Review of African American Women Diabetic Self-Care: A Meta-Analytic Perspective

Doris Clark PhD, RN, CNE

ABSTRACT
The studies were based on the greater prevalence of Diabetes in the African American women population. The goal of the studies was to identify barriers that prevent African American (AA) women's self-care. The barriers identified increased the risk of diabetic complications. Due to the abstractness of the barriers, health care providers tended not to include them in the interventions when AA women sought help. Quantitative and qualitative methodologies were used to interview AA women in different settings such as churches and community centers. The meta-analytic review revealed that AA women are a high-risk population for Type 2 Diabetes and even greater for the complications that accompany this chronic disease. AA women most at risk were AA women who are caregivers for elderly parents, grandchildren whose parents were unable to care for them, and those with adult children still living at home. Psychosocial internal factors such as lack of social support and transportation also influenced their ability to self-manage their health care.

The AA woman may also have physical and psychological comorbidities such as hypertension and depression that influence their self-care abilities. When with their counterparts, Caucasian women, and adjusting for certain areas in their lives such as socioeconomic status, it was found that the risk remained high, and AA women could not adjust or change their lifestyles to manage their Diabetes. Interventions were introduced to help AA women overcome these lifestyle factors. The studies revealed that focus and support groups were helpful in increasing self-management, and self-care education did increase the ability to control the psychosocial factors and self-manage their diabetes. However, the results show that the goal of self-care was not totally achieved or sustained.

Keywords
Diabetes, African American women, Physical activity, Diet.

Introduction
Diabetes is a major health problem in the United States [1-3]. According to the Center for Disease Control (CDC), greater than 29 million people have Diabetes in the United States. In addition, greater than 86 million are in a prediabetic state. Of those 86 million persons, within five years, 15-30% will develop type 2 diabetes without physical activity and diet [2]. In particular, the African American woman has been described as having the highest incidence of Type 2 Diabetes and related complications. There has been research on factors increasing African American women's risk for this disease. Studies on diabetes with samples of white women have been conducted, but these research findings have not been generalized to African American women.

This review of literature examines the psychosocial factors that predispose African American woman to Type 2 Diabetes. The literature search suggests psychosocial factors that might impact the African American woman’s ability to self-manage the diabetic state, resulting in complications that lead to frequent hospitalizations [4-6]. The psychosocial factors revealed in the literature are: (a) the inability to lose and sustain weight loss, (b) the multi-caregiver role, (c) the social support system, (d) spirituality, and (e) self-esteem issues.
Inability to lose and sustain weight loss
Statistics from the Center for Disease Control and Prevention (CDC) and ADA have revealed that African American women are two to four times as likely to be overweight than white women. The obesity factor was one that predisposes the African American woman to Type 2 Diabetes [7]. In addition, African American women are also at high risk for the most dangerous complications that occur with Diabetes. The CDC revealed that Type 2 Diabetes and its complications can be reduced with a 15-lb weight loss and dietary changes.

Barriers to Weight Loss
Gumbs [7], suggested that the combination of a low-fat diet, exercise, and behavior modification are important in helping to lose weight and sustain the weight loss. However, the studies that have been done about the ability to lose weight using behavior modification have been done mainly on white women who live in urban areas [8]. The generalizations of the results of these studies to the African American population are questionable. This is due in part to the fact that African Americans live in underserved areas. According to literature research, most of African American women live in low income urban areas and are economically deprived [4,6,9]. These factors are not conducive to eating nutritional meals, or having access to quality care. In addition, these factors leave the woman feeling too fatigued to expend energy to perform physical activity and exercise.

According to literature research, most of African American women live in low income urban areas and are economically deprived [4,6,9]. These factors are not conducive to eating nutritional meals, or having access to quality care. In addition, these factors leave the woman feeling too fatigued to expend energy to perform physical activity and exercise.

According to the CDC, these social and economic factors are barriers to quality health care and the ability to access health care that is needed to maintain a stable diabetic state. This statement is supported by a study done by Hawkins, Watkins, Kieffer, Spencer, Espitia, and Anderson [3], in which focus groups were used to collect data to describe what psychosocial issues were present that prevented the African American population from accessing and receiving quality health care. The outcome of the study produced the following concerns from the participants: (a) the high cost of insurance premiums, (b) inadequate health care services, and (c) lack of trust in the ability of the health care system to care for the African American population.

