REDUCING OVERWEIGHT AND OBESITY AMONG ADULT MEN AND WOMEN THROUGH **EXERCISE PARTICIPATION**

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Abstract

This paper examines the roles of physical exercise in reducing overweight and obesity among adult men and women who live sedentary life-styles in the society. The paper equally isolated the consequences of lack of physical activity in sedentary lives and advocated among others, the need to engage in physical exercise. The author points out that exercise participation is sine-qua-non for healthy living for adult men and women in sedentary occupations. A number of recommendations were proffered among which was that individuals should ensure that he/she does not give-in to a sedentery life style that will prope him/her, to be everyweight or obese. It sedentary life-style that will prone him/her to be overweight or obese. It was also recommended that Government at all levels should provide sporting facilities where adult men and women in the society, particularly those that are already overweight and obese could take part in physical exercise from time to time. This would thus aid them in watching their condition in order to avoid being overweight and to stay healthy.

Keywords:

Introduction

One's life-style matters a lot. Most deaths in the 21st century were as a result of life-styles lived by the casualties. For instance, most obese people are traceable to the fact that it was as a result of their eating habit and due to the simple fact that they do not engage in any exercise at all or if they do, it was less than being adequate. The issue of sedentary living cannot be said to be more appropriately treated any other time than in the society now. So many people today, particularly in Nigeria, live sedentary life-styles without caring much about participating in any form of physical activity. Evidence abounds everywhere today, as there are so many people who are involved in sedentary occupations. The term "sedentary" as defined by Procter (1996)

means involving little exercise or physical activity. Sedentary behaviour has been identified as one of the leading preventable causes of death (Nokdad, Giles, Bowman, Mensah, Ford, Smith & Marks, 2004). As a result of this development in the society today, one could find so many adult men and women being overweight and obese.

Obesity in childhood is an independent risk factor for adult obesity and its associated health problems (Dietz, 1986). Omonu (2008) discovered that many persons in the society today have not taken enough care to avoid certain things as they live their lifestyles on a daily basis. He further stated that a number of things like overweight and obesity have become of great concerns in health parlance. Therefore, the individuals may not be happy with their weight, and so, may try to do all that is within their reach to avoid being obese. Many people no longer engage in any form of exercise and have therefore accumulated in their body excess fats than needed. However, this situation is capable of depriving thousands of people from living quality lives in the 21st century. The focus of this paper therefore is on how overweight and obesity can be reduced among men and women who live sedentary lives through participation in physical exercise.

The Concept of Overweight and Obesity

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health (WHO, 2015). It is measured in terms of Body Mass Index (BMI). However, this is the index of weight-for-height which is commonly used to classify overweight and obesity in adults. It is defined as a person's weight in kilogrammes divided by the square of his height in metres (kg/m²).

The standard is that:

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• a BMI greater than or equal to 25 is considered overweight, while

• a BMI greater than or equal to 30 is considered obese.

Body Mass Index (BMI) provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. However, it should be considered as a rough guide because it may not correspond to the same degree of fatness in different individuals.

Obesity is often considered to be a condition of affluence. Certainly in affluent nations such as the United States, obesity is highly prevalent, and in most poor African countries, it is less common. However, overweight and obesity are common in both adults and children, and even among the poor in some non-industrialised countries, particularly the middle-income nations. In several Caribbean countries, over 20 percent of women are classified as obese (Lathan, 1997). When more energy food is ingested over a prolonged period than is expended by physical exercise, work, and basal metabolism, weight will be gained and might eventually result to obesity.

According to Hahn and Payne (2003), people are said to be overweight if their weight is between 1% and 19% above their desirable weight. They continue further that as weight increases above the 20% level, the label obese is routinely applied. However, there is an exception in the case of excessive weight caused by extreme muscularity, such as that of many football players. Consequently, the term obesity requires further refinement for better understanding and for the purpose of this paper. It was stated that when people are between 20% and 40% above desirable weight, they are described as having mild obesity (About 90% of all obese people are in this category). Excessive weight in the range of 41% to 99% above desirable weight is defined as moderate obesity. This constitutes 9% of the obese people. Weight of 100% or more above desirable weight is described as severe, gross, or morbid obesity. This is about 1% of the obese population.

