Obesity in Kenya: A Synthesis of the Literature

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Background

The prevalence of obesity in Kenya has risen in the past decade and this is causing a worrying situation. Various factors have been suggested to cause this rise, namely; the environment, culture and poor healthcare systems. This review aims at describing the factors that cause the increase in the prevalence of obesity, analyses the public health responses and provides recommendations. Several chronic diseases are associated with overweight and obesity, namely diabetes, cardiovascular diseases and cancer. In the past, obesity was only a problem in high income countries but is now dramatically on the rise in low- and middle-income counties, especially in urban settings [1]. Worldwide obesity has more than doubled since 1980. In 2008, 1.5 billion adults, 20 years and older, were overweight. Of these over 200 million men and nearly 300 million women were obese. 65% of the world’s population live in countries where overweight and obesity kills more people than underweight. Nearly 43 million children under the age of five were overweight in 2010. Obesity is preventable [1]. Overweight and obesity are the fifth leading risk for global deaths. At least 2.8 million adults die each year as a result of being overweight or obese. In addition, 44% of the diabetes burden, 23% of the ischaemic heart disease burden and between 7% and 41% of certain cancer burdens are attributable to overweight and obesity [1].

Methods

A desktop technique was used to ascertain the articles on obesity in Kenya by use of PubMed and hand-searching. A critical analysis was done to synthesis the articles obtained.

Results

Health Determinants

The causes of death from obesity today are different from those of the past. But many low- and middle-income countries are facing a “double burden” of disease, as they continue to deal with the problems of infectious disease and under-nutrition, they are experiencing a rapid upsurge in non-communicable disease risk factors such as obesity and overweight, particularly in urban settings [1]. No one factor causes obesity. There are several factors that lead to the condition including biological, psychological, behavioural, social and environment determinants. To illustrate the issues in Kenya some of the elements of the Evans and Stoddart model will be used as a reference point for discussion. This model [2] argues that genetic endowment, social and physical environment directly interact with the individual, causing responses that may cause disease (obesity), and affect well-being or health and function. This
model being the most recent and complex explains the complexity of health and that the individual also has power to influence their environment.

Environment

People migrate from rural areas to settle in the urban setting to seek employment and possibly better health care. For the situation in Kenya, the employment opportunities afforded in the urban setting create an increase in income, leading to an improvement in well-being which results in the individual response which may be positive (health and function) or negative (disease being obesity). However, due to the demands of urban living that leads to a sedentary lifestyle, the amount of exercise reduces, as stated by Onywera [3]. This is regardless of the level of education, socio-economic status or behaviour, resulting in obesity. Obesity appeared to be prevalent in women in the high-income group (7278 kJ) in urban areas (7049 kJ) with 34.5% total fat intake than in rural areas 29.7% of energy.

Obesogenic Environment

One cause of obesity and overweight is an energy imbalance between calories consumed and calories expended. Globally, there has been: an increased intake of energy-dense foods that are high in fat, salt and sugars but low in vitamins, minerals and other micronutrients [1]; a decrease in physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanisation. Changes in dietary and physical activity patterns are often the result of environmental and societal changes associated with development and lack of supportive policies in sectors such as health, agriculture, transport, urban planning, environment, food processing, distribution, marketing and education [1]. The cheap, highly processed foods and fatty diets in Kenya have been attributed to the marked “nutritional transition” [2] which occurred over the past 400 years since the colonial times [2]. This moved the whole population from the traditional and indigenous foods that are associated with health benefits [2].

Culture

In Kenya, and Africa at large, some socio-cultural beliefs view obesity and overweight as an admired trait. It is seen as a sign of prestige and wealth [3]. There is a lack of strong and outward looking social networks which have been shown to be protective of health [2].

Health Care

Depending on whether the health care system is well structured, it is then involved in improving health and leading to either prosperity or an individual response to health and function. Hsia et al [4] in a study to access to health care in Sub-Saharan Africa recognised the critical “infrastructure gaps” that obstruct the health systems. Okeyo et al [5] speculated that overweight and obesity, with their related disease conditions will constitute a major threat to the economically productive adults causing a huge health-care burden soon in developing countries.

Discussion

Public health responses to this issue should focus on interventions that include changes to the major determinants of obesity. Adopted by the World Health Assembly in 2004, the WHO Global Strategy on Diet, Physical Activity and Health describes the actions needed to support healthy diets and regular physical activity. The Strategy calls upon all stakeholders to act at global, regional and local levels to improve diets and physical activity patterns at the population level [1]. WHO developed the 2008-2013 Action plan for the global strategy for the prevention and control of non-communicable diseases (NCDs) to help the millions who are already affected cope with these lifelong illnesses and prevent secondary complications? This action plan aimed to build on, the WHO Framework Convention on Tobacco Control and the WHO Global Strategy on Diet, Physical Activity and Health.

The action plan provides a roadmap to establish and strengthen initiatives for the surveillance, prevention and management of NCDs. Overweight and obesity, as well as their related non-communicable diseases, are largely preventable. Supportive environments and communities are fundamental in shaping people’s choices, making the healthier choice of foods and regular physical activity the easiest choice, and therefore preventing obesity.

At the individual level, people can:

a) Limit energy intake from total fats;

b) Increase consumption of fruit and vegetables, as well as legumes, whole grains and nuts;

c) Limit the intake of sugars;

d) Engage in regular physical activity;

e) Achieve energy balance and a healthy weight.

Individual responsibility can only have its full effect when people have access to a healthy lifestyle. Therefore, at the societal level it is important to:

a) Support individuals in following the recommendations above, through sustained political commitment and the collaboration of many public and private stakeholders;

b) Make regular physical activity and healthier dietary patterns affordable and easily accessible to all - especially the poorest individuals.

c) Might also include the provision of school meals and health education of not only the school children but the community at large.

The food industry can play a significant role in promoting healthy diets by:
a) Reducing the fat, sugar and salt content of processed foods;

b) Ensuring that healthy and nutritious choices are available and affordable to all consumers;

c) Practicing responsible marketing;

d) Ensuring the availability of healthy food choices and supporting regular physical activity practice in the workplace.

Initiatives to improve the situation of obesity should therefore be at the individual, family, community, population and societal levels. There appeared to be no published literature on the initiatives to improve the obesity epidemic in Kenya and Africa at large.

**Recommendations**

1. Interdisciplinary perspective at various societal levels, involving research, education, direct management in primary health care is required to improve the obesity situation in Kenya. This could be achieved by involving the incorporation of food and nutrition studies into different areas such as the primary school curriculum, which might affect a shift of behaviours, attitudes, culture, values and beliefs to benefit the community at large [9,10].

2. Incentives for healthy eating habits [8] should be developed to nationally encourage consumption of traditional foods and the consumption of high fat modern food in moderation.

3. The promotion of strategies to increase the level [10-12] of physical activity in the urban population both at local and national levels.

4. Improved surveillance and monitoring [8-10] of the population’s health and well-being is essential. This may be achieved by the Kenyan government improving the infrastructure in the country.

**Conclusion**

There is an increase in obesity especially in the urban settings in Kenya. This has been attributed to the rural to urban migration due to better employment opportunities and improved health care. However, due to the sedentary lifestyles, decreased amount of exercise and consumption of high-calorie dense foods, obesity develops.

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