In addition to the socioeconomic barriers that impact the power of the African American woman to lose and sustain weight loss, is that most African American women do not have the same negative view regarding their body image when they are overweight. In the literature, it was identified by participants as a barrier. The barriers, according to Carthron, et al. [6], are the ability to afford healthy foods, time to cook, and time for exercise. The belief of this author, from the literature, is that the African American woman tends to have a more positive perspective of body image when overweight. In addition, African American women tend to have different ideas of what constitutes a flattering body style.

The Multi-Caregiver Role and Social System
The multi-caregiver role is the phrase used in research for women who feel the need to be responsible for the physical and emotional well-being of family members and friends [3,6,8,9]. The multi-caregiver role involves providing care for: (a) elderly parents at home or in their home, (b) grandchildren whose parents are involved in substance abuse or are incarcerated, (c) adult children and grandchildren living in the home for extended periods of time, and (d) friends who come to the woman to talk and get support for their concerns. This leaves the African American woman feeling tired, and with feelings of hopelessness and helplessness [4,8]. The stress that is felt from the multi-caregiver role is often combined with lack of economic stability, inadequate marital stability, lack of educational attainment, and unsupportive work environments [4,6]. In addition, the African American woman often feels the negative impact of the caregiving role and finds the cost of caring for the entire family overwhelming, while ignoring her health needs.

In addition, another identified barrier to self-management relates to loss of social support. Byers, et al. found that social support was a primary factor in the effective self-management of type 2 diabetes. Merius and Rohan [5], found patient attrition to diabetic education groups was directly related to social support of family and friends. The literature review revealed the loss of the extended family, which is composed of grandparents, parents, sisters, and brothers, have left the African American woman with few opportunities to talk with extended family members [4-6,8]. Participants in the studies revealed they received support when they can talk with family and friends about their health concerns and exchange methods for improving health care concerns. Consequently, the loss of support leaves the woman to suffer silently without a positive family support system.

Spirituality
Spirituality has always been an important component of the African American culture. Spirituality plays a significant role in the African American health belief system, health belief practices, and the outcomes of these beliefs and practices. It has served as a personal and social aspect in the lifestyle of the African American. Spirituality is most frequently used to cope with aspects of the African American’s life including: (a) hopelessness, (b) helplessness, (c) social, economic, and political injustices, and (d) bringing solace and comfort [8,9].

While, religious beliefs have been considered when performing studies on how African Americans deal with illnesses, but a clear definition of spirituality has not been established in research. The question of how spirituality is used by the African American to cope with chronic illness is usually through prayer or communication with a higher power. In addition, the church community is said to be a great source of social support and interaction. The literature revealed that many of the studies were held in church focus groups [4,5,8]. A summary of the African American woman’s feelings relating to God or a higher power are as follows: (a) feeling that there is a higher power that provides friendship and caring, (b) a
sense of protection, comfort, and love, (c) a connection with God that brings freedom and liberty, (d) a connection that brings peace and strength, and (e) a source of healing.

**Psychosocial Factors and Self-Management of Diabetes Mellitus**

According to the literature search, the ability to lose and sustain weight loss, the multi-caregiver role, and the cultural aspect of spirituality are psychosocial factors that are precursors to the diagnosis of Type 2 Diabetes. These psychosocial factors have been identified as stressors in the development of Type 2 Diabetes in the African American woman. These psychosocial factors remain after the diagnosis of Diabetes Mellitus and are named as stressors that inhibit the ability of the African American woman to self-manage the diabetic state.

Gumps [7] introduced the study about the positive outcome for African American women who attended Diabetes Self-Management Education (DSME) classes. The classes supported the women who found self-care challenging. Especially, the change in diet, and having to maintain a daily regimen of diet, exercise, and medication. The participants reported through classes, they saw their health care provider two to three times per 12-month period, greater frequency of blood glucose monitoring, and other positive self-care behaviors. Gumps [7] concluded that aligned with DSME, other studies were needed to study culturally sensitive interventions for African American women who had less participation in diabetic education. One psychosocial factor that was significant in the African American woman’s ability to self-manage the diabetic state was social support. This psychosocial factor was identified in other studies [5,8,9].