More facts about global estimate of overweight and obesity according

More facts about global estimate of overweight and obesity according to the World Health Organisation, (WHO, 2015) is shown below:

- In 2014, more than 1.9 billion adults, 18 years and older, were overweight. Of these, over 600 million were obese.
- Overall, about 13% of the World's adult population (11% of men and 15% of women) were obese in 2014.
- In 2014, 39% of adults aged 18 years and over (38% of men and 40% of women) were overweight.
- The worldwide prevalence of obesity more than doubled between 1980 and 2014.

In most cases, one of the things that gives room to all this, is the lack of physical activity which is occasioned by the fact that many live a sedentary life. Thus, they accumulate much fat without dissipating it due to the lack of physical exercise.

Common Health Consequences of Overweight and Obesity
It has been established that various health risks are associated with obesity or overweight (Lathan, 1997). Raised BMI is a major risk factor for non-communicable diseases such as:

- Obesity undoubtedly contributes to type II diabetes, also known as non-insulin-dependent or adult-onset diabetes.
- Much evidence indicates that there is a relationship between excess body weight and hypertension and that weight reduction often leads to a lowering of blood pressure. Obesity increases resistance in the arteries, thus increasing blood pressure. It also puts an additional load on the heart which may lead to heart enlargement. These conditions may contribute to arteriosclerotic

heart disease, coronary thrombosis, and congestive cardiac failure.

- Middle-aged females are especially at increased risk of gall bladder disease if they are overweight.
- Results in osteoarthritis- a highly disabling degenerative disease of the joints may set in. Arthritis is probably aggravated by excess body weight, if not caused by it. Joints can be stressed by having to bear extra weight.
- suffer psychologically. Serious persons Obese disturbances are widely reported in obese children and adults especially in females than in males.
- Endometrial, breast, and colon cancer have been reported common in overweight and obese persons.

 These conditions have serious implication on one's health and

healthy living.

The risk of these non-communicable diseases increases, with an increase in BMI (WHO, 2015).

Benefits of Exercise in Weight Control

There exists a relationship between exercise and weight control. For the purpose of this paper and for a better understanding, attempts were made to succinctly point this out. Exercise according to Procter (1996) means "healthy activity." Hence, it involves performing physical actions to make or keep (someone's body) healthy. Exercise therefore refers to activities performed to keep the body fit by giving strength to muscles and mobility to the joints. It is an important stimulus to the circulation of the blood and the lymph.

Ama (1988) stated that physical exercise is a drill or continuous training of the body, in which the muscles are flexed and extended at regular intervals in order to make the individual functionally and organically fit. Physical exercises may be active or passive or indoors. Stampfer, Hu, Manson, Rimm & Willett, (2000), and HU, Manson, Stampfer, Graham, et al. (2001) described physical exercise as any bodily activity that enhances or maintains physical fitness and the overall state of health and wellness.

By classification, physical exercises are generally grouped into three types, depending on the overall effect they have on the human body:

- Flexibility exercises such as stretching, improve the range of motion of muscles and joints (Hu, Manson, Stampfer, Graham, 2001).
- Aerobic exercises, such as cycling, swimming, walking, skipping rope, rowing, running, hiking or playing tennis, focuses on increasing cardiovascular endurance (Hu, 2001).

Anaerobic exercises, such as weight training, functional training, and eccentric training or sprinting, increases short-term muscle strength (O 'Connor, Crowe, Spinks, 2005). It should equally be noted that sometimes, the terms "dynamic" and "static" exercises are used.

