Dietary practices and physical activity of black women at-risk for chronic illness: A review

Abstract

This literature review examined the health risks associated with overweight and obesity among black women who coexist in a society bombarded with pressure to be thin and in a culture that embraces a full-figured stature. Studies on dietary practices and physical activity were examined to understand the perspectives and concerns of black women as they relate to chronic illnesses. The literature support the rationale to pursue a study that examines the health practices of overweight/obese black women, and assess their readiness for change consistent with reducing their risk of BMI-related comorbidities.

Keywords
Black women, overweight, obese, diet, exercise, health, illness

Introduction

The following Jamaican proverb, *"Before good food waste, mek belly buss",* exemplifies the dietary behavior of Americans reflected in the large portions of foods served and consumed during mealtime. Such indulgent behavior coupled with a sedentary lifestyle has resulted in Americans increasing in size and developing preventable chronic illnesses, such as diabetes and heart disease. According to the National Center for Health Statistics (NCHS), over 64% (n=3,756) of Americans are overweight and over 30% (n=3,756) are obese (2004, p. 8). Obesity among African American women has significantly contributed to the highest rate of heart disease deaths compared to women of other races (American Heart Association, 2002); one in four over the age of 55 is living with diabetes (American Diabetes Association, 2002), and an increased risk of breast cancer (American Cancer Society, 2001). Obesity is associated with additional risk factors such as poor nutrition, low physical activity and genetics; all are tied to chronic illnesses that are preventable (CDC, 2006).

Overweight and obesity among African American women has historically been perceived as being healthy, robust, and fertile beginning from African roots. It was also seen as a sign of financial prosperity, since a weighty physique reflects the means to properly sustain one's self. Historical research conducted by Johnson (2003) revealed that the large size of African women was not customary, although preferred, because they typically labored long hours, walked everywhere, and were the primary caregivers in their families. Johnson (2003) also noted that "little African girls on a subtle cultural level learned what African men and families valued, that being a large woman was highly acceptable and even envied" (p. 2).

The slave trade to the Americas transported the cultural importance of voluptuous black women,

manifested in the form of mammy and exploited by slave owners as breeders. With respect to the mammy role, "being obese in this case conjured respect, and status among the slaves; she was good ole Mammy, the good worker" (Johnson, 2003, p. 2). Hence, this position in slave society carried some level of security and protection. When we look at the overweight/obese size of many black women today, Johnson (2003) recognizes that "being a large African American women is viewed as an asset by those whose opinion matters the most to us" (p. 2), which is the opinion of African American men.

Today, with societal pressures to look thin, African American women are viewed as unhealthily overweight and obese in comparison to other racial/ethnic groups of women. According to Tilghman (2003), "the prevalence of obesity is high among African Americans, particularly African American women" (p. 1). In the African American family, attitudes and beliefs about food and nutrition impact women's dietary choices, and ultimately affect their weight (Ahye, Devine and Odoms-Young, 2006). The role of Black women in managing the food and nutrition for their families, according to Ahye, Devine and Odoms-Young (2006), is also tied to caring for family members with health concerns associated with chronic illness.

According to the National Health and Nutrition Examination Survey for 1999–2002, 65% of Americans are overweight, and 30% are obese (CDC, 2002). Within one year (2000-2001) obesity rates among adults increased from 19.8% to 20.9%, signaling to the public health community a rising epidemic (CDC, 2002). Within overweight/obese segment of the population the incidence of chronic illnesses is high. Healthy People 2010 (2020) identifies overweight and obesity as one of the ten leading health indicators posing a significant health issue for Americans. The chronic illnesses that are linked to overweight and obesity include diabetes,

cancer, heart disease and stroke, kidney disease, arthritis and chronic back conditions. Other risk factors associated with overweight and obesity include physical inactivity, cigarette smoking and poor nutrition.

In a study conducted by McTigue, Garrett and Popkin (2002), they found that "66 percent of the African American women with a BMI of 24 to 25 when they were in their early twenties were obese by the ages of 35 to 37 years, whereas 47% of Hispanic and 42% of white women became obese" (Tilghman, 2003, p. 2). Based on data made available in 2000, the costs associated with overweight and obesity is approximately over $117 billion (Weisberg, 2002).

The problem that this review examines is a further look at the dietary practices, physical activity, and social support systems of overweight/obese African-American and Afro-Caribbean women at risk for BMI-related comorbidities.

