SOCIO-CULTURAL FACTORS INFLUENCING ATTITUDES AND PERCEPTIONS OF BODY IMAGE AND THEIR HEALTH IMPLICATIONS IN EMBAKASI SUB-COUNTY, NAIROBI CITY COUNTY.

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DECLARATION

I declare that this thesis is my original work and has not been submitted to any other University for examination.

Edah Chepkemoi ..…… …….

Signature Date

This thesis has been submitted with my approval as University Supervisor.

Prof. Simiyu Wandibba …… …….

Signature Date

DEDICATION

To my husband Kiprono, my daughters Ellah and Chellah, my parents Mr. Paul Langat and Pascaline Langat and to my supervisor Prof. Simiyu Wandibba. I am thankful for your continuous support that kept me going through out the study time. Wish you God's blessings.

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LIST OF ABBREVIATIONS

ADA	American Diabetes Association
BMI	Body Mass Index
FGD	Focus Group Discussion
GOK	Government of Kenya
KNBS	Kenya National Bureau of Statistics
LDL	Low-Density Lipoprotein
NCCHE	National Council of Commission Higher Education
USDHHS	United States Department of Health and Human Services
WHO	World Health Organization
DM	Diabetes Mellitus

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ABSTRACT

This study sought to explore the influence of socio-cultural factors on attitudes to and perceptions of body image and its relationship to health among Embakasi Sub-County residents in Nairobi City County. The basic question that the study sought to address was: How do socio-cultural factors influence the attitudes to and perceptions of Embakasi Sub-County's residents and their health? Accordingly, the overall objective of the study was to explore the influence of socio-cultural factors on attitudes to and perceptions of body image and its relationship to health among the Sub-County residents. The study was guided by the theory of phenomenology.

This study adopted a cross-sectional and exploratory research design. Data were collected using in-depth interviews, focus group discussions, key informant interviews and narratives. The study found that: One, body image is described in terms of shape, size and height. Perception of what an attractive, beautiful and ideal body image is varied greatly among the female and the male gender. Two, the study population has been influenced largely by Western lifestyles and perceptions of body image and eating habits. Decreased levels of exercise, sedentary lifestyles and changes in nutritional patterns characterized by fast food lifestyles, which are as result of changes in economic and technological advancement, predispose these residents to obesity and other related lifestyle diseases like cancer and diabetes. Three, the research findings also indicate that socio-cultural beliefs and attitudes to body image are intertwined with other social aspects, for instance, body shape and size were said to determine the chances of one getting a marriage partner

and are also an indication of stability in marriage. Finally, such attitudes to and perceptions of body image impacted either negatively or positively on one's health.

The study, therefore, concludes that socio-cultural factors play a major role in shaping the perception of and attitudes to body image. These two aspects further determine whether one lives healthily or unhealthily. The negative impacts associated with such unhealthy lifestyles are diseases such as cancer, diabetes and hypertension.

On the basis of the above conclusions, the study recommends that Nairobi City County residents should be sensitized on living a healthy lifestyle and how their beliefs of body image, dietary habits and physical activity affect their health status through health campaigns and forums. Secondly, the research recommends the need to do more research on the socio-cultural beliefs that influence dietary habits and general good health with regard to body size and shape, and further identify and champion such alternative beliefs that promote a healthy lifestyle among the residents of Nairobi City County.

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CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction

Body image has been defined as a person's perceptions, thoughts and feelings about his/her body (Grogan, 2008:1).This definition includes psychological concepts such as perceptions of and attitudes towards the body, as well as experiences of embodiment. Scholars such as Grogan (2008:4) have included weight satisfaction, size perception, accuracy, appearance satisfaction, body satisfaction, appearance evaluation, appearance orientation, body concerns, body esteem, body schema and body percept in their definition of body image. Self-perceptions are important to examine because they can have implications for a person's psychological and physical health. This study undertook to explore the influence of socio-cultural factors on attitudes to and perceptions of body image and its relationship to health among residents of Embakasi Sub-County in Nairobi City County.

Body image refers to personal constructions and public projections of our body and body parts, often in attempted conformity with parameters of 'beauty' established in socio-cultural or non-personal contexts. In other words, body image "involves our perception, imagination, emotions, and physical sensations of and about our bodies" in relation to values that are not necessarily innate but "learned or expected culturally" (Lightstone, 2006).

Poor dietary patterns, unhealthy or lack of physical exercises and cultural perceptions of body image are health risk factors. These factors lead to overweight and obesity all of

which are risk factors contributing to the rising prevalence of Type 2 diabetes mellitus and other lifestyle diseases. Most of these have been categorized as modifiable risk factors for diabetes. Modifiable risks for diabetes are factors that can be changed by behaviours such as eating a healthy diet, engaging in exercise and increasing physical activity. Other risk factors include being overweight or obese, sedentary lifestyle, smoking, elevated blood sugar, unhealthy cholesterol levels, and high blood pressure (ADA, 2009:31), all of which lead to prediabetes and even diabetic conditions.

Obesity or overweight is one of the main risk factors for developing diabetes (ADA, 2009). In children, obesity is defined as a body mass index (BMI) at or above the 95^{th} percentile for age and sex based on population data for the 1970.On the other hand, in adults it is defined as a BMI greater than $30kg/m^2$. The prevalence of obesity among human groups in the world varies according to the interactions of variables such as genetics, physiology, culture, socioeconomic structures and environment. According to Sonia et al. (cited in ADA, 2009: 32), these variables can well be understood in relation to eating habits and physical activity in these groups.

Body image plays an important role in the management of body weight (Cooper and Goodyear, 1997:543). The assessment of body image in relation to overweight or obesity is important in order to understand its relationship to the maintenance of excess weight and in initiating motivation for weight reduction. Ortega et al. (1995:763) point out that an obese adolescent consumes larger meals with a higher percentage of energy from fat and protein. Overweight children and adolescents have also been found to have

a relatively low level of aerobic power and performance fitness (Wan et al., 2004:135). Studies further show that individuals with low levels of physical activity have greater body weight and body fat levels compared to their active counterparts (Schulz and Schoeller, 1994:680). For example, Freedman et al. (1995:61) found that black African women were generally less concerned about their weight and tended to report less pressure to be slim, less dissatisfaction with their weight and greater acceptance of being overweight than white women. Many studies have examined behavioural factors related to obesity in America's black women (Allan et al., 1993:330; Burke et al., 1992:622; Kamunyika et al., 1993:424).These studies suggest that the higher prevalence of obesity among black women in African countries may be due to fewer educational and financial resources, cultural influences leading to de-emphasis of the thin body type in the black community, low physical activity levels and ineffective dieting behaviour and body image.

Despite trends of globalization, societies maintain different conceptions of the ideal body image. These ideas have health repercussions, especially among adolescents. However, there are differences in the way teenage girls give meaning to this social demand and conceptions. In every society there exist intracultural and intracommunity differences that need to be explored for better understanding of body image (Ritchie et al., 2005:74).

Nairobi City County is thought of as being at the crossroads of nutrition and lifestyle transition as a result of advancement in technology and economy, leaving many of its

residents living a sedentary lifestyle characterized by fast foods and lack of physical exercise. This lifestyle influences one's body weight and image which, among other factors, could predispose these individuals to obesity and other health risks.

1.2 Problem Statement

Specific cultural definitions of ideal body image, body size and body weight have a great influence on the discursive practices adopted by people. Nairobi City County is an area with multi-ethnic residents who have been influenced largely by Western lifestyles and perceptions of body image and eating habits. Decreased levels of exercise, sedentary lifestyles and changes in nutritional patterns characterized by fast food lifestyles, predispose residents to obesity and other related lifestyle diseases like cancer and diabetes. The growing epidemic of obesity has led to an increasing focus on strategies for prevention (Boyington and Josephine, 2008:294).Obesity is the primary risk factor for diabetes and in essence an obese person is likely to be in danger of becoming diabetic. Cultural perceptions regarding obesity may not link it to health risks. Those perceptions regard obese people as 'healthy' and relate it to material affluence (wealth) and to high fertility especially among women. The latter is currently amongst the greatest challenges that public health systems in Kenya are battling with. Because the prediabetic stage is often asymptomatic, people can go for many years without detection of their condition (Leiter et al., 2001:1040).Therefore this research undertook to answer the following questions:

1. How do people's beliefs influence perceptions of body image among Embakasi Sub-County residents?

2. How do these people's beliefs influence attitudes towards their body image?
3. How does nutrition affect body image and health?
4. What is the impact of physical activity on body image and health?

1.3 Objectives

1.3.1 General Objective

To explore the influence of socio-cultural factors on attitudes to and perceptions of body image and its relationship to health among Embakasi Sub-County residents in Nairobi City County.

1.3.2 Specific Objectives

1. To describe the extent to which people's beliefs influence their perceptions to body image.
2. To find out how people's attitudes influence their perception of body image.
3. To determine how nutrition and physical activities affect body image.
4. To describe the relationship between body image and health.

1.4Assumptions of the Study

1. People's beliefs influence perceptions of body image.

1 People's beliefs influence attitudes towards their body image.

2 Nutrition affects body image and health.

4 Physical activity influences body image and health.

1.4 Rationale of the Study

The findings of this study should assist in formulation of appropriate strategies of preventing and managing of lifestyle diseases, such as cancer and Type 2 diabetes. For example, sensitization about the ill effects of sedentandry life, poor nutrition and lack of exercise on people's health. The findings have also provided anthropological information on body image, physical activity and dietary habits in relation to health. Most studies on body image, obesity, dietary habits and physical activity have been done by biomedical scientists and this study was necessary to explore the study problem from a social scientific perspective.

1.5 Scope of the Study

The study was done in Embakasi Sub-County of Nairobi City County among individuals aged between 30 and 55 years. The study explored how socio-cultural factors influence the perceptions of body image, obesity, physical activity and nutritional patterns could predispose the study objects to health risk factors. The theory of phenomenology was used to guide the study.

1.6 Limitations of the Study

Due to the descriptive nature of the study, it was not possible to test the relationship between the variables using statistical methods. The study was generally qualitative in nature and the small number of participants who were involved in could limit the generalization of the study results.

1.7 Definition of Key Terms

Perceptions -Individual knowledge, thoughts and beliefs regarding body image, physical activity, dietary habits and obesity.

Body image-A person's perceptions, thoughts and feelings about his/her body size and shape as influenced by socio-economic and socio-cultural factors in relation to health and beauty.

Knowledge – An organized body of information by an individual, community or group of individuals from which thoughts and behaviours are referred to as being either wrong or right.

Obesity – A condition in which an individual's body mass index (BMI) is at or above the 95^{th} percentile. WHO (1998a) has classified BMI into underweight (BMI < 18.5), normal (BMI 18.5 - 25), overweight (BMI 25-30) and obesity (BMI > 30).

Physical activity- Any bodily activity that enhances or maintains physical fitness and overall health and wellness.

Nutrition- The process of taking food into the body and absorbing the nutrients in those foods.

Prediabetes- A condition in which the fasting blood glucose is elevated above what is considered normal levels but not high enough to be considered as diabetes mellitus.

Beliefs- The psychological state in which an individual or a group holds a conjecture or premise to true.

Attitude- A psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature relevant to the research problem. The literature is reviewed under the following subheadings: Socio-cultural factors that influence body image, obesity, nutrition and physical activity; physical activity and health; nutrition and health; body image and health. The chapter also discusses the theory that guided the study.

2.2 Body Image

2.2.1 Obesity

Towards the end of the last century the World Health Organization (1998a) identified obesity as a global epidemic affecting an estimated 250 million adults worldwide. According to Haslam and James (2005:1198) the prevalence of chronic, non-communicable diseases is increasing at an alarming rate globally. About 18 million people die every year from cardiovascular disease, for which diabetes and hypertension are major predisposing factors. Propelling the upsurge in cases of diabetes and hypertension is the growing prevalence of overweight and obesity which have, during the past decade, joined underweight, malnutrition, and infectious diseases as major health problems threatening the developing world. By mid that century, more than 1.1 billion adults worldwide were overweight, and 312 million of them were obese. In addition, at least 155 million children worldwide were overweight or obese (WHO, 2006). However, WHO has revised the definition of obesity to adjust for ethnic differences, and this

broader definition may reflect an even higher prevalence with 1.7 billion people classified as overweight worldwide (WHO, 2006: iii).