Connor, Crowe, Spinks, 2005). It should equally be noted that sometimes, the terms "dynamic" and "static" exercises are used. 'Dynamic' exercises such as steady running tend to produce a lowering of the diastolic blood pressure during exercise, due to the improved blood flow. Conversely, static exercise (such as weight lifting) can cause the systolic pressure to rise significantly (during the exercise). Frequent and regular aerobic exercise has been shown to help prevent or treat serious and life threatening chronic conditions such as high blood pressure, obesity, heart disease, type 2 diabetes, insomnia, and depression.

Omonu (2011) clearly pointed out that there is a direct relationship between physical activity and cardiovascular mortality. Thus, physical inactivity is an independent risk factor for the development of coronary artery disease. Also, there is a close response relation between the amount of exercise performed from approximately 700 to 2000 Kcal of energy expenditure per week and all cause of mortality and cardiovascular disease mortality in middle-aged and elderly populations. The greatest potential for reduced mortality is in the sedentary who become moderately active. Most beneficial effects of physical activity on cardiovascular disease mortality can be attained through moderate-intensity-activity (40% to 60% of maximal oxygen uptake, depending on age). In addition, persons who modify their behaviour after myocardial infarction to include regular exercise, have improved rates of survival. Also, persons who remain sedentary have the highest risk for all-cause and cardiovascular disease mortality (Stampfer, Hu, Manson, Rimm, Willet, 2000). Manson, Rimm, Willet, 2000).

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Another form of exercise that enhances human organic efficiency is physical recreation activities. Certain cardiovascular diseases such as High Blood Pressure (HBP), obesity, and high concentration of cholesterol in the blood, can be avoided through participation in physical exercise (Omonu, 2006). It is generally acknowledged that if a man wakes up each day only to eat, sleep, and go to office (or go to teach), without performing any activity in form of exercise, the resultant physiological disorder that will occur is always very devastating. Thus, this may be due to the part of negligence of an aspect of life known as recreation sports. Folawiyo (2001) asserts that many people are faced with the "stress" and "strain" of an economically strangulated society with lots of uncertainties.

It is evident in our society today that tremendous "inactivity" among people in Nigeria, particularly among adults, aged 35-70 years, had increased. As a result, something needs to be done urgently and now. We are aware that diseases such as infectious diseases have effectively been conquered, but disease of degeneration nature have increased extensively

particularly cardio-vascular diseases like High Blood Pressure (HBP), High concentration of cholesterol in the blood, and obesity. One thing that had led to this situation in our society today is the use of electronics and other labour-saving gadgets that have become a regular habit among many Nigerians. Thus, the incidence of incidental manual activities as a means of exercising the body, thereby improving the standard of physical fitness of the people are generally disappearing. This actually is very unfortunate and could be devastative indeed. We also cannot avoid the thought that our modern way of life could be another important factor for inactivity and that the main determinant of longevity are now more cultural than medical. Individuals showing High Blood Pressure, obesity, High concentration of cholesterol in the blood, or a combination of these, run a high risk of death from cardiovascular disease than non-obese with normal blood pressure and a low cholesterol level. a low cholesterol level.

a low cholesterol level.

Moronkola (2003) stated that participation in exercise programmes or physical activities reduces or prevents psychosomatic diseases, backaches, cardiovascular disease, and obesity. However, it lowers blood pressure, constipation, ageing, diabetes, and nervous control problems. Ogwu (1995) asserts that maintenance of an adequate level of fitness is essential for anyone wishing to make best of his life, to live a happier, healthier, and a more productive life. What is therefore required of every one of us is exercise for physical fitness and for total well-being (both physical and spiritual well-being). Thus, the fact is that it cost a lot of money for the society to care for the sick society to care for the sick.

Conclusion and Recommendations

The paper focused on overweight and obesity and highlighted the usefulness in reducing the problem of overweight and obesity occasioned by lack of exercise participation. Participation in exercise by adult men and women who live sedentary lives and are in sedentary occupations was equally highlighted. Likewise, it points out the dangers or problems posed by overweight and obesity which can be remedied by exercise. The fundamental cause of overweight and obesity is an energy imbalance between calories consumed and calories expended. Globally, there has been:

- An increased intake of energy –dense foods that are high in fat; and Increase in physical inactivity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanisation.