Literature

The prevention of BMI-related comorbidities among Black women is of paramount importance from a public health perspective. For example, according to the National Center for Health Statistics (NCHS), over 64% of Americans are overweight and over 30% are obese (2004, p. 8). Among this segment of the American population, NCHS indicates that "in 1997-2002, 50 percent of non-Hispanic black women 20-74 years of age were obese, compared with 39 percent of women of Mexican origin and 31 percent of non-Hispanic white women" (2004, p. 8).

"Obesity has been defined as "an excess accumulation of body fat, and it is the amount of this excess fat that correlates with ill-health" (Prentice and Jebb, 2001, p. 141). Obesity, defined as "BMI of 30 to 34.9 kg/m²" (Patt et al., 2004, p. 59S). High BMI has been associated with chronic illnesses such as diabetes, cancer, heart disease and stroke, kidney disease, arthritis and

chronic back conditions. Obesity among African American women has significantly contributed to one in four over the age of 55 living with diabetes (American Diabetes Association, 2002), and is associated with several additional risk factors such as poor nutrition, low physical activity, family history, race/ethnicity, prior history of gestational diabetes, and aging (CDC, 2005). In terms of breast cancer, "obesity increases risk for recurrence", thereby encouraging weight loss among women (Stolley et al., 2006, p. 604).

There is also a strong rationale in focusing upon dietary practices and engagement in physical activity in order to prevent BMI-related comorbidities. Research on the dietary practices and physical activity of overweight/obese Black women supports the case that unhealthy choices put them at risk for BMI-related comorbidities. Research conducted by Jefferson, Melkus and Spollett (2000) indicated that young urban Black women, between the ages of 25 to 44, were aware of the importance of a healthy diet and exercise in preventing diabetes, yet 90% indicated that they ate relatively high calorie diets and 73% had a body mass index (BMI) greater than 27kg/m^2**.** The Patt et al. (2004) study showed that urban African American women "in higher BMI categories have significantly lower levels of life satisfaction and total general well-being, and worse exercise performance" (p. 63S). BMI and limited leisure exercise were correlated in a study to show that the risk of stroke resulted when these risk factors were combined (Worrall et al., 2002, p. 917). Factors that also compound these risks factors in some African American communities are limited access to fresh fruits and vegetables, unsafe neighborhoods and lack of public areas to perform exercise (Stolley et al., 2006). In light of these studies, there is a rationale for investigating Black women's eating behavior **(**e.g. fast food consumption, portion size, eating of fatty/greasy food, eating of fruit and vegetables, eating while watching television)

and engagement in physical activity and exercise—including their stage of change for engaging in preventive behavior and self-efficacy for being able to do so.

Cultural influences were noted to impact the dietary practices of African-Americans (Airhihenbuwa et al. 1996). In terms of physical activity, culture can play a significant role in defining what it means to be physically active, inactive, or engaging in formal exercise (Wilbur et al., 2002). Urban African-American women defined physical activity as a busy and engaging lifestyle that included juggling many daily tasks and responsibilities (Wilbur et al., 2002). Physical inactivity was defined as a completely sedentary lifestyle that was tied to mood and lack of motivation. Exercise was defined as actual physical movement in the form of running, calisthenics, or weight training in conjunction with a modified healthy diet. The African-American women in this study associated exercise with White women (Wilbur et al, 2002). Hence, there is a rationale for examining from a cultural perspective potentially culturally influenced attitudes and beliefs regard to eating held by Black women at risk for BMI-related comorbidities.

There is also a rationale for investigating selected demographic variables and their relationship to key study variables. For example, it was found that urban African-American women who were well educated were most likely to be sedentary if they had a partner, no children, or were active in their communities (Young and Voorhees, 2003). On the other hand, regardless of education and income, Black women were found in one study to be prone to obesity (Jefferson, Melkus and Spollet, 2000). Of low income urban women who were single, head of their household and had little to no college, limited physical activity was associated with "environmental safety and community support" (Wilbur et al., 2002, p. 18).

These studies exemplify the pervasive views and choices of Black women in their diet and exercise habits. Because Black women are more overweight/obese than any other racial/ethnic group of women, it places them at an increased risk for developing chronic illnesses like diabetes, cancer, heart disease and stroke. Haire-Joshu et al. (1999) administered a nutrition program to African American women, as part of a study to understand the stages of change process in their diet modification. Those eligible to participate had a body mass index of greater than 27 and were 20% over their optimal body weight. The results of the study showed that "participants were in the preparation stage for all dietary patterns" (Haire-Joshu, et al., 1999, p. 94). "Females who reported three to four hours of TV viewing per day showed almost twice the prevalence of obesity compared to a group watching just one hour of TV" (Tucker and Bagwell, 1991, p. 908).

