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Short report

Obesity in African-Americans: Perceptions and Realities

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ABSTRACT

Obesity disproportionately affects African-Americans. Adverse health consequences include coronary heart disease, stroke and cancer. African-Americans suffer from a higher rate of death when compared to white men and women from these leading causes of death. Premature death is often preceded by a reduced quality of life. Complex social, psychological, behavioral, cultural, environmental, physiological, economic, and genetic factors contribute to this disparity. The African-American population is expected to double in 50 years. Unless the underlying issues are resolved, this health crisis will continue to worsen in the coming decades.

1. Introduction

Obesity is now a global pandemic[1]. According to the World Health Organization, 1.5 billion adults, 20 and older, were overweight in 2008. Of these over 200 million men and nearly 300 million women were obese. In 2010, nearly 43 million children under the age of five were overweight. By 2015, it is expected that there will be 2.3 billion overweight people and 700 million obese people worldwide [2].

Obesity is associated with major adverse health consequences and is responsible for significant morbidity and premature death [3, 4]. Although obesity is preventable, 65% of the world's population lives in countries where overweight and obesity kills more people than underweight. Obesity is statistically associated with an increased incidence of type II diabetes, [5] all cancers except esophageal and prostate cancer, [6-13] all cardiovascular diseases, [14-17] asthma [18], gallbladder disease, [19] osteoarthritis, [20] and chronic back pain [21] It is also associated with an increase in all-cause and cause-specific mortality, both in middle-aged adults and the elderly. [22,23] It has been postulated that obesity may reverse the life expectancy gains of the past century [24]. There are other negative consequences also. Obese people are often subjected to multiple forms of prejudice and discrimination [25-29]. There is also an increased financial burden, both individually and to the society [30].The US is also facing a major obesity crisis. This is mainly due to an increasing consumption of energy dense foods and the progressive adoption of a sedentary lifestyle. It is estimated that approximately two-thirds of US adults are overweight or obese [31]. There is also a spiraling increase in childhood and adolescent obesity [32, 33]. Obesity in the African-Americans is even more alarming. This group suffers from disproportionately higher incidence of being overweight and obese [34]. This disparity results in a much higher rate of obesity related diseases, especially cardiovascular disease, stroke and cancer [35]. Several complex ethnic, financial, social, cultural and psychological issues underlie this disparity. This includes lack of awareness of their actual body weight. This small clinical study illustrates the latter problem and allows this article to highlight the obesity crisis in this population.

2.Matereals and Methods

One hundred consecutive African American patients visiting the office during a scheduled follow up visit were asked 'what do you think your weight is?' All patients had hypertension and were on treatment. Hypertension had been diagnosed when the average of 2 or more diastolic blood pressure measurements on at least 2 subsequent visits was =90 mm Hg or when the average of several systolic blood pressure readings on 2 or more subsequent visits was consistently =140 mm Hg. Anti-hypertensive treatment

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3. Results

Of the one hundred patients, there were 52 (52%) males and 48 (48%) females. Their ages ranged from 22 to 88 years. Ninety (90%) of participants were above the normal BMI range, indicating that they were either overweight or obese. 28 (28%) were overweight and 62 (62%) were obese. None of the patients were below the normal range ofBMI. 68% were not aware oftheir true weight. 40 (40%) perceived their weight to be less than their actual weight, 32 (32%) verbalized their true weight (+/-2 lbs) while 28 (28%) perceivedtheir weight to be above their actual weight.

4. Discussion

The highest rates of being overweight or obese occur in African American women when compared to other groups in the US [34]. It is estimated that almost four out of five African American women are either overweight or obese. Health consequences of obesity include three of the leading causes of death in the United States: coronary heart disease, stroke and cancer. African American men and women have a higher rate of death than do white men and women for each of these three leading killers [35]. And premature death is often preceded by a reduced quality of life, placing an enormous burden on the health care system and the overall economy. There are several factors underlying this health disparity. Cultural factors play an important role in the acceptance of increased body weight, especially amongst African American women. They have less dissatisfaction and less negative cognition towards their obesity, [38-40] and may actually prefer larger hips, [39] and larger body size [42, 43] Black adolescents are less likely to perceive themselves as overweight than white adolescents [44. African Americans are more likely to feel less guilty about over-eating and more likely to medically accept larger body sizes. Excess body weight may even be perceived as favorable and not harmful to health. Although clearassociationshave been established in this population between obesity and morbid events, [45-47] inconsistencies in studies connecting obesity with mortality in African Americans may be driving some of these perceptions [48].

Dietary patterns of African-Americas are not conducive to health promotion and are not consistent with current recommendations [49]. They tend to consume high-calorie, low-nutrient dense foods that are highly palatable and the least expensive [50]. African-Americans are more likely to have inadequate resources for healthy foods, [51] and often face non-acceptability of these foods by their family members [52]. Commercial practices exploit this limitation and further marginalize African Americans [53]. There is an overwhelming presence of fast-food restaurants and a lack of grocery stores around playgrounds and recreational areas in black neighborhoods [54-56]. There is also a paucity of chain supermarkets in the inner cities [57]. Lack of proper refrigeration space and transportation also prohibits purchase and storage of healthy food. Only 35% of the African-Americans consume two or more fruits per day and only 24% consume three or more vegetables a day [58]. Soul food, a dietary staple in many African American kitchens, is high in fat, sugar and sodium and further promotes obesity in this group. African-Americans are also subject to economic stress. They account for 34% of people living in poverty [59]. Obese minority women are 10 times more likely to be poor, with a significant less household income than that for white women. Poverty makes minority women more vulnerable to obesity. A lower socioeconomic status and racism raises stress levels, which contributes to the metabolic syndrome and associated obesity [60]. The related psychological impact of social withdrawal and depression may drive toward the use of food as an emotional comfort [61].

African Americans are less likely to engage in physical activity and are more likely to have high levels of inactivity during leisure time [62-64] African Americans tend to engage in hard work with long hours and low pay lifestyles that are not conducive to leisurely physical activity. There is also less access to physical activity facilities [65]. Safety issues and traffic are also not conducive to healthy walking in their inner city neighborhoods [66]. According to the Centers for Disease Control, only 24% to 36% African-American adults participate in regular physical activity.

African Americans also find it difficult to lose weight [66-69]. Preference for fatty foods, [70, 71] lack of nutrition knowledge, poor social support and self efficacy also hamper weight loss efforts in this population [72, 73]. They are less likely to comply with weight management recommendations made by national and professional organizations [74], and are more likely to engage in risky strategies, such as skipping meals and fasting [75] Finally, although pharmacological, surgical and other medical approaches are available to combat obesity, clinical trials suggest that African-Americans are less likely to lose weight with these interventions.

5.Conclusions

African-Americans suffer disproportionately from obesity and its related health consequences. Many of the underlying factors revolve around complex social, psychological, behavioral, cultural, environmental, physiological, economic, and genetic factors. The African-American population in the US is growing faster than the white population and is expected to double in 50 years. Unless these issues are aggressively resolved, the obesity related health crisis in the African-Americans will greatly magnify in the coming decades.

Conflict of Interests

The author has no potential conflicts of interest to disclose.

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