Obesity acquired during childhood or adolescence may persist into adulthood, increasing later risks for chronic conditions such as diabetes, heart disease, hypertension, stroke and some type of cancers. A number of predisposing factors have been identified, including diet, physical activity and environmental factors. Genetic and metabolic factors create the foundation on which cultural, environmental and social factors merge to determine body weight. Socio-cultural factors include the way a cultural group is organized, the dominant ethos or worldviews and the key values, ideas and expectations of group members (Mavoa and McCabe, 2008: 375). Together, group structures, as well as the group's dominant worldviews, values, ideas and expectations about food eating, physical activity and preferred body size, and create a social and cultural environment that has the potential to either promote or protect against obesity. The remarkable rise in the prevalence of overweight in many traditional societies has been accompanied by westernization of their dietary and physical activity patterns (Bennett, 1999: 54). Since the roots of adulthood obesity and its subsequent effects on morbidity are laid down in childhood, early identification of the risk factors is pertinent and bears important public health implications (Wan et al., 2004).

Prediabetes has been shown to be closely related to body image (overweight and obesity), physical inactivity and unhealthy dietary habits. This 'obesity epidemic' carries with it the associated problems of the rising rates of co-morbidities (World Health

Organisation, 1998a). Obesity-related diseases include prediabetic condition and non-insulin-dependent diabetes mellitus. By 2005 diabetes had reached epidemic proportions in the United States, and its relevance was expected to continue to increase. Much of the increase was due to overweight and obesity and physical inactivity (US Department of Health and Human Services [USDHHS], 2001). Effective interventions to control or manage obesity will necessarily hinge on understanding the complex processes that determine body composition, including excess adiposity, in the population. These processes involve the interactions of numerous factors, including biological characteristics such as genetic predisposition, social, cultural, environmental, and behavioural factors (WHO, 1998a) group.

It is clear that obesity is associated to a large extent with lifestyle. However, there is no single best way to treat obesity. In general, the lifestyle therapies include behavioural modification, nutritional change, and exercise conditioning. Most importantly are lifestyle behaviours such as regular exercise and proper diet. Well-being comes about as the result of positive lifestyle choices. Changes in lifestyle that lead to weight loss reduce the incidence of diabetes and hypertension. But preventing obesity and other lifestyle-related infections will require fundamental social and political changes. Public health initiatives will be required to make affordable, healthful foods available, and initiatives in education and community planning will be needed to encourage and facilitate exercise which includes adopting global strategy on diet, physical activity, and health, which target lifestyle modifications that can combat the increase in non-communicable diseases (Hossain et al., 2007b:213).

2.2.2 Socio-cultural Factors Influencing Body Image and Physical Activity

Culture has been described as a: "... society that shares and transmits behaviours to its members…" (Cited in Cash, 2004: 3). Mary Douglas (1966) writes that the body is a form or surface on which the central rules, hierarchies, and commitments of a culture are inscribed. Similarly, Scheper-Hughes and Lock (1987:25) describe the body as a "natural symbol" for thinking about relationships between nature, society, and culture. Although body image is a relatively complex phenomenon, researchers such as Lovejoy (2001) now identify at least two independent components: (1) attitudinal body image, which consists of attitudes towards, and degree of satisfaction with the body and its parts; and (2) perceptual body image, which refers to the accuracy or distortion of self-perception of body size and parts (Lovejoy, 2001: 242).

Each society constructs its socio-cultural systems differently as individuals with agency negotiate and strategize their everyday lives (Wiedman, 2012: 602). In addition, research by Ball and Kenardy (2002: 206) among the Australian women has shown that culture plays a significant role in forming appearance ideals and that these vary for persons of different cultures. With the globalization of modernity, social and cultural chronicities increasingly develop in ways that structure an individual's everyday behaviours, over time containing their physical body. The kinds of work, the foods consumed, their beliefs, the design of houses and the workplace, all pattern and routinize behaviours. Political, economic, psychological, social, and material conditions accumulate during the life experience of the body. Conditions present during gestation, through early childhood, into adult and later years are modified by such factors as climate, seasonality, age, gender, ethnicity, technologies, built environments and socio-economic status. From a

bio-cultural perspective these limiting, containing, and recurrent cognitive, social, and material processes become embodied into the physiology and metabolism of an individual's body. Physical symptoms are manifested as observable changes in bodily functions, especially during major life disruptions. These recurrent processes over time structure, regularize and routinize the timing of everyday activities, and an individual's identity. However, these structural chronicities do not equally affect all members of a society, but specific segments within a population and these vary by country (Wiedman, 2012: 604).

An individual's cultural and social background influences their beliefs and perceptions about body image, and making healthy food choices does not always contribute to the body image that someone is trying to achieve or maintain. When asked about body image preferences, Latino-American and African American men and women were more attracted to overweight individuals than to normal weight individuals and provided many reasons why being larger than normal was something that many of them were okay with and even strived for. These reasons included being able to fill out their clothes better, a physical attraction to larger individuals within their culture, a family history in which having a lot of food shows financial security, and having size to succeed in sports (Barroso et al., 2010: 860). Latina women in a focus group study explained that having curves and a thicker figure is more attractive to themselves and to Latino men, in contrast to Caucasian women whom they described as striving more for the "thin norm" (Viladrich et al., 2009: 29). The prevalence of obesity in the United States supports these statements, as there are a greater percentage of obese non-Hispanic black and Hispanic adults than there are obese non-Hispanic white adults (Flegal et al., 2010: 240).

White (1991: 28) found that black women in America had significantly higher levels of obesity and its associated eating problems, such as compulsive overeating. Compared with white women, black women tended to exhibit lower levels of eating-disordered behaviour and attitudes related to a drive for thinness, such as excessive dieting and fear of fat (Akan and Grilo, 1995). A major in study in America in the 1990s found important differences between African and white females in body image and weight concerns (Parker et al. 1995: 10). Overall, 70 percent of black females were satisfied or very satisfied with their weight whereas, in sharp contrast, 90 percent of white females were unsatisfied. The main behavioural effects of negative body image (and indeed body dissatisfaction) are a need to alter one's body shape and weight loss methods (Brown & Brownson, 2002). Dieting is often used to lose and/or maintain weight, along with an increase in physical activity and other weight loss methods (i.e., medical advice). Researchers found that black females were more flexible and less absolutist in their definitions of beauty than white females. Black females saw beauty as deriving from "having the right kind of attitude" rather than the right body. They linked beauty to dress, style, and movement, emphasizing that beauty was within the reach of any woman who had pride in herself and her culture. This study suggests that many young black women in the study ignored the "tyranny of slenderness," defining themselves as subjects, and valuing their personhood rather than their objectified bodies. This explains the role that socio-cultural factors play in shaping people's perceptions of and attitudes to body image.

Dietary patterns or food use are structured socially and culturally. For instance, a study by Jebb (2003:190) found that at the time Americans were eating more food away from

home, drank more soft drinks and snacked more frequently than 20 years before. Behaviours of food consumption have been distracted by television watching and exposure to the commercial marketing of energy-dense foods. This fast food, according to Jebb (2003: 190) has characteristics that favour the development of obesity.

Perceptions of body image/physical appearance and healthy lifestyles are primarily based on one's cultural and racial cues (Weidman, 2006:31). For example, studies show that African Americans are more tolerant and prefer heavier body weights. Perception and acceptance of heavier body weights by African American females positively relates to the high rates of obesity found in African American communities. High tolerance for weight can create perceptions that being overweight and obese are normal and acceptable, rather than a leading cause for health complications and death (Blixen and Carol, 2006). Body image and awareness of body weight are established early in life. Even though heavier weights are identified as increasing risk for health complications, many African American women of the early 1990s still reported being satisfied with their weights (Stevens et al., 1994:362).

In the early 1970s weight was identified as an important health concern, source of psychological stress, and measure of self-esteem among white females in America (Lipman et al., 1972: 278).Achieving the thin body ideal was viewed as the key which opened the door to success, popularity, and romance. Decades of research indicate that physical activity and dietary habits are important behaviuors for health promotion and disease prevention. Specifically, physical activity has been found to contribute to health

benefits such as lower risk of diabetes mellitus (Kaye et al., 1991:802).In the late 1960s and early 1970s, researchers began to report that diabetes increased significantly as populations moved from rural to urban locations, migrated from non-western to westernized nations, lived at greater levels of acculturation on Pacific islands, or Native Americans on reservations (Cleave and Campbell, 1969; Wise et al., 1970). By 1971, the correlation of diabetes with modernization was recognized as the "Price of Civilization" (Prior, 1971). Indeed, a survey of 75 communities in 32 countries, reports that diabetes is rare in developing countries where a traditional lifestyle has been preserved, while those who have undergone westernization, industrialization, and urbanization exhibit a14–20 percent prevalence (Hossain et al., 2007a:2).

Diabetes is one of the most significant health threats of the 21st century. It is a leading cause of disability and mortality, and its prevalence has increased to the point that it has been termed an epidemic. Type 2diabetes is a metabolic disorder, with food intake, weight and physical activity directly influencing an individual's glycolic load or carbohydrates concentration. Changes in lifestyle, weight, physical activity and diet can reduce and prevent incidences of diabetes (Maiorana, 2002:862; Tuomilheto, 2001:1346) and other lifestyle diseases. Prediabetes is a preventable condition through control of an individual's lifestyle- weight, physical activity and dietary patterns (Maiorana, 2002:863). It is characterized by higher than normal blood glucose level, which can cause damage to health over time. However, without the knowledge of health risk factors, individuals in jeopardy not only are more likely to be inactive participants in preventing these diseases, but might also be putting themselves at further risk.

The first step in disease prevention, therefore, must be an understanding of the individual knowledge, beliefs and practices related to this disease. Type 2 diabetes, the most common form of diabetes, is usually not diagnosed until complications arise. Not unsurprisingly, therefore, approximately one-third of all people with diabetes may be undiagnosed (ADA, 1998). On the other hand, obesity is a new condition in human evolutionary history, having become common as the population level grew higher with increased food security. Over the past 68 years or so social, economic and technological changes have altered patterns of life almost everywhere on earth (Ulijaszek and Lofink, 2006: 377).In tandem with the economic and technological advancement, changes in diet and physical activity patterns have been central to emergence of obesity among many of the world's population, including the developing world (Popkin and Doak, 2004: 110).

Social institutions such as government agencies, health and educational institutions, food production, manufacturing and service industries increasingly standardize and routinize their organizational processes as the numbers of clients and employees grow and costs are managed. Wallace (1970) portrayed this cultural process as the organization of diversity and the replication of uniformity. Foucault (1977) writes about this as modern institutions controlling bodies through systems of power and knowledge, and Bourdieu's (1977) "habitus" portrays these as socially acquired everyday routines of thoughts and actions. For Bourdieu (2004), social position and these everyday routines influence rural Frenchmen's perception of their body affecting marriage selections. As individuals interact with or become part of these ideologies, social structures, and material cultures of modernity, their behaviours become less variable and more uniform. It is this chronicity

of everyday physical activities, foods, and ideologies that is the basis of metabolic disorders such as diabetes and obesity (Bourdieu, 2004: 15). In each modernized society, social institutions, ideologies, and material cultures differ in specifics, but are similar in effects on the body. It is in this way that the social and cultural is embodied at the cellular level in the metabolic system. Individuals often do have agency, the power to make decisions and behavioural actions counter to a culture's institutionalized values, normative rules, and institutional policies (Barth, 1966: 57). However, given the pervasiveness of this global pattern of chronicities to address these lifestyle-related conditions, it is important to identify the structural constraints and incentives that set parameters and pattern an individual's decisions and behaviours.

Evidence suggests that these obesity rates link to body image perceptions, which vary across ethnic groups. Perceptions result from the interactions of cultural values, societal perceptions, physical attractiveness, gender identity and media influences (Vartanian and Hopkinson, 2010).The increasing rate of obesity across the world has been attributed to environments that are obesegenic (Hill and Wyatt, 2005: 765). A dominant explanatory framework for the emergence of obesogenic environments is that of nutritional transition (Popkin and Doak, 2004: S140).Cultural norms have also made humans susceptible to obesity (de Garine and Pollock, 1995: 292).

2.2.3 Physical Activity and Health

According to Erlichman et al. (2002:273) low levels of physical activity are associated with an increased risk of obesity and other lifestyle-related diseases. Besides, obesogenic

environments not only discourage physical activity but also encourage inactivity both occupationally and during leisure time (Hill and Wyatt, 2005:767).In industrialized nations and urban areas of developing countries, jobs requiring heavy manual labour have been largely replaced by jobs in service and high technology sectors, which require minimal physical exertion. The increased use of automobiles and public transportation systems in urban areas of developing nations encourages inactivity, whereas increased time spent watching television, playing electronic games and/or using computers has increased the sedentary behaviour of both adults and children (Brownell, 2002: 433).