Based on the foregoing, the following suggestions were made:

1. The society should be sensitised enough to be aware of and understand the dangers inherent in sedentary lifestyles and living in sedentary occupations. This could be done through

public Health Education. However, the Health Educator in the society could be charged with such enlightenment. The individual should as a matter of fact, consciously ensure that he takes part in exercise of whatever form from time to time. Also, individuals should be enlightened to become aware of the benefits derived from participation in exercise and sports.

- 2. It is important for government at all levels to support individuals through political will and commitment in assisting both men and women to take part in sports and exercise by providing facilities and even creating several clubs and/or recreation centres where people can easily walk in and participate in one form of sport or the other.

 3. Individuals themselves should be mindful of the type of diet
- they take by limiting energy intake from total fats and sugars, and increasing their consumption of fruit and vegetables, as
- well as legumes, whole grains, and nuts.

 4. Finally, regular physical activity and healthier dietary choices should be made available, affordable, and easily accessible to all especially the poorest in the society.

References:

Dietz, W.H. (1986). Prevention of childhood obesity. Paediatric clin North America, 33, 823-833.

Folawiyo, A. F. A. (2001). Concepts of leisure and recreation. Lagos: Irede Printers Ltd.

Hahn, D. B. & Payne, W.A. (2003). Focus on Heath (6th edn.) New York: McGraw-Hill.

Hu, F., Manson, J., Stampfer, M., Graham, C. (2001). Diet, lifestyle and the risk type 2 diabetes mellitus in woman. *The New England Journal of Medicine*, 3345 (11), 790-797. Retrieved October 5, 2006, from ProQuest database.

Lathan, M. C. (1997). Human nutrition in the developing world. FAO Food and Nutrition Series, No. 29.

Moronkola, O. A. (2003). Essays issues in health. Ibadan: Royal people (Nig.) Ltd.

Mokdad, A. H., Giles, W.H., Bowman, B. A., Mensah, G. A,m Ford, E.S., Smith, S.M. & Marks, J.S. (2004). Changes in health behaviours among older Americans, 1990 to 2000. *Public Health Rep.* 119, 356-361.

O'Connor, D., Crowe, M. & Spinks, W. (2005). Effect of static stretching on leg capacity during cycling. Turin, 46 (1), 52-56. Retrieved October 5, 2006,

from pro Quest database.

Ogwu, T. N. (1995). Health and fitness through exercise. *Journal of Nigeria Association of Sports Sciences and Medicine*. JONASSM. 7. 64-70.

Omonu, J. B. (2006). Enhancing human organic efficiency through physical recreation activities participation. In R. L. Abbah and E. M. A. Ayegba (Eds). *Towards fruitful retirement from service*. Pp. 104-117. Ankpa: CUCA Communications.

Omonu, J. B. (2008). Exercise as a strategy for preventing and managing obesity and overweight: *Journal of Nigeria Association of Sports Sciences and Medicine* (JONASSM). X(2), 33-38.

Omonu, J. B. (2011). Exercise, health and longevity: An X-ray. Lagos: Sam Artrade Ltd.

Procter, P. (1996). *Cambridge international dictionary of contemporary English*. Low price Editions, Cambridge: Cambridge University press.

Stampfer, M. J., Hu, F.B., Manson, J.E., Rimm, E.B. & Willet, W.C. (2000). "Primary Prevention of Coronary Heart Disease in woman through Diet and lifestyle". *New England Journal of Medicine* 343(1), 16-22. Doi:10. 1056/NEJM 200007063430103. PMID 10882764.

World Health Organisation (WHO) (2015). *Obesity and Overweight*. http://www.who.int/mediacentre/factsheet/fs 311/en/retrieved 6th May, 2015.