Implication of Obesity on Economic Growth and Lifestyles

Mohammad Quasem, Akmmaksudul Alam

Howard University, School of Business, 2600 6th Street, Washington, DC
Rockville, Maryland

Abstract
Obesity is an accumulation of excess fat on the human body. When individuals consume higher calorie foods they may see an adverse effect on their health, oftentimes leading to reduced life expectancy and increased health problems. Over the past few decades, obesity has become a growing epidemic with more Americans putting on excess weight. Obesity can be caused by many factors including behavioral and lifestyle choices, genes, endocrine disorders, medications, and psychiatric illnesses. The consequences of the rapid growth of obesity are seen in mounting financial burdens on the medical system as obesity leads to an increased risk for many preventable disease including heart disease, cancer, stroke, chronic lower respiratory diseases, diabetes, hypertension, and high blood pressure. This study explores the impact that obesity has on death rates in the United States as well as globally.

Key Words: obesity; life expectancy, medical system, cause of death, prevention, financial burden

1. Introduction and Problem

Obesity is a serious global crisis. The World Health Organization (WHO) estimated that 1.6 billion adults were overweight and obese in 2005. The Center for Disease Control and Prevention (CDC), estimated that in 2010 one third of American adults suffered from obesity. Through extensive research the CDC found the following facts regarding obesity in the United Sates: (1) the number of people suffering from obesity is increasing each year, (2) 63% of Americans are overweight, (3) obesity is the fastest-growing cause of disease and death in America and is completely preventable, (4) obesity related expenses have exceeded $75 Billion, and (5) obesity affects males and female adults as well as male and female children.

Research has shown that obesity increases the chance of various diseases, including heart disease, diabetes, high blood cholesterol, high blood pressure, obstructive sleep apnea, certain types of cancer, and osteoarthritis. Obesity can be caused by a combination of various factors, such as consuming more calories than necessary, lack of physical activity, and genetic susceptibility. It can also be caused by genes, endocrine disorders, medications, or psychiatric illness. Preventions for this condition include dieting and physical exercise. Individuals can improve their diet by reducing the consumption of energy dense foods, like those high in fats and sugars and increasing the amount of daily dietary fiber intake. Supplements are also available to help with the prevention of obesity, like anti-obesity drugs or surgery.

2. Problem Statement

Over the last three decades the mortality rate has increased globally due to obesity. According to various studies the rise of obesity can be attributed to unhealthy diet, lack of physical activity, excessive alcohol and tobacco consumption, among others factors. Non-communicable diseases, such as abnormality in blood pressure, hypertension and as well as abnormality in cholesterol, are on the rise due to obesity. Furthermore studies have shown that obesity increases the risk of chronological heart disease, high blood pressure, stroke, type 2 diabetes, certain types of cancer, and premature death.

The WHO reported that 35 million deaths in 2005 were a cause of non-communicable diseases, which were linked with obesity. Studies indicated that in 2008, one of the leading causes of death in India was obesity and that the prevalence of obesity in India has increased steadily. The WHO also found that obesity is a major health concern in China. These studies indicate that obesity is not only a problem in the United States, but has become a problem in developing nations as well.

3. Research Methodology and Expected Outcome

The main objective of this research is to educate the public on the negative impact obesity has on the on the economy as well as an individual's quality of life. This study is not intended for the medical community to use as source of diagnosis. This paper explores the impact obesity has on the death rates in the United States. In addition, the examination of other leading preventable causes of death, such as tobacco smoking and infectious diseases, will be compared to the death rates linked to obesity.

In this study, data related to obesity will be collected and a future prediction model will be developed to predict the future possible expansion of obesity. In this case multiple regression models will be appropriate. Appropriate parametric and nonparametric statistical test statistics will be developed to make inference of its impact in the USA and globally. Variability of the obesity percentages of males and females from different countries and as well as individuals from the same country will be examined via appropriate statistical tests. On the basis of the outcome of this research, appropriate recommendations will be made.

References

Cokkinnides, V., Bandi, B., McMahon, C., Jamal, A, Glynn, T., Ward, E., (2009) Tobacco Control in the United States –Recent Progress and Opportunities

Flegal, K.M, Williamson, D.F., Pamuk, E.R., & Rosenberg, H.M. (2004). *Estimating* Deaths Attributable to Obesity in the United States, 94, 1486-1489

Increase in obesity rate in India,http://www.topnews.in/increase-obesity-rate-india-2289896

Morbidity and Mortality Weekly Report, (2010). Vital Signs: State-Specific Obesity Prevalence Among Adults – United States, 2009, 59, 951-955

Obesity – Wikipedia, the free encyclopedia, (htt://en.wikipedia.org/wiki/obesity

Ogden, C. L. Carrol, M.D., Curtin, L.R., McDowell, M.A., Tabak, C.J., and Flegal, K.M (2006), Prevalence of Overweight and Obesity in the United States, 1999-2004, 265, No

13, 1549-1555.

Shankar, Bhavani, (2009-417), Obesity in China: The Differential Impacts