Physical activity plays a major role in weight loss and, by extension, prevention of diseases such as diabetes. The most obvious benefit of physical activity and exercise is the reduction of body fat through energy expenditure(Lipman et al.,1972).Urban residents are in this case mostly known to more likely watch television, engaging in sedentary behaviours while eating and increasing risk for weight and, by extension, risk for prediabetic condition and, finally, Type 2 diabetes (Kimm,2001: 34).The greatest deterioration in physical activity is likely to be observed among persons between the ages of 15 and 18 years and a continuous decline is common between 18 and 29 years of age and is also uncommon among occupational groups which undertake high levels of physical activity during working hours (Caspersen et al., 2000 :1607).

Obese and overweight persons tend to be poorly motivated to participate in physical exercise. This is due to perceived negative consequences, such as shame and embarrassment at bodily exposure, real and imaginated negative attention or ridicule

from those more fit than themselves, and negative attention, and anxiety about time taken away from family or other pleasurable activities (Knapp, 1988: 220).

2.2.4 Nutrition and Health

Food is valuable as air and water. This is because it is used by our bodies and changes into those materials which are necessary for the health and stability of organs. The healthiness of a person depends on selected food kind and quality as his/her diet (Charles and Carl, 2007: 7). Human's nutrition includes food habits, food beliefs, effects of traditions, effects of geography, religion, social factors, physiologic factors, food income, culture and education, and mass media. The useful effects of a good nutrition are healthiness, luckiness, affectivity, and long lifetime, all of which contribute to positive society's development (ESfahani, 2006: 2). Maleness and femaleness in all cultures are associated with specific foods, and rules often exist to control the consumption of those foods (Brumberg, 1988:177). For example, the Hua people of Papua New Guinea have complex gender relations in their elaborate conceptions about *koroko* and *hakeri'a* foods. The former are cold, wet, soft, fertile, fast-growing foods associated with females, while the latter are hot, dry, hard, infertile, and slow-growing foods associated with males (Counihan, 1999:48).

Diet is pivotal to weight maintenance and diabetes prevention as it directly influences the individual's glycemic load and therefore health risk. Cultural values and community pressures are also reported to influence diet management. Physical activity and diet play a significant role in regulating and preventing risk for lifestyle-related diseases. The

promotion of healthy eating in children and adolescents should become an increasingly important issue to the public and a research priority to manage the rising prevalence of overweight and obesity among children and adolescents (Lobstein and Frelut, 2003:116). Preventing the onset of obesity-inducing dietary behaviours or modifying these behaviours at an early age is likely to contribute to the prevention of overweight and obesity which poses the greatest health risk factor. A detailed understanding of factors that determine these behaviours is essential to be able to effectively prevent or modify obesity-inducing eating patterns. To understand this, focus is on the level of behaviours such as attitudes, test preference, social influences and perceived behavioural control (Lobstein and Frelut, 2003:123).

Dietary behaviours and habits are likely to be influenced by environmental factors. The role of parents, for instance, is considered to be of particular importance since parents directly determine the child's physical and social environment and indirectly influences behaviour and habits through socialization processes and modelling (Ritchie et al.,2005:72).A sedentary lifestyle and excess calorie intake contribute to overweight and obesity, and the period between adolescence and early adulthood is accompanied by lifestyle changes that predispose young adults to less physical activity (Caspersen et al.,2000:11) and this means they become prediabetic.

2.2.5 Body Image and Health

Body image is an individual's psychological experience of the appearance and functions of her body (Cash and Prunzinsky, 1990). It is a psychological phenomenon that is

significantly affected by social factors. Therefore, to understand it fully, one needs to look at the experiences of individuals in relation to their bodies and the cultural milieu in which the individual operates. The image that an individual has of his or her body is largely determined by social experiences. Body image is elastic and open to change through new information, i.e., through the media, family or friends' influences, since it is socially constructed. It must be investigated and analyzed within its cultural context. Promotion of positive image is important in improving people's health and body image is implicated in a number of health related behaviours (Cash and Prunzinsky, 1990).

Body image influences one's participation in physical exercises and eating habits. In affluent Western societies, according to Tur et al. (2005:527), slenderness is generally associated with happiness, success, youthfulness and social acceptability. Being overweight, on the other hand, is linked to laziness, lack of willpower, and being out of control. Tur et al. (2005:533) further postulate how excess flesh (for men and women) came to be linked with low morality, reflecting personal inadequacy or lack of will. In order to determine the health risks related to body image (overweight), overweight is defined as having a body mass index of 25-29.9kg/m^2 which is closely related to obesity where one is said to have a BMI of 30kg/m^2 or more. Obesity is a condition seen as detrimental to human health and it is associated with lifestyle diseases such as hypertension and diabetes (Grogan, 2008: 2). Cultural variations of appropriate and preferable body image may also contribute to obesity rates (de Garine and Pollock, 1995:7). In some societies, a larger body size has traditionally been seen as attractive and indicative of attributes such as health, fertility, beauty, wealth, and power. In the majority

of cultures for which data exist, plumpness is preferred, especially for women, because it is associated with fertility, hardiness, power, good nurturance, and love (Thompson, 1994:15). For example, Jamaicans define a fat body as juicy, flowing with fertility and sexiness (Sobo, 1997:113). Fijians also prefer a plump body because it as a product and a symbol of care, generosity, and social cohesion (Becker, 1995:42). In contrast, most Americans cultivate their bodies as reflections of individuality and focus on thinness as a symbol of self-control and power.

Various societies across the world practise or have practised ritual fattening to promote fertility, marriage ability and embodied social status (de Garine and Pollock, 1995:18).Studies showing an increased value of thinness and increased awareness of the risk factors associated with overweight and obesity suggest that socio-cultural factors, such as participation in the global economy and exposure to western ideas, may influence body image perceptions worldwide. Tur et al.(2005) found that a number of communities and societies in which obesity have risen in recent decades and that previously were shown to desire and/or accept larger bodies and obesity now preferred thinner bodies. This has also been observed among African American girls and women with diabetes by Lieberman (2003).

Anthropologists have documented that the desire for fatness, associated with economic prowess, is still found today among people of developing counties. For example, many cultures such as the Annang of Nigeria still practise forced feeding of girls (Cassidy, 1991:182). The most beautiful woman is one who is so fat she is unable to work or move

about easily. This becomes a symbol of wealth, for only the richest man can afford to lose the potential productivity of a wife and daughter. Additionally, in much of Western Africa the term ‘fat’ is viewed as a compliment implying strength and beauty (Cassidy, 1991:193).

2.3 Theoretical Framework

2.3.1Phenomenology

This study was guided by the phenomenological approach. Phenomenology is a research practice that involves and provides the careful description of aspects of human life as they are lived. It is an effort at improving our understanding of ourselves and our world by means of careful description of experience (Jackson, 1983, 1998; Merleau-Ponty, 1998). Phenomenology was propounded by Michael Jackson (1998) and made prominent by the works of Merleau-Ponty.

Phenomenology argues that the world of immediate or lived experience takes precedence over the objectified and abstract world of the ‘natural attitude’ of natural science (Merleau-Ponty, 1998). Science is thus secondary to the world of concrete lived experiences. Phenomenology clarifies things and experiences, thus bringing them to the common knowledge (Jackson, 1996). The phenomenological method is one of the direct understandings of the ‘thick’ description, a way of putting to balance the diverse human experiences and to deconstruct ideological traps that experiences would become if theorized.

Phenomenology engages in a process called ‘bracketing’ in which the ‘natural attitude’ is placed aside such that the researcher begins with the ‘phenomena themselves’ and lets the phenomena show themselves from themselves in the very way in which they show themselves from themselves (Merleau-Ponty, 1998). In this sense, ‘the being-in-the-world’ of and agent is reinforced. Being-in-the-world means that the agent (the being) never acts in solitude but in and through a matrix (the world), thereby reproducing the structures of the matrix while at the same time creating newer structures to suit its survival. Phenomenology thus envisages that an agent experiences the environment in a unique way and therefore it is only through the agent that we can understand the experience of the agent.

To achieve this, researchers must put aside all biases they may have about the phenomena. When we have prejudice against a person, we will see what we expect, rather than what is there. The same applies to phenomena in general (Merleau-Ponty, 1998; Jackson, 1998): we must approach them without theories, hypotheses, metaphysical assumptions, religious beliefs, or even common sense conceptions. The point of the anti-theoretical attitude is that the variety of human experience cannot be comprised in a body of enumerable theories (Jackson, 1996). Phenomenology, thus, never begins with a theory but, instead, begins anew with the phenomena under consideration. Ultimately, bracketing means suspending judgments about the ‘true nature’ or ‘ultimate reality’ of the experience – even whether or not it exists.

With phenomenology, skepticism is replaced with a more generous, and ultimately more satisfying, curiosity. By returning to 'the phenomena themselves,' or to the lived world, we stand a better chance at developing a true understanding of human existence (Jackson, 1998). Phenomenology reveals the ways in which humans are (Jackson, 1983; Merleau-Ponty, 1998). The first hurdle in social science research is the traditional dualism between subject and object, which splits man as knower from his environment as the known. But in the phenomenological attitude, experience does not show this split. The knower and known are both inextricably bound together (Jackson, 1998: 5).

Another element of phenomenology is that it views human lived experiences from the insider rather than pretending to understand it from an outsider, 'objective' point-of-view. The insider's perspective therefore becomes the focus of interrogation. Phenomenology thus espouses the careful description of the lived experiences from the insiders' perspective. Researchers are consequently tasked with the responsibility of shedding off their prejudiced knowledge and literally enter the mind of the object of study so as to understand how and why the object expresses itself in the way it does. This is the only way that a phenomenon could possibly be essentially understood (Jackson, 1996: 2).

2.3.2 Relevance of Phenomenology to the Study

Society has perceptions and attitudes which are instilled into the individual through socialization. Theoretically, the society's perceptions and attitudes become an individual's perceptions and attitudes. However, agents have the power and capability to act otherwise and therefore develop varied perceptions and attitudes that give them the

capital over other agents within the same society. The agent therefore becomes a more practical element of study when one seeks to understand a phenomenon.

Body image is construed differently by different individuals. The notion of an ideal body image is shaped by the society's expectations though in all cases it is the individual who works to attain the ideal body image. This makes the individual develop attitudes to and perceptions of body image that may (in various degrees) differ from those of their society. These individualized perceptions and attitudes guide individuals to take up practices that will make them achieve their idealized body image. This includes engaging in certain dietary patterns and physical activities. These practices have health implications, whether positive or negative, which the individuals may or may not be conscious of.

The study described the perceptions of and attitudes to body image among the residents of Embakasi Sub-County in Nairobi City County, and how these related to health. To satisfactorily understand the people's attitudes and perceptions, there is need to overlook objectified realities and rationales according to the researcher, and instead get into the field with empty minds ready to be filled by the experiences of the object under study, see through the object's eyes, hear through their ears and walk in their bodies. This will give a more elaborate and authentic respondents' knowledge, attitudes, perceptions and practices and, in this respect, phenomenological anthropology brings back the critical sense of the vision of fieldwork.

Body image is shaped by a complex interrelation between attitudes, perceptions and practices. Individuals and society's perceptions and attitudes define what the ideal body image is. The individual then takes up practices to achieve this ideal body image through dietary patterns and physical activities which, in turn, have implications for health. This can be conceptualized as shown in Fig.2.1 below.

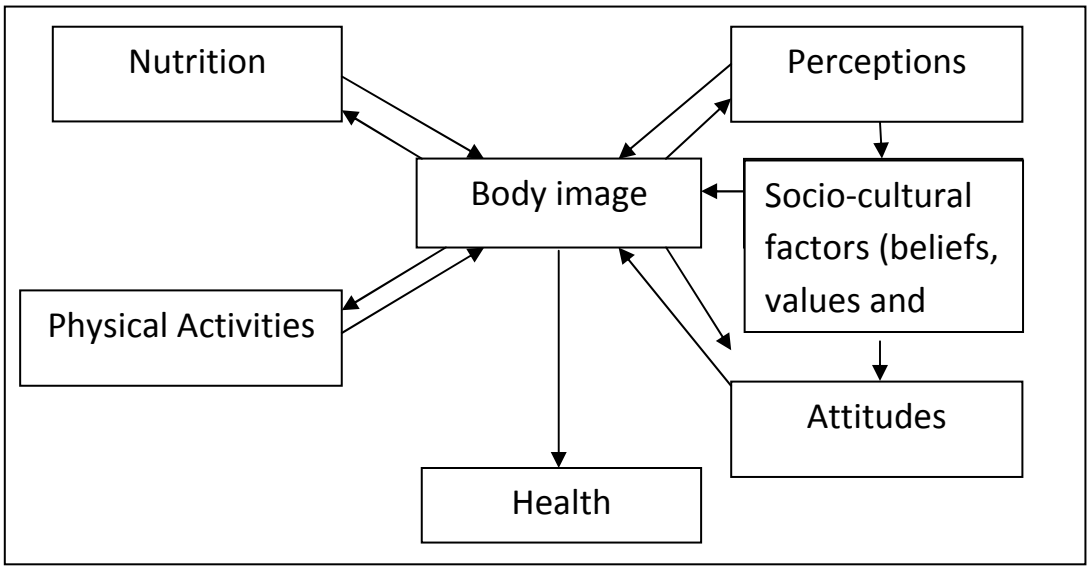

Fig. 2.1: Conceptual Model

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the research site, study design, study population and unit of analysis. The chapter also describes the sample population and sampling technique as well as the methods and instruments of data collection and how the data were analyzed. Finally, the chapter discusses the ethical considerations that had to be considered.

