD who have type II diabetes. This wider skill set will empower such service providers with culturally adapted healthcare knowledge to assist AACD diabetes patients to make better informed choices when following diabetes lifestyle changes. The benefits of increasing the healthcare providers' knowledge of AACD cultural differences is the resulting improved care giving to this population group. In addition, this increased knowledge will not only improve

individual AACD members' health but can also influence the larger AACD community by adhering to lifestyle changes, and eventually preventing new cases of type II diabetes.

By using social media and other media to publicize success stories of AACD individuals benefiting from adhering to treatment regimes, others in the community may be positively influenced. For example, community members may explore new cost-efficient ways to grow vegetables, thereby making it more affordable to obtain healthy food. Using prominent AACD social figures engaging in exercise and sharing their favorite healthy recipes may inspire others in the community to stay in their exercise programs. Thus, a larger percentage AACD persons with type II diabetes may make the needed lifestyle changes by regularly taking prescribed medicines, which will render increased health and lessen the complications from type II diabetes. A strategic approach to culturally adapted diabetes education will reduce the number of type II diabetes cases in the AACD population group, thus lessening the burden on the health care system and country.

### **Conclusion**

I explored cultural factors that could contribute to the high prevalence of type II diabetes among AACD. Therefore, I illuminated the success of culturally adapted diabetes education that showed the need for in-depth cultural knowledge of AACD. The findings showed some cultural practices and beliefs that might explain the high incidence of type II diabetes among AACD. Furthermore, the findings indicated participants' willingness in trying to implement lifestyle changes while not fully embarking on such changes. Only a few participants' responses indicated steps that they were taking, instead

of trying to take, indicating the difference between adhering to treatment advice and contemplating following that advice. Given the positive results from prior studies on culturally adapted diabetes education, I expected AACD would also benefit from such tailor-made programs. With such a sizable percentage of AACD suffering from type II diabetes, practitioners should develop education programs to incorporate patients' culture to achieve success. I found participants perceived diabetes as a serious condition that caused loss of eyesight, loss of limbs, and death. Therefore, it is important to bring messages of hope and success by publicizing success stories on social media and local publications. I conducted a qualitative, phenomenological study, which indicated some cultural factors that might contribute to the prevalence of diabetes among AACD. The results of this study, together with those to follow, would provide the way for culturally adapted diabetes education for AACD.



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## Appendix: Semistructured Interview Guide

1. How would you describe your experience living with type II diabetes?
2. What lifestyle choices do you make on a regular basis to manage your diabetes?
3. Are there any lifestyle choices you think you should adhere to more often to better manage your diabetes? If so, what are they?
4. How do you feel about your healthcare providers' recommendations for managing your diabetes?
  - a. What recommendations, diabetes management tips, and/or treatments recommended by your healthcare provider do you think are important to adhere to? Why or why not?
  - b. Are there any recommendations, diabetes management tips, and/or treatments recommended by your healthcare provider that you do not adhere to? Why or why not?
5. How does your culture influence your views of health?
  - a. Your views of diabetes?
  - b. Your views of medical treatment and medical recommendations?
6. Do you think AACD as a broader cultural community holds certain perceptions of diabetes and diabetes management that are unique to that community? Why or why not?
7. Have you experienced any challenges related to having diabetes? If so, what were those challenges?