Research supports the premise that Black women perceive their dietary practices and physical activity as poor, and correlated with their body mass index (BMI). Black women with a higher BMI desired to lose weight, and the information they shared in focus groups indicated that their sedentary lifestyle negatively influenced their health and wellness (Jefferson, Melkus, and Spollet, 2000). Research by Satia, Galanko and Neuhouser (2005) revealed that African American women read food labels, yet reported having an average BMI >25. Lower education levels generally equated with poorer health perceptions in this study (Stover et al., 2001). Research has shown that Black women will express a readiness for change in improving their dietary practices and increasing their physical activity. Thrasher, Campbell and Oates (2004) found that African American church members relied on their spouses or partners for support in their dietary practices and physical activity. African American women were likely to seek out

family members for support in improving their health. The researchers noted that a church network increases health intervention.

A study conducted to understand the impact of limited internet accessibility among low income African American women correlated access to level of education (Haughton, et al., 2005). Of the 9% of women in the study who indicated that they have internet access, they were most likely to be young and education with a higher income bracket. Access to internet-based health information continues to be a challenge for African Americans and have shown in studies to be more likely to watch television (Gibbons, 2005). The research has indicated that African Americans who have internet access tend to use it for such things as to find a new job, a new home, acquire health knowledge or religious resources (Gibbons, 2005).

In terms of BMI and breast cancer, African American face challenges in meal preparation for themselves and their families, particularly in the areas of healthy recipes, cost-effective meals, or the time it takes to see the long-term benefits (Stolley et al., 2006). Physical activity is also seen as a challenge because of no social support, physical impediments, family commitments, or lack of motivation (Stolley et al., 2006). With chronic illness care being so challenging for those living with a particular disease, the role of support systems can play a key role in dietary observance and physical activity. Belgrave and Lewis (1994) emphasized the importance of social support for African-Americans with diabetes in adhering to a health regiment. Their research stirred further questions about the nature, function, and persons of the social support systems among African-Americans living with chronic diseases.

A study comparison of Black and Latin American women's obesity showed that Black women had a higher body mass index, were more sedentary and less critical about their body image

(Sanchez-Johnson et al., 2004). Black women were noted as consuming higher calories and fat in their diet. The researchers also indicated that Black women perceived a fuller figure as an ideal body image.

It is also important to measure BMI, and to explore BMI in relation to all study variables—in search of the best predictor of BMI. When examining BMI in relation to breast cancer, Stolley et al. (2006) found that Black women who had been diagnosed with breast cancer were overweight and obese and sought to make dietary changes and increase their level of exercise. "Although eligibility for the study required a BMI of at least 25 kg/m² (overweight), the mean BMI was 33.0 kg/m², with a range of 25-43 kg/m², highlighting the significant problem of obesity" (Stolley et al., 2006, p. 619). In a study conducted by McTigue, Garrett and Popkin (2002), they found that "66 percent of the African American women with a BMI of 24 to 25 when they were in their early twenties were obese by the ages of 35 to 37 years, whereas 47% of Hispanic and 42% of white women became obese" (Tilghman, 2003, p. 2).

In an obesity comorbidities study conducted by Paeratakul, Lovejoy, Ryan and Bray (2002), "the prevalence of diabetes and hypertension was higher in black people compared to white or Hispanic people across all BMI categories" (p. 1207). Black women in this study had the highest prevalence of obesity, diabetes, hypertension and heart disease across gender and race.

Findings

The literature reveals that black women are more likely to be overweight/obese than any other racial/ethnic group. Overweight/obesity rates are correlated with weight-related chronic health conditions that have a high incidence among black women. The average body mass index for black women between the ages of 25-44 is over 27kg/m². Black women who read food labels

are likely to have a lower body mass index.

Access to quality foods and safe environments for exercise are factors that deter a health lifestyle. In the presence of social support, a healthy lifestyle is like to ensue. Studies conflict as to whether level of education directly impacts health behaviors among black women. While black women with higher education are more likely to use technology to access health information, educated black women were either more likely to exercise if they are single with children or were likely to be obese regardless of level of education.

Conclusions

Hence, there is a strong rationale to pursue a study that examines the dietary practices, physical activity, and social support systems of overweight/obese black women, and assesses their readiness for change consistent with reducing their risk of BMI-related comorbidities. Such a study would deepen the quality of knowledge about the health issues among black women and create opportunities for programs and policies that would enhance their overall quality of life. To further examine the dietary practices and physical activity of at-risk black women, the next steps would include commencing a study to determine specifically whether education plays a role in health and wellness among black women; determine what black women perceive as good health; and assess their use of technology to enhance health literacy.

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