3.2 Research Site

This study was carried out in Embakasi Sub-County of Nairobi City County (Figs.3.1 and 3.2). Nairobi is the capital city and largest city in Kenya. The city is located at 1,795 m above sea level. The name "Nairobi" comes from the Maasai phrase "enkare nyirobi" which translates to "the place of cool waters". The city lies on the Nairobi River in the South of the Nation. According to the 2009 census, the administrative area of Nairobi has 3,138,295 inhabitants living in an area of 696 $km^{2.}$ The county has some of the most dense, unsanitary and insecure slums in the world. Almost half of the city's population lives in over 100 slums and squatter settlements within the city, with little or inadequate access to safe water and sanitation (GOK, 2010: iv). It is a cosmopolitan and multicultural city.

Embakasi Sub-County is inhabited by persons of both middle class and lower class economic statuses that are categorized as literate and aware of lifestyle health hazards. In addition, being an urban area, the people have access to physical exercise facilities

such as the gym. Thus, Embakasi serves as an example of how urbanization and lifestyles affect people's perceptions of body image, physical exercise and health.

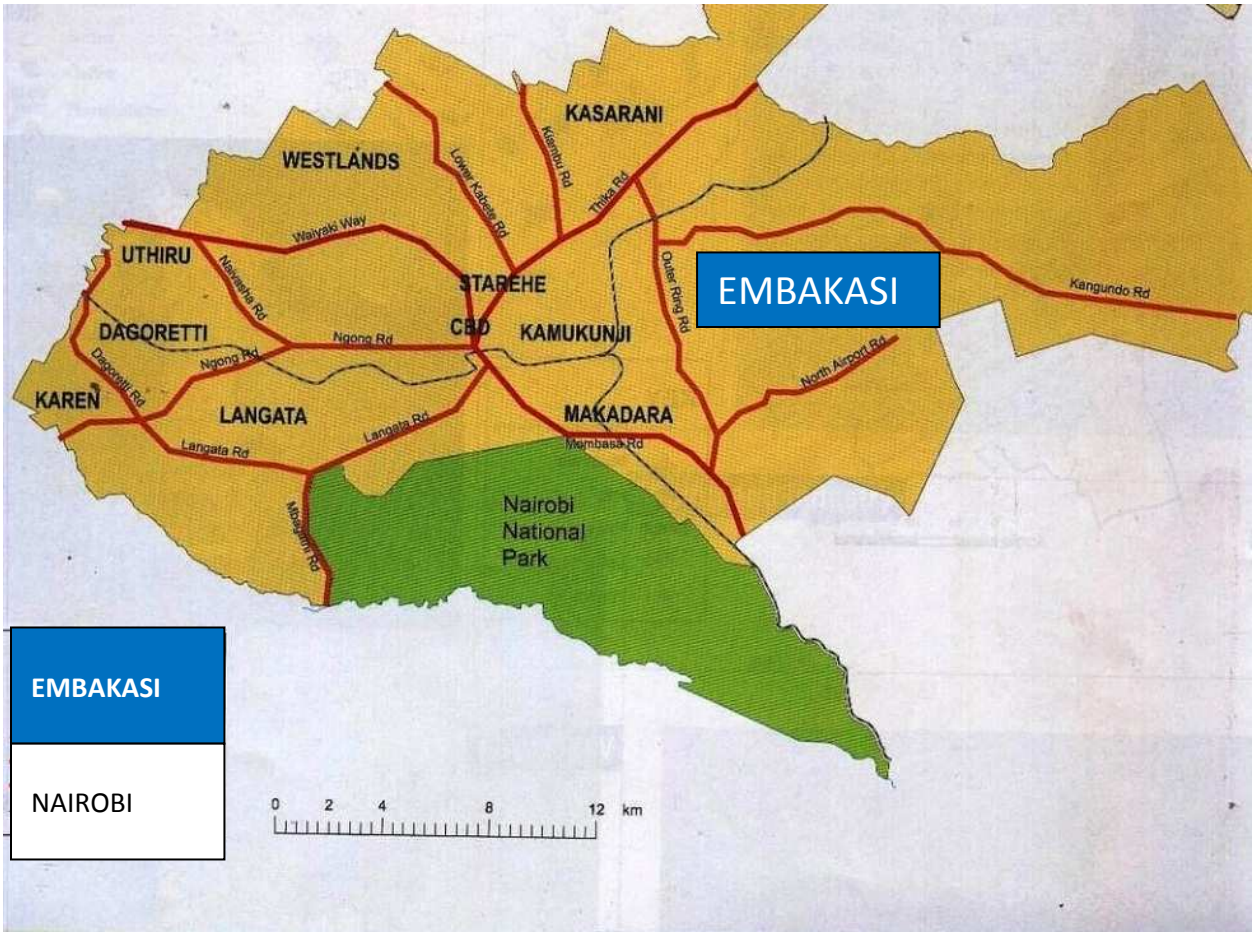

Figure 3.1: Map of Nairobi City County showing the location of Embakasi Sub-County (Source: Malagon, 2011: 2)

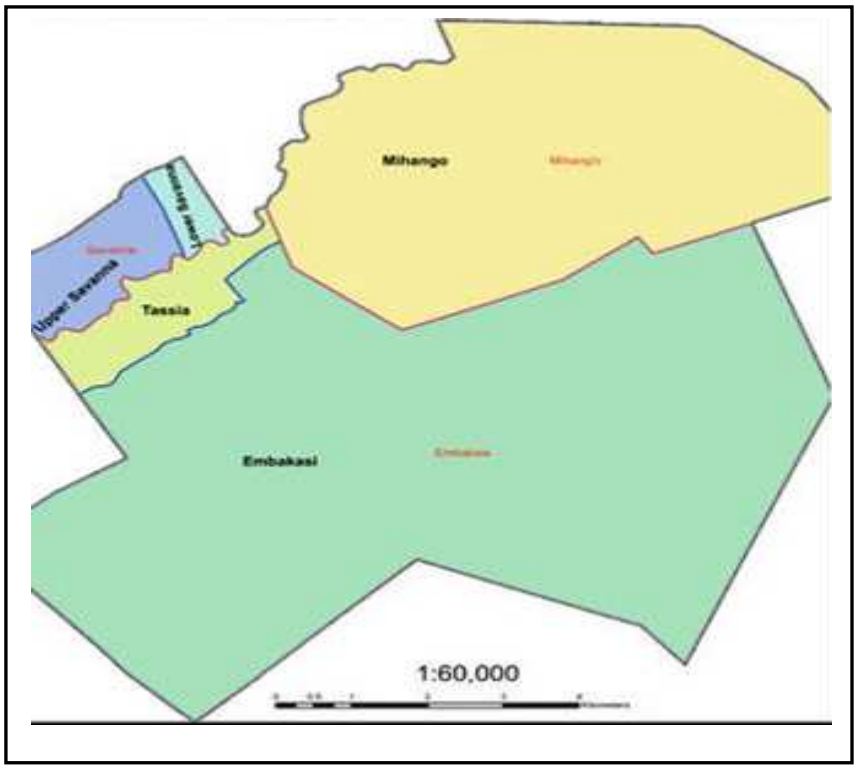

Figure 3.2: Map of Embakasi Sub-County (Source: Malagon, 2011:8)

3.2.1 Health Care Facilities

According to the Nairobi Strategic Development Plan for 2007-2012(GOK, 2007) the best medical facilities in East Africa are found in Nairobi. Nairobi City County has over five hundred established formal health facilities which include three district hospitals, 1 national referral hospital(Kenyatta National Hospital),156health centres, 496 dispensaries, medical clinics, both public and private, and unaccounted informal medical specialists like herbalists, shamans, diviners and seers. In addition to hospitals, there are numerous private clinics that serve the county's population.

3.2.2 Educational Facilities

Nairobi is home to several education facilities including universities, university satellite campuses, youth polytechnics, technical colleges, other tertiary colleges, secondary schools, primary schools, and other forms of learning institutions. In 2007, Nairobi City County was estimated to be hosting about 1,241 primary schools, 335 secondary schools and about 60 tertiary colleges. This may explain the increased rate of literacy among the residents of Nairobi City County (GOK, 2007: v).

3.2.3 Economic Activities

Nairobi is the main commercial centre of the country. It has a well developed infrastructure, including modern financial and communication systems. Nairobi is the headquarters for both international and local companies and organizations, with a well developed system of hotels and top-rate tour companies, while the county's national park caters for many tour companies and travel agencies. It is a manufacturing and tourism city (GOK, 2007: iv). This offers employment opportunities to the residents of Nairobi City County, both in formal and informal occupation. The inhabitants of Embakasi are engaged in both informal employment such as *Jua Kali* and housekeeping and various formal sectors like the government, parastatals, and the private sector.

3.3 Research Design

This study adopted a cross-sectional and exploratory research design. Data were collected using in-depth interviews, focus group discussions, key informant interviews and narratives. Qualitative data were sorted, summarized, categorized and analyzed

thematically for content on the basis of the research objective and research findings are presented according to themes, in direct quotations and selected comments. On the other hand, the quantitative data were analyzed arithmetically and the findings are presented in tables of frequencies and percentages, as well as pie charts.

3.4 Study Population and Unit of Analysis

The study population comprised women and men aged between 30and 55 years old living in Embakasi Sub-County. This age group was selected because individuals within it are likely to be married and/or employed which comes with influence on their eating habits, physical exercise, and expectations of a married life. The unit of analysis was the individual man or woman in that age bracket.

3.5 Sample Population and Sampling Procedure

The sample population consisted of 70 individuals selected using purposive sampling.Age range determined who participated in the research study. With the help of the local administrator who was familiar with the area, individuals aged 30-55 years were purposively selected to be interviewed. The individuals were then asked of their age and willingness to participate in the interview.

3.6 Methods of Data Collection

3.6.1 In-Depth Interviews

An in-depth interview schedule (Appendix 1) was used to collect information from the seventy respondents. This method enabled the researcher to acquire the study's baseline

data and detailed information on the sample population's beliefs and attitudes towards body image in relation to health. The open-ended questions provided room for probing.

3.6.2 Key Informant Interviews

Key informants are people believed to be knowledgeable on the topic under investigation. According to Peil (1995) key informants are selected because of the specific information they have and the most important contribution is their well considered interpretation of complex events. In this study two nutritionists and three health officers were interviewed. They were purposively selected and face-to-face interviews conducted with them. A key informant interview guide (Appendix 2) was used to collect information on body image, obesity and other health risk factors.

3.6.3 Focus Group Discussions

Focus group discussions (FGDs) enabled the interviewer to compare the outcome from the discussions and the responses given in the questionnaires and to obtain consensus on contentious issues. In addition, this enabled the researcher to observe the participants' first reaction to sensitive issues related to their body images, obesity, physical activity and nutrition and also probe issues arising from the survey. Four focus group discussions were held and each group consisted of at least 10 members from the following categories of participants: old men, old women, young men and young women. A focus group discussions guide (Appendix 4) was used to guide the discussions.

3.6.4 Narratives

This study also used narratives to obtain detailed lived experiences and personal perceptions of and attitudes to body image, obesity nutrition and physical activities and how these relate to health. Four people provided the narratives.

3.6.5 Secondary Sources

Documentary materials such as health education articles, the internet, books, theses and journals and other relevant literature on body image, physical activity, dietary patterns and obesity were used to gather background information to the study. In addition, these sources continued to act as reference materials throughout the entire period of the study.

3.7 Data Processing and Analysis

Qualitative data from in-depth interviews, focus group discussions, and narratives were sorted out and interpreted in relation to the research objectives. Quantitative data on the bio-demographics of the respondents were analyzed using the Statistical Package for the Social Sciences (SPSS) software version 20 to generate frequencies and percentages.