Byers, et al. [8] in their study to identify facilitators and barriers that impact the African American woman’s ability to self-manage their diabetes. The barriers included the challenge of making lifestyle changes, and fear related to negative health care outcomes. Interventions should be targeted toward helping the African American women find new ways of thinking, succeeding, and relating to the environment and people are needed when faced with new life adversities. Therefore, interventions needed to help African American women to self-manage their chronic illness should be based on their cultural and social perspectives.

**Interventions for African American Women to Self-Manage Diabetes**

According to the CDC National Education for Diabetes Program, there needs to be a collaborative effort to help the African American woman combat the risk factors that predispose her to Type 2 Diabetes Mellitus. These collaborative efforts must come from partnerships with business, social, and political organizations. According to the CDC, Healthy People 2020 advocates faith-based initiatives that support the cultural aspect of spirituality in the African American population. The term, cultural competent care, will reach this population in the area that is most important to them and can be used to provide access to health care and quality health care that will decrease the health disparities in this population.

In addition, other research studies advocate the use of focus groups in community and church organizations to enable cultural competent care. A literature search indicated that church-based focus groups or health promotion programs will empower the African American woman through education regarding diabetic awareness, nutritional information, behavior modification, and lifestyle changes, and counseling on coping strategies [4,5,7-9].

The literature review revealed the method of focus groups was helpful for the African American women. The use of focus groups offered African American women an opportunity to talk openly and freely about their health care issues, and the methods that are needed to reduce the health disparities. However, the focus groups needed to be based on a specific health model for the African American woman that integrated health care with the cultural and spiritual aspects of her life.

**Conclusion**

The research studies have indicated the African American woman is at the highest risk for Type 2 Diabetes Mellitus and its complications. Genetic and physical factors predispose her to this major health disease. The psychosocial factors such as: (a) difficulty in weight management, (b) multi-caregiver role, (c) helplessness and hopelessness, (d) fear of complications of DM are there at the onset of the disease and continue throughout the disease span. These psychosocial factors that continue throughout the disease span are barriers that impede self-management. However, the common interventions used for weight loss, dietary changes, and exercise have been ineffective measures for positive health outcomes for this population. Church-based or faith-based health promotion programs have been found to be helpful in reducing health disparity and promoting positive quality of life outcomes for African American women. The purpose of the church-based or faith-based programs is to incorporate the concept of spirituality, which has its roots in African American culture, with health care interventions. The linkage of spirituality and health care is of major value to nurses in practice and education. Interventions linking spirituality and health result in a cultural awareness and sensitivity when caring for the African American population. Spirituality is especially useful for the African American women positive health outcomes to self-manage and maintain a stable diabetic state.

**References**

1. American Diabetes Association Statistics about Diabetes. 2017.
2. Centers for Disease Control and Prevention. National Diabetes Statistics Report. Atlanta GA Centers for Disease Control and Prevention US. Dept. of Health and Human Services 2017.
3. Hawkins J, Watkins DC, Kieffer E, et al. Psychosocial factors that influence health care use and self-management for African American and Latino men with type 2 diabetes An exploratory study. Journal of Mens Study. 2015; 23: 161-176.
4. Richardson B, Willig A, Agne A, et al. Diabetes connect African American womens perceptions of the community health worker model for diabetes care. Journal of Community Health. 2015; 40: 905-911.
5. Merius HN, Rohan AJ. An integrative review of factors associated with patient attrition from community health worker programs that support diabetes self-care. Journal of Community Health Nursing. 2017; 34: 214-228.

6. Carthon DL, Johnson TM, Hubbart TD, et al. Give Me Some Sugar! The Diabetes Self-management Activities of African-American Primary Caregiving Grandmothers. Journal of Nursing Scholarship. 2010; 42: 330-337.

7. Gumbs JM. Relationship between diabetes self-management education and self-care behaviors among African American women with type 2 diabetes. Journal of Cultural Diversity. 2012; 19: 18-22.

8. Byers D, Garth K, Manley D, et al. Facilitators and Barriers to Type 2 Diabetes Self-Management Among Rural African American Adults. Journal of Health Disparities Research Practice. 2016; 9: 164-174.

9. Tang TS, Funnell MM, Sinco B, et al. Peer-Led empowerment-based approach to self-management efforts in diabetes PLEASED A randomized controlled trial in an African American Community. Annals of Family Medicine. 2015; 11: 27-35.