3.8 Ethical Considerations

The researcher received all the necessary approvals from the relevant authorities. Consent of respondents was sought before commencing the interviews. Full explanation of the purpose of the research study, expectations of the researcher from the respondents and why it was important to co-operate with the researcher took precedence. The study ensured privacy and confidentiality to the respondents by using codes and pseudonyms

instead of their real names. The study also took into consideration the code of ethics in conducting anthropological research. A statement of consent (Appendix 6) was read out to all subjects in the study and they were asked for their informed verbal consent to participate. Only those who gave their consent were interviewed.

3.9 Dissemination of Study Results

The results of this study will be made available at the online library services of the University of Nairobi. Copy of the thesis will also be made available to Steno Health Promotion Centre and other relevant authorities. Above all, the results will be published in journal articles so as to share knowledge with the scientific community worldwide.

CHAPTER FOUR

SOCIO-CULTURAL FACTORS ON ATTITUDES TO AND PERCEPTIONS OF BODY IMAGE AND ITS RELATIONSHIP TO HEALTH

4.1 Introduction

This chapter presents the research findings. The findings are based on data collected through in-depth interviews, focus group discussions and narratives. The chapter starts by outlining the socio-demographic profiles of the respondents. The findings are presented based on the objectives of the study.

4.2 Socio-demographics of the respondents

4.2.1 Age

A total of 70 respondents were the main source of the data presented here. Thirty per cent of the respondents were in the 30-35 age category, 25% were in the 36-42 age category and 45% were in the 43-55 age category (Table 4.1).

Table 4.1: Age of the respondents

Age	**Frequency**	**Percentage**
30-35	21	30
36-42	18	25
43-55	31	45
Total	**70**	**100**

4.2.2 Gender of the respondents

Both men and womenparticipated in the study. Of these, 58% were women and 42% were men.

4.2.3 Marital status

Marital status was also considered as an important variable in terms of expolring its significance in matters of perceptions of and attitudes to body image. Twenty-five percent of the respondents were not married while 20% were once maried but were now either separated/divorced or widowed, and the rest (55%) were still married (Figure 4.1).

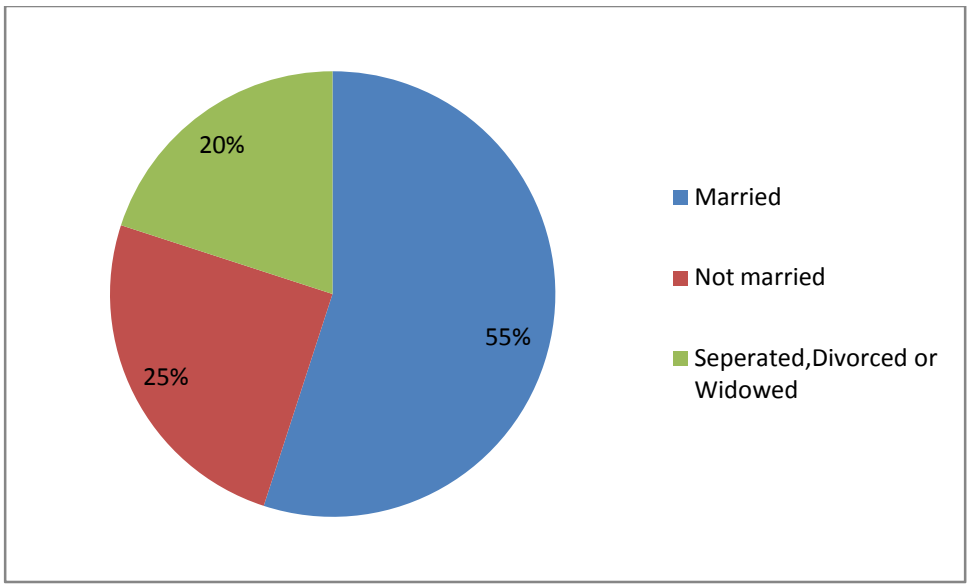

Figure 4.1: Marital status of the respondents

4.2.4 Level of Education

The study population's level of education was generally high with 60 per cent of the respondents having completed secondary education, 30% had attained college level of education while only 10% had primary education level and below (Table 4.2).

Education was seen as an important variable that was likely to influence the respondents' perceptions of and attitudes to body image and health.

Table 4.2: Level of Education

Level of education	**Frequency**	**Percentage**
Primary certificate	7	10
Secondary certificate	42	60
Above college education	21	30
Total	**70**	**100%**

4.2.5 Ethnicity of the Respondents

Since one of the objectives of the study was to explore how socio-cultural factors influence the perceptions of and attitudes to body image, dietary habits and physical activity, ethnicity was also considered as an important variable in exploring these issues in the study population. The findings on this variable are presented in Table 4.3.

Table 4.3: Ethnicity of the Respondents

Ethnicity	**Frequency**	**Percentage**
Gikuyu	8	11
Kamba	10	14
Luo	5	7
Luyia	6	9
Kalenjin	4	6
Gusii	7	10
Somali	3	4
Asians	8	11
Mijikenda	6	9
Meru	4	6
Briton	1	1
Kuria	6	9
Maasai	2	3
Total	**70**	**100**

4.3 Body Image

The study findings indicate that the respondents describe body image in terms of shape, size and height. Focus on what is attractive and beautiful also varied greatly among the respondents. The study findings suggest that male experience of body size and shape is vastly different from that of females. Men think less about being fat; they are less prone to connect it with psychological, personal, or emotional problems and do not really think

being overweight or obese affects their relationships or masculinity According to Alice (not her real name) "an attractive woman should have big hips, should be moderately fat.'' Pointing at picture no.5 (Appendix 5) she stated that a body figure like that fits well into clothes and makes the body attractive.

Body image describes and means a lot to the achievements that one gets in life. According to Eunice(not her real name),an attractive body image brings good suitors for a woman for marriage, puts one in a social class that commands respect among colleagues and could also show the amount of economic and financial resources that one has in life. As Eunice narrates in Box 4.1 below:

Box 4.1: Eunice, 38 years old

My body size and height of 5 feet 6 inches and weighing 110kg really makes my people respect me when I visit my village in Nyanza. It persuades my folks in the village to believe that I am happily married to a very rich man and I am rated to belong to a higher social and economic status in my family despite the fact that I am living a generally humble life in this slum of Mukuru.

The respondents described a slim body as being beautiful and attractive. Being a cosmopolitan city, this could be due to the influence of westernization on the respondents' perceptions of what a beautiful body should look like. The belief in western lifestyles also had much influence on how the respondents perceived body image. For a modern Nairobi female resident, a slim body is what every woman craves to attain as this

is purportedly the ideal beautiful body image. Thus, a big body is associated with irresponsible eating habits, as described by Zawadi (not her real name) in Box 4.2 below:

Box 4.2: Zawadi, 30 years old

I am 62kg and describe my body weight as being big. I am very unhappy with my body size and image, and I blame this on my very poor eating habits for I tend to eat too much of chunk food. I particularly love French fries. As an educated lady, I would like to work extra hard by managing and monitoring my dietary habits and doing lots of physical exercises such as joking in the morning hours. Although my mother and my boyfriend really appreciate my body size and weight, I think that I am too big. And I am scared of getting lifestyle diseases like diabetes.

The respondents were asked to make comparisons between an attractive man/woman and unattractive man/woman using the illustrations in Appendix 5. They gave various answers in regard to an attractive man. Seventy per cent of the respondents said that an attractive man is one who is not underweight or overweight. He should be neither too fat nor too slim. On the other hand, the remaining 30% stated that an attractive man should have a height of more than 1.2 metres, be physically fit, and weigh between 60kg and 80kg. However, any man who does not care about his body image, which is obese or is a dwarf, was considered unattractive by all the respondents.

In the case of a woman, 60%of the respondents indicated that an attractive woman is one with an average height of less than 5 feet 4 inches, maintains her body shape and is generally beautiful. In contrast, an unattractive woman is one who is overweight and does not care about her body image or shape. Extremely tall or obese women were also considered as being unattractive by all the respondents.

4.4 Perfect vs. Imperfect Body Shape and Size

Using picture 6 (Appendix 5) the respondents felt that this represented an average size of a perfect body, one that keeps one out of diseases and fits into outfits easily. The perfect body was seen as one averagely weighing between 60kg and 80kg. According to all the respondents a perfect body is one that keeps a person physically fit and attractive. They added that in appropriate and overweight body (over 80kg for women and 100kg for men) is prone to many disadvantages such as lifestyle-related diseases, leading to remarks such as *"if a person is so thin, he /she must be drinking, or using drugs*". One respondent added, "*he/she must be HIV positive*". The study findings indicate that overweight is considered as an amorphous shape and unattractive for either sex. According to Abby (not her real name) "*a sexy and beautiful woman should have a coca cola bottle shape"*. Among the suggestions for achieving a perfect body were eating a balanced diet and exercising on a regular basis. In addition, the respondents pointed out that physical, mental, and psychological fitness defines a perfect body.

Among the male respondents twelve of them considered female picture 3 (Appendix 5) as attractive because the body is neither too slim nor too fat. According to them, the

body depicts the ideal shape of a model with good, attractive weight and shape. Female respondents, on the other hand, chose picture 5(Appendix 5) as the most attractive for men. In either case of the genders, the respondents considered people having body size portrayed by picture 5 as healthy. Reasons for their choice were that such people are likely to be carrying out exercises and, in general, eating healthy. According to Ranhel (not her real name) aged 37 years, “being fat makes a woman unattractive, asexual, and remote and she can avoid sex entirely. However, being excessively thin is not also beautiful for a woman.”

4.5 Socio-cultural Beliefs of Body Shape and Size

The study findings indicate that in societies where the respondents hail from, obese people are looked down upon and are believed to be badly brought up. Other respondents indicated that individuals with figure 8 shape (Appendix 5) are perceived by the community to be wealthy, especially among the male gender and therefore contented with life. The belief therefore is that obesity is more or less a measure of wealth and so such big-bodied people are believed to be rich and to have lots of money. This is in agreement with the findings of a study by Bott (1981:7) among the Tonga and Fiji which found that the way a culture is structured both reflects and perpetuates the relative rank and status of individuals within that group. Together and separately, rank and status influence expected and actual patterns of eating, physical activity and body image. From the FGDs, there emerged a close relationship between wealth, education and body image.

The study findings suggest that socialization and enculturation also have a lot of influence on the beliefs that one has of body image and how these factors influence one's health. According to Bella (not her real name) who hails from Nyanza region, a fat woman could carry pregnancy to full term and give birth to a healthy child without any delivery complications. She added that a woman with a big body has a larger space in her uterus to accommodate the growing foetus and would give birth to a bigger baby compared to one with a slim body size. The bigger size also comes with big hips and tall stature. The study also revealed that 60% of the respondents believed that a big body is a sign of good health when one is aging. Starting from the age of 30 years and once an individual is married, she/he is expected to grow fat so as to age gracefully. According to one of the respondents who hails from the western region of Kenya, a married woman should get fat as a measure of stability in her marriage. It is therefore the responsibility of married couples to meet this societal expectation in their marriage by eating food that is perceived to facilitate the growing of a big body.

Fatness is believed to be a show of good health. However, obese women are considered as unattractive and some communities, for example, the Luo of Nyanza region, believe that men should be fatter than women. Children aged up to 14 years should have small bodies because of age and shame since big-bodied kids always feel embarrassed and intimidated. Similarly, youths aged 18-30 years have the desire and work towards having slender bodies. Ladies, for instance, believe it is a sign of beauty while men believe that it adds to the qualities of being handsome. Moreover, 90% of the male respondents were of the opinion that females with medium-sized and healthy bodies attract men more

compared to those with slim or obese body size and shape. On the other hand, male persons having well-trimmed, huge, and streamlined bodies are considered to be healthy and also attractive to ladies.

All the respondents were in agreement that in their communities there exist some traditional beliefs that people should gain a lot of weight after getting married because they are well taken care of. The general belief as indicated by the findings is that married people should be fatter than unmarried ones. However, most married women prefer less body fat and have much desire for medium-sized bodies so as to remain healthy and also attractive to their men. Unmarried women are believed to always work on their weight with the aim of becoming beautiful and attractive. As narrated by Kelong (not his real name) aged 47 years, once married, one is expected to grow fat (see Box 4.3 below).

Box 4.3: Kelong, 47 years old

Before I got married, I weighed about fifty kilos. I did not understand about body weight management but during my wedding my parents and in-laws told me that it was mandatory to gain weight since it would show how responsible my wife and I were in our marriage. They added that the community is watching that I should also ensure that my wife who was then 50 kilos should gain weight. My mother stressed that fatness in marriage is a sign of good social and emotional relationship between the couple.

The study also found out the influence that employment has on the perception of body image. Sixty percent of the respondents believed that once employed, individuals gain more weight, an indication that they are rich. The unemployed usually remain skinny as

a result of poverty. Consequently, employed individuals look fatter and more attractive compared to the unemployed. On the other hand, unemployed ladies always admire a well build body to avoid people's negative thoughts of them being idle.

4.6 Young Adults' Perceptions of and Attitudes to Body Image

According to the study findings from young adult respondents between the age of 30 and 35 years, fat bodies make them look older than their real age especially for women since they are referred to as 'mamas' yet they are still young girls. This has brought about the positive attitude among the young adults for smaller body shape and size since they perceive it as perfect in relation to their age.

Respondents aged between 30 and 35 years, especially those who were not married, felt that it is beneficial to have a perfect body shape and size since it enhances the attraction, development and growth of friendships between girls and boys. In addition, a perfect body shape and size makes them look younger, keeps them in good health, and enables them to fit in their clothes perfectly. Furthermore, 30% of the youthful respondents believed that anyone with a perfect body shape and size commands respect, is attractive, is courageous and has positive attitude to life. The effects of not having a perfect body include: low self-esteem, reduced lifespan, increased health-related problems, and inability to fit into desirable outfits. In one way or the other, the lack of a perfect body size and shape affects marriages and marital chances. If a woman or man is overweight, she or he is at a high risk of high blood pressure and other weight-related problems. This causes sudden death, leaving the other partner as a widow or widower. Body shape and

size also affect women's chances of marriage; indeed ten female respondents believed that big-bodied women are feared by men, and have low self-esteem compared to those who are not. This reduces their chances of getting married. Individuals already in marriage are no exception and are constantly under pressure and complaints from their partners to either reduce or gain their weight so as to remain attractive and presentable. Such perceptions of and attitudes to body image by young adults as suggested by the findings are in tandem with the research findings by Freedman (1984:34) among the females in America, particularly those who are white and middle class. Such females are socialized through a host of influences from the media to fantasy play with *Barbie* dolls to believe that slenderness is essential for attractiveness and is a key component of interpersonal success.

Study findings further suggest that several attributes are associated with fat persons; they are thought to be greedy or gluttonous, lazy and possess low self-esteem. Some are believed to be rich and stress-free. On the other hand, thin persons are perceived to be poor, unwell/unhealthy, stressed, and to be eating poorly.

4.7 Dietary Habits and Body Image

All the respondents described a good diet as one that has vitamins, proteins, carbohydrates, minerals and little fat. In summary, the respondents agreed that a good diet must have the four main classes of food: carbohydrates, proteins, vitamins and mineral salts. On the other hand, they described a poor diet as one that is simply unbalanced and thus lacks some of the four major classes of a balanced diet. Some of the

foods that were considered as healthy foods by the respondents include traditional foods like *githeri* (a mixture of maize and beans), vegetables, meat, and fruits. This is because they keep the bodies well and disease-free.

In contrast, foods that were considered unhealthy include fries (too fatty), junk foods, and too much sugary food. These, according to the respondents, may cause a number of diseases like heart disease, weight-related illness (obesity), diabetes, and an increased metabolic rate in the body which may lead to muscle tear. Despite the knowledge of how important the dietary pattern is to their health, the study findings suggest that many respondents engage in eating of junk foods like French fries which are readily available in their residences and work places. These foods also tend to be cheap and thus affordable to many.

The respondents considered that three meals per day are the ideal for a healthy body. In addition, they suggested that people should have their meals when they are hungry so as to regulate the energy and metabolic rate within their bodies. While eggs/sausages/whole grains, bread, and a cup of tea or coffee are specifically for breakfast, lunch should entail mainly light meals and some fruits. The findings indicate that the respondents felt that fast foods are dangerous and so many people avoid them and take in protein-rich foods instead. People from the low economic status are affected by poor dietary practices in the sense that such families have no choice but to consume whatever is available.

The research findings indicate that dietary habits influence body shape and size since weight is dictated by the kind of foods consumed. The respondents added that they would consider changing their diets if they achieved financial stability, fell sick, engaged in intensive physical exercises, or during fasting. In case the change in diet did not lead to the development of an attractive body shape or size, the respondents indicated that they would seek medical and nutritional guidance and change their eating habits accordingly.

Findings from FGDs suggest that Embakasi residents have a good understanding of the disadvantages that come with poor dietary habits, for instance, meat/beef or chicken was associated with blood pressure and diabetes. Some respondents also talked of food prohibitions in certain circumstances in one's life. For instance, among the Abaluyia, pregnant women desist from drinking porridge because, according to Jeane (not her real name) aged 45 years, it would make the foetus overgrow and so cause delivery complications (see Box 4.4 below)

Box 4.4: Jeane 45 years old

In 1996, when I was expecting my first born, I had graving for porridge, eggs and avocados. Despite the prohibition from my mother-in-law not to do so I went ahead and ate and this caused serious complications during my delivery. I even lost my baby because I was not able to give birth normally. Since that happened, I have been very careful with my eating habits during pregnancy. In fact, I stopped eating eggs and avocados completely.

4.8 Physical Activities and Body Image

To the respondents, physical exercises imply running, weight lifting, fitness exercises, and weight-reduction activities. Physical exercises influence the shape and size of the body by burning excess calories and fat in the body. This ensures physical fitness of the body and reduces body weight. Different age groups engage in different physical fitness activities.

According to 60% of the respondents, children aged up to 14 years engage in a lot of exercises like playing and singing which use a lot of energy compared to adults. They should therefore consume adequate body building foods. Linda (not her real name) says "*watoto ndio wanafaa kukula chakula ina carbohydrates mob kuliko watu wazima"*(literally, children are the ones supposed to eat more food rich in carbohydrates compared to adults). On the other hand, those aged between 15 and 30 years engage in gym exercises, play football, dance and run. The older generation, over 30 years, of age engage in various physical exercises like visiting gyms, running and playing a number of games.

All these factors, however, were influenced by one's social and economic status. The study found that at the age of 30 to 55 years, most of the individuals are married and raising families. Thus they are very busy with work that earns them livelihoods and do not engage in physical exercises like those in the gym, but believe that since they walk for long distances in search of manual jobs, this serves the same purpose as that of running in the morning or going to the gym.

In terms of gender, men were said to require more energy than women especially those who do manual work. As a result of being engaged more in manual work, most males do not have big bodies compared to women and hence women require more body exercises than men. In addition, men are involved in more vigorous physical activities compared to their female counterparts. At the same time, married individuals are perceived to require more energy as opposed to the unmarried ones. This is because those married engage in vigorous exercises as they fend for their partners and families compared to the unmarried individuals. Lastly, half of the respondents indicated that unemployed individuals are idle most of the time and less active physically. On the other hand, the employed ones are very active physically depending on their job requirements; those who work in offices have fewer physical activities than the casual workers.

Regular body exercises result in a more healthy body. The study findings suggest that physical activities are one of the ways of reducing the risks of obesity. All respondents asserted that since obesity results from energy imbalance due to too many calories in and too few calories burned, only the amount of activity people get each day will determine how much gets burnt out. However, 30%of the respondents felt that other factors influence how many calories people burn each day, among them, age, body size, and genes. These respondents added that despite all the health benefits of physical activity, people in Embakasi are doing less of it (at work, at home, and as they travel from place to place).One respondent stated that about one in three people gets little, if any, physical activity and concluded that the lack of or decline in physical activity is a key contributor to the obesity epidemic among Nairobi residents. Keeping active can help people

maintain a healthy weight or lose weight. It can also lower the risk of heart disease, diabetes, stroke, high blood pressure, osteoporosis, and certain cancers, as well as reduce stress and boost moods. Inactive (sedentary) lifestyles do just the opposite.

All the respondents believed that physical activity prevents obesity in several ways. First, it increases people's total energy expenditure, which can help them stay in energy balance or even lose weight. However, this could only happen if they did not eat more to compensate for the extra calories they burnt. Two, it decreases fat around the waist and total body fat, slowing the development of abdominal obesity. Weight lifting, push-ups, and other muscle-strengthening activities build muscle mass, increasing the energy that the body burns throughout the day, even when it is at rest, and making it easier to control weight. Lastly, they believed that physical activity reduces depression and anxiety, and this mood boost may motivate people to stick to their exercise regimens over time.

Some of the physical activities the respondents are engaged in include jogging in the morning/evening, running, playing football and other sports. The respondents' daily work includes hawking, carpentry, manual work, and other *Jua kali* work. Respondents who operate small retail shops spend the whole day walking around their shops as they attend to their customers. However, twenty respondents work in offices and therefore spend up to 8 hours sitting at their work stations. Apart from the few individuals who work in offices, the hawkers and carpenters said that the nature of their work did not give obesity any chance. This is because their work involves excessive physical exercising which eventually burns all excess fats in their bodies. Consequently, hawkers, carpenters, and

shopkeepers rarely engage in other physical exercises besides their daily work. Hawking, for instance, involves moving from centre to centre for trade. The more one walks during the day the more one exercises one's body thus reducing weight and obesity. However, those working in offices and spend the whole day sitting are motivated to take up physical exercises besides their work so as to keep fit and check their weight.

4.9 General Good Health

Ninety per cent of the respondents described personal health as one's ability to perform daily tasks without difficulty or pain while 10% stated it to be the absence of disease or illness. Two respondents defined personal health as an overall state of well-being where a person is able to cope with all the stress of the day-to-day life and be able to do and finish regular routines. One respondent, however, stated that personal health is subjective and only the person himself/herself can dictate whether he/she is well enough to perform daily tasks. Generally, the respondents agreed that good health is one that is free from disease and stress.

A more generalized definition of a healthy lifestyle from the respondents is a lifestyle that leaves one fit, energetic and at reduced risk for disease, based on the choices made about their daily habits. All respondents were in agreement that good nutrition, daily exercises and adequate sleep are the foundations of continuing good health. They added that managing stress in positive ways, instead of through smoking or drinking alcohol reduces the wear and tear of your body at the hormonal level.

On the other hand, unhealthy lifestyle, according to the findings, is one that is full of disease, illness and other health-related problems. One respondent defined it using examples like late sleeping, snacking, breakfast eating, and body weight, lack of exercising, alcohol consumption and smoking. Two of the respondents defined it in terms of poor sleep, poor hygiene, sexual promiscuity and substance abuse. The study findings suggest that the respondents recognized the fact that the dietary habits and physical exercises that influenced their perception of and attitudes towards body image also affected their general state of health.

4.9.1 Causes of Obesity

At its most basic, obesity results when someone regularly takes in more calories than needed. The body stores these excess calories as body fat and, over time, the extra kilos add up. The causes of obesity are as varied as the people it affects. Obesisty among Embakasi residents results from bad lifestyles, lack of physical exercises, taking foods containing a lot of fats and laziness.

The research findings also indicate that obesity may result from the prenatal and postnatal behaviours of the mothers. The respondents stated that early life is important. Specifically, pregnant mothers who smoke or are overweight may have children who are more likely to grow up to be obese adults. Excessive weight gain during infancy also raises the risk of adult obesity, while being breastfed may lower the risk.

The study findingsfurther indicate that obesity results from unhealthy dietary habits. What has become the typical Western diet in Nairobi, i.e., frequent, large meals high in refined grains, red meat, unhealthy fats, and sugary drinks,are some of the biggest causesof obesity prevalence in the City. Foods that are lacking in this diet including whole grains, vegetables, fruits, and nuts seem to help with weight control, and also help prevent chronic diseases.

All respondents agreed that too much television, too little activity, and too little sleep also cause obesity. Television watching, which is very common in Embakasi, is a strong obesity risk factor, in part because exposure to food and beverage advertising can influence what people eat. As stated earlier, physical activity can protect against weight gain, but globally and locally, people are engaged in too little physical activity. In addition, the lack of sleep, is also emerging as a risk factor for obesity.

4.9.2 Effects of Obesity

Excess weight, or simply obesity, diminishes almost every aspect of health, from reproductive and respiratory function to memory and mood. Key informants stated that obesity increases the risk of several debilitating and deadly diseases, including diabetes, heart disease, and some cancers. This occurs in a variety of pathways, some as straightforward as the mechanical stress of carrying extra pounds and some involving complex changes in hormones and metabolism. Obesity decreases the quality and length of life, and increases individual, national and global healthcare costs.

One of the key informants explained how in early 2012 the Mauritius government announced a healthy eating campaign after it found that lifestyle diseases and conditions were on the rise, terming the prevalence of diabetes, cancer, hypertension, heart diseases and obesity as a threat to national development. According to this key informant, the increase in lifestyle diseases and unhealthy conditions is attributed partly to an affinity for junk food, current pattern of urbanization and fast-spreading motorization, leading to a growing sedentary lifestyle and more alcohol and tobacco consumption.

Three respondents indicated that obesity causes diabetes. Five respondents stated that body weight is directly associated with various cardiovascular risk factors. Here, the respondents were not as confident regarding the association between obesity and cancer compared to the case of diabetes and cardiovascular diseases. This could be due to the fact that cancer is not a single disease but a collection of individual diseases. Other respondents associated obesity with lung function or respiratory diseases. They said that excess weight impairs respiratory function via mechanical and metabolic pathways. The accumulation of abdominal fat can limit the descent of the diaphragm and, in turn, lung expansions, while the accumulation of visceral fat can reduce the flexibility of the chest wall, sap respiratory muscle strength, and narrow airways in the lungs. Also, asthma is one of the most common respiratory diseases that have been linked to obesity.

4.9.3 Reversing Obesity and Overweight

All the respondents agreed that obesity actually harms virtually every aspect of health, from shortening life and contributing to chronic conditions such as diabetes and

cardiovascular disease to interfering with sexual function, breathing, mood, and social interactions. Based on the fact that obesity is not necessarily a permanent condition, the respondents highlighted a number of ways to reverse the condition. Dieting, exercising, medications, and even surgery can lead to weight loss. Sixty per cent of the respondents were of the opinion that obesity prevention, beginning at an early age and extending across one's life span, could vastly improve individual and public health, reduce suffering, and save millions of the Kenya shillings spent annually on obesity-related health care issues.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

5.1 Introduction

This chapter discusses the study findings on the basis of the research objectives and draws conclusions.

5.2 Discussion

5.2.1 People's Perceptions of Body Image

The people of Embakasi described body image in terms of shape,size and height. The three attributes were used to describe what body image is beautiful and attracctive and which one is not attractive. Body image perception is influenced largely by how one fits into one's clothes.Body image also indicates one's social and economic status and the advantages one enjoys in society.This supports the study findings by Tovee and Cornelissen (2001: 396) which state that BMI is considered as the primary factor in determining physical attractiveness regardless of the cultural settings.It also describes differences in preferences for body weight in different cultures.Body image relates to a person's perceptions, feelings and thoughts about his or her body, and is usually conceptualized as incorporating body size estimation, evaluation of body attractiveness and emotions associated with body shape and size (Grogan, 1999:3). Thus, body image has been operationally defined in terms of perceptual, and attitudinal factors depending on the interest of the researchers.

Female respondents stated that body image influences the social life of an individual especially in regard to marriage. It determines one's ability to attract suitors for marriage and, once married, how society perceives one's married life in terms of economic and financial status. Study findingssuggest thatperceptions of body image have been greatly influenced by the western conception of attractiveness.This explains the effects of urbanisation and socio-economic status on the perception of body image that has changed the perception of what an ideal body image is.It also agrees with Bordo (1993:1) who found that the mind, body dualism -the splitting of mind and body and the linking of men with the exalted mind and women with the denigrated body- is at the heart of both patriarchal power and of women's problems with food.The remarkable rise in the prevalence of overweight in many traditional societies has accompanied a westernisation of their dietary and physical activity patterns (Bennett, 1999:51).For instance, overweight may be seen as a visible indicator of wealth and status in societies where food is scarce (WHO, 1990c); or there may be social pressure for women to gain weight and remain overweight during their reproductive life (Brown, 1992: 34).

According to Lee and Lee (2000: 324), economic liberalisation has encouraged deregulation of the mass media, which projects a powerful image that "rigidly equates success with a young, slender and glamourously adorned woman''.Body image, from the study findings, is a phenomenon that is influenced largely by the social and cultural environment. The study findings established that an attractive man is one who is not underweight or overweight. He should be neither too fat nor too slim. On the other hand, an attractive woman is one with an average height, maintains her body image/shape and

is generally beautiful. In contrast, an unattractive woman is one who is overweight and does not care about her body image or shape. The study findings also show that socio-cultural beliefs and values play a major role in the description of body image. Body image also influences other aspects of life in society, for instance, marriage, education, and sexual life. Female respondents described a slim body as being beautiful and attractive. On the other hand, a big body is what every woman would want to attain since it is purportedly an ideal body image. Nevertheless, a big body is greatly associated with irresponsible eating habits. To expound on these perceptions of body image Gordon (2000: 2) postulated that parental and peer influences have implications for the development of ideas concerning what an 'ideal' female image.

5.2.2 People's Attitudes towards Body Image

The study findings indicate that the perfect body averagely weighs between 60kg and 80kg. The key theme underlying work in this section is how socio-cultural factors have influenced the attitudes to body image. There is growing evidence that body image is subjective, and open to change through social influence (Groetz et al., 2002: 5). Models of antecedents of body image have implicated socio-cultural factors in causation of body dissatisfaction, weight concern and the discrepancy between the current and an ideal body shape and size (Grogan, 1999: 24).

Traditional cultural beliefs, media and sports, among other social factors, may be important in shaping the attitudes that individuals will have towards body image and the influence that this will bring to their health status. Media imagery may be important in

producing changes in the ways that the body is perceived and evaluated, depending on the viewer's perception of the importance of those cues (Groetz et al., 2002:10).This clearly explains the varying attitudes to body image by the residents of Nairobi City County. A perfect body, according to 90% of the respondents, portrays any person as being physically fit and gives him/her an attractive image.

The definition of what a perfect body is varied according to the respondent's age, cultural beliefs, values, and gender. Fifty per cent of the male respondents felt that an attractive woman is one whose body is neither too slim nor too fat. Female respondents also had the same feeling. Westernization and education were found to be factors largely influencing the respondent's definition of a perfect body image. Females particularly felt that their body shape and size were a key component of interpersonal success; they had been influenced by the media to believe that slenderness is essential for attractiveness and success. In a study among Malaysian women, Othman (2001: 18) found that rapid industrialization and urbanization had meant unparalleled changes in women's condition, with regard to education, employment opportunities, mate choice, birth control and legal rights. The changes had created conflicting demands on young women to strive simultaneously for career accomplishment while maintaining their physical attractiveness. According to Othman, these findings indicated that negative attitudes towardsbody image led to a number of unhealthy behaviours.For instance, body image can affect the likelihood that we will engage in, or avoid, exercise (Choi, 2000: 37).

Although being dissatisfied with the way one looks and 'feeling fat' can in some cases motivate us to exercise (Grogan et al.,2004: 52),it may also prevent us from engaging in organised sports activities such as joining a gym (Thompson, 1994: 13).

Whereas the study findings suggest that obese and overweight people are looked down upon and are believed to have been brought up badly, three male respondents stated that fatness in men in their culture an indication of wealth and contentment with life. However, obese women were perceived as being unattractive and some communities believe that men should be fatter than women. Often, males express their wish to increase in weight whereas females want to reduce. However, the belief in most communities is that men and women should gain much weight after getting married because they are well taken care of. The findings also suggest that individuals who are employed are supposed to gain weight more than the unemployed ones.

Body image is supposed to mean a lot for the achievements that one makes in life. An attractive body image brings good suitors for a woman for marriage, puts one in a social class that commands respect among colleagues, and could also be an indication of economic and financial status. According to Stevens et al. (1994: 1322) positive attitudes towards being moderately overweight are characteristics of economically disadvantaged societies in which thinness is a sign of poor health. In their study, they found that most black populations in America tend to gain greater social and economic advantages in their society when they have bigger body weight. However, for a modern Nairobi female resident, a slim body is what every woman would want to attain as it is purportedly the

ideal body image. The study findings suggest that socialization and enculturation have a lot of influence on the beliefs that one has about body image.

The study findings indicate that the youth feel that fat bodies make them look older than their real age. This is especially the case for women as they are called ‘mamas’ yet they are still young girls. In addition, young adult respondents believed that anyone with a perfect body shape and size commands respect, is attractive, and has courage and a positive attitude. They attributed a small body image to qualities such as attractiveness, self-discipline, and self-confidence. The effects of not having a perfect body include low self-esteem, reduced lifespan, increased health-related problems, and inability to fit into desirable outfits.

5.2.3 Dietary Habits and Body image

According to the study findings, a good diet is one that has vitamins, proteins, carbohydrates, minerals and little fat while a poor diet is one that is simply unbalanced and thus lacks some of the four major classes of a balanced diet (carbohydrates, proteins, vitamins and mineral salts). Ideally, three meals per day were considered healthy when accompanied with fruits. The meals should contain vitamins, mineral salts, fats, carbohydrates and proteins. Many respondents condemned excess consumption of red meat, animal fat, sugar, junk food, and greasy food. However, food insecurity in the highly populated nations has contributed to problems in accessing a good diet. The study findings suggest that food only has meaning according to what it does to the body in terms of weight gain or loss. Accordingly, the concern among the respondents is about

how much and in what manner they eat, that is, it is not the food itself but rather the behaviour towards it.

Young children aged below 6 years and the aged, that is, those aged 45years and above, are the most affected people when it comes to poor dietary practices. People from a low economic status are also affected by poor dietary practices in the sense that such families have no choice but to consume whatever is available. The study findings suggest that time constraints, particularly regarding women's engagement in work, and the demand for convenience in food, have seen the rise in demand for pre-packaged foods with very short preparation times, and of food that can be consumed away from home. Such foods are often densely caloric and so come with negative effects on one's BMI and thus body image. Eating at fast food restaurants, a common lifestyle among the respondents is positively associated with a high fat diet, a high BMI, but negatively associated with vegetable consumption and physical exercise.

In general, the study population linked diet to the shape and size of the body in that overfeeding leads to obesity while underfeeding leads to thinness or lack of appropriate weight. People consider changing their diets if they achieve financial stability, fall sick, engage in intensive physical exercises, or during fasting. If the change in diet does not lead to the development of an attractive body shape or size, most people not only seek medical and nutritional guidance but also change their eating habits drastically. Generally, the study population has a good understanding of the disadvantages that come with poor dietary habits, for instance, red meat was associated with high blood pressure

and diabetes. Dietary habits in relation to body image are manifested in the current standard of fashions and definitions of beauty especially among the women by projecting a particularly thin body image as ideal; this contributes to obsession with certain foods as a way of attaining this idealized body size.

5.2.4 Physical Activities and Body Image

The study findings indicate that physical exercises involve running, weight lifting, fitness exercises, and weight-reduction activities. Physical exercises affect the shape and size of the body by burning excess calories and fat in the body. Children aged up to 14 years engage in many exercises like playing and singing which require a lot of energy. The youth aged between 15 and 30 years engage in gym exercises, playing football, dancing and running. The older generation, those aged over 30 years, are physically inactive and therefore need to engage more in the above listed activities to keep fit. In terms of gender, men were found to require more energy than women especially those who do manual work. At the same time, married individuals were thought to require more energy as opposed to the unmarried ones. This is because the former are engaged in vigorous exercises as they fend for their partners and families compared to the unmarried individuals.

All the respondents believed that physical activity prevents obesity in many ways, including increasing people's total energy expenditure, decreasing fat around the waist and total body fat, increasing the energy that the body burns throughout the day, and reducing depression and anxiety. Some of the physical activities the respondents are

engaged in include jogging in the morning/evening, running, as well as playing football and other sports. Most of the respondents' daily work includes hawking, carpentry, manual work, and *jua kali* work. However, a few respondents work in offices and therefore spend up to 8 hours sitting at their tables. The respondents, therefore, who engage in such informal jobs like hawking, do not engage in other physical activities out of the work because their work involves excessive physical exercising which eventually burns all excess fats in their bodies. The study findings on physical exercises and its relationship to body image agree with ESfahani's (2006:2) work that obesity is uncommon among occupational groups that undertake high levels of physical activities during working hours. In his study among the American Samoa with high levels of obesity, adults engaged in farm work were found to have lower BMIs than those not engaged in such work.

5.2.5 Body Image and Health

The respondents' generalized definition of a healthy lifestyle is one that leaves one fit, energetic and at reduced risk for disease, based on the choices made about one's daily habits. On the other hand, most of the respondents defined an unhealthy lifestyle as one that is full of disease, illness and other health-related issues.

The study findings suggest that obesity results when someone regularly takes in more calories than required. Some of the causes of obesity are heredity, the prenatal and postnatal behaviours of mothers, unhealthy diets, too much television, too little activity, and too little sleep. Obesity diminishes almost every aspect of health, from reproductive

and respiratory function to memory and mood. It increases the risk of several debilitating and deadly diseases, including diabetes, heart disease, and some cancers, and causes diabetes and cardiovascular diseases, cancer and lung function or respiratory diseases like asthma. However, obesity is not necessarily a permanent condition. There are a number of ways to reverse the condition including dieting, exercising, medications, and even surgery.

In contrast to this findings,a study by Brown and Konner(1987: 32) state that individuals have been able to display embodied wealth by way of above-average body size and shape, including weight and fatness. In a cross-cultural comparison of appropriate body size in different traditional societies, the two scholars found that the vast majority of them favoured plumpness as being attractive.This attitude has been changed by westernisation and urbanisation as seen among the white communities in America(Rinderknecht and Smith, 2002 :318). To understand body image, it is therefore, important to understand the role that socio-cultural factors play in shaping the attitutes to and perceptions of body image and the effects that these have on people's health, whether positively or negatively.

5.3 Conclusion

The research findings indicate that many factors influence the shaping of people's perceptions of body image and these have varying consequences on the health of an individual. Westrnisation and urbanisation that comes with improvement in the economy and technological advancement affect the social lifestyle of individuals which, in turn, affects their health.

The findings further suggest that in Nairobi City County, the obesity epidemic may not appear as a threat to public health since it is smouldering and slowly growing year after year. This makes it even more difficult to combat, since its causes have become so intertwined with socio-cultural, environmental, and governmental factors. However, study findings suggest that efforts to combat obesity are beginning to gain traction, one step at a time.

Overall, it can be concluded that there are clear differences in attitudes to and perceptions of body image between the two genders especially when rating the attractiveness of body image. The study findings show that most respondents understand body image as the way people perceive themselvesand, most importantly, the way they think others perceive them and this eventually affects their social relationships and health.The findings also suggest that social and cultural factors havesignificant influence on the attitudes to and perceptions of body images as people tend to compare themselves with what is acceptable within their own culture and see if they match the standards of their social setting. It is also clear that behaviours related to eating patterns and physical activities and body image are strongly influenced by community expectations.

In conclusion, the study findings portray obesity as an outcome of cultural and symbolic overvaluation of food in the context of plenty, and a disorder of convinience,as the needs of humanity in developing nations are served with more convinient work, leisure andfood-getting.A noteworthy finding is that obesity is related to quite different evaluations of the importance of body image to self-esteem. Respondents, especially

women who were overweight experienced a dispropotionately negative influence on their self-concept compared to men.In addition, fatness and obesity are body characteristics which adults strive to achieve due to the beliefs and values attached to such body characteristics in the society where they live.Finally, ethnicity is associated with differences in food-related beliefs,preferences, and behaviours, and attitudes to body size and shape and this may contribute to the higher average the risk of obesity and other lifestyle diseases.

5.4 Recommendation

Based on the above conclusions, the study recommends the need for more anthropological research on how Nairobi people's perceptions of and attitudes to body image could predispose them to ill-health. Secondly, with the realization of the advance influence of socio-cultural factors on the perception of and attitudes to body image and health, sensitization on health lifestyle is highly recommended in this setting.

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Appendix 1:In-depth Interview Guide

Introduction

Hello my name is Edah Chepkemoi. I am from the University of Nairobi and I am carrying out a study on the relationship between body image, obesity, physical activity and nutrition, and health risks among Nairobi City County residents. The information given is purely for academic purposes and will be treated as very confidential. You have been purposely selected as one of our respondents in this study, and I hope that you will feel free to discuss with me. Your name or information that may identify you as a participant shall not be given to anyone. You are not under any obligation to respond to all the questions and you may withdraw at any time during the interview should you desire to do so. Thank you.

A. Body Image

1. What do you consider to be an attractive man/woman? What do you consider to be unattractive man/woman?
2. In your view, what is a perfect body size and shape?
    a. Why is this perfect?
    b. What is a non-perfect body shape and size?
    c. What can you do to achieve a perfect body?
3. I am now going to show you illustrations of different body sizes and shapes. (Use illustration of the opposite sex from that of the informant)
    a. Of these, which one do you consider attractive? Why?
    b. Of these people, who would you consider healthy? Why?

c. What could those with a ‘non-perfect’ body do to attain the perfect body size and shape?

4. What are the beliefs within this community that make particular groups of people desire a particular body shape and size?
    a. Informant to elaborate by giving examples of such beliefs.
        i. (Probe further on beliefs such as ability to give birth; giving birth to more children in women; measure of wealth; health indicator; etc.)

    b. Informant to elaborate beliefs on particular groups
        i. Children (0 – 14), youths and young adults (15 – 30), adults (above 30)
        ii. Male vs. female
        iii. Married vs. unmarried
        iv. Employed/working vs. non-employed, etc.
5. Specifically talking about the young adults, does body size and shape matter, is it an issue with them? Why/how?
    a. What benefits do they gain from having a perfect body shape and size?
    b. What are the effects of not having this kind of body?
    c. Does body shape and size influence marriage/ marital chances? How?
    d. Is it the same for already married adults (men and women)?
6. a) What comes to mind when you see a very fat person?

    b) What comes to mind when you see a thin person?

    c) How would you describe your body shape and size?

d) Now I am going to show you a set of illustrations. What do you think of each of them? In terms of attractiveness, health, etc.

e) Where do you place yourself?

B. Dietary Habits

1. How would you describe a good diet? What is a poor diet?
    a. What types of foods do you consider healthy? Why?
    b. What types of foods do you consider unhealthy? What could be the health risk to those who consume them?
    c. What is the proper duration between meals? How many meals should one take in a day to be considered healthy?
    d. Are there beliefs pertaining to the eating of certain meals? (what meal at what time/ amount of the meals)
    e. Who are mostly affected by poor dietary practices? (Age, gender, occupation, etc.)
2. Many people's attitudes to certain foods make them either avoid them or over consume them. Let us talk about your case:
    a. Are there foods that you avoid? Why?
    b. Are there foods that you like/over consume? Why?
3. Can you describe your normal daily diet? Now let us talk about yesterday; can you describe what you ate?
4. In what ways is diet linked to a perfect body shape and size?
5. Under what conditions would you consider changing your diet?

a. What if this change is against the development of the attractive/ admirable body shape and size?
b. Have you had to change your diet at any time? If yes, what prompted that?

C. Physical Activities

1. What comes to mind when 'physical activities' are mentioned?
2. In what ways does physical exercise affect/influence the shape and size of the body?
3. Can you describe differences in physical activities between different groups?
    a. Children (0 – 14), youths young adult and(15 – 30), adults (above 30)
    b. Male vs. female
    c. Married vs. unmarried
    d. Employed/working vs. non-employed, etc?
4. What is your take on physical exercise as a way of reducing the risks of obesity?
5. Physical activities engaged in
    a. What constitutes your daily work?
    b. How does this help you reduce the chances of developing obesity/overweight?
    c. Do you do other exercises besides the daily work? What motivates you to take up those exercises? Do these exercises help you in reducing chances of developing obesity?

D. General

1. How would you describe good health? How would you describe poor health?

2. In your view, what is a healthy lifestyle? What is an unhealthy lifestyle?

Let us talk about obesity/overweight.

3. In your view, who is an overweight/obese person? Do you know people that are obese/ overweight?
    a. What causes obesity/overweight?
    b. What are the effects of obesity/overweight?
    c. How can an individual reverse this condition?

Review

Is there anything else you would want to tell me about diet, body shape and size, physical activities and overweight?

Appendix 2: Key Informant Interview Guide

1. What is personal health?

2. What are the major health issues you see among the residents here?

3. Do you think people's socio-cultural perceptions and attitudes influence their health?

4. How do you define body image?

5 What is an ideal body image?

6. How does the perception of body image influence one's health?

7. How does the perception of body image relate to obesity, physical activity and nutritional patterns and how is it perceived to be a health risk factor?

8. What socio-cultural perceptions and attitudes influence body image?

9. How should one maintain an ideal body image in relation to health?

Appendix 3.Narrative Guide

Individual Recent Past (5 years)

1. Can you tell us about your life over the last five years?

Appendix 4.Focus Group Discussion Themes

1. Body image

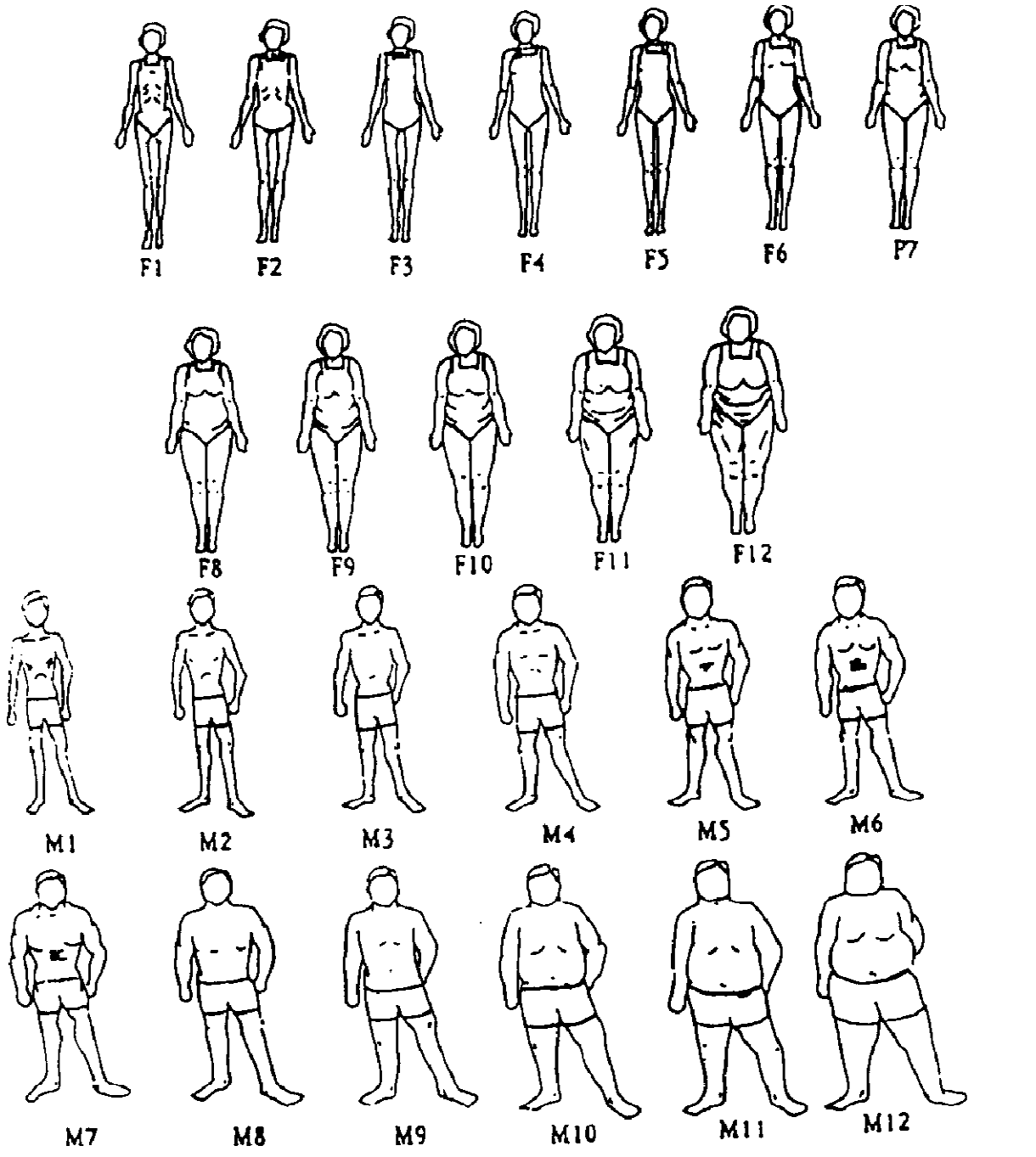
2. Obesity and overweight

3. Physical activity and dietary habits

4. Socio-cultural beliefs of body image

5. Health and healthy lifestyle

Appendix 5: Illustration of Body Image by Furnham and Alibhai (1983)



Appendix 6: Informed Consent Form

Hallo, my name is Edah Chepkemoi from the University of Nairobi. I am conducting a research on the influence of socio-cultural factors on attitudes to and perceptions of body image and its relationship to health in Embakasi Sub-County in Nairobi City County. You have been purposively chosen to participate in the study. Your participation is completely voluntary but your experiences could be very helpful. All the information provided shall be used purely for the study and treated with confidentiality. However, you can terminate this interview at any stage without victimization. The interview takes approximately 45 minutes to complete.

Do you agree to participate in this research Yes ◯ No ◯

Sign …… Date ……

Thank you for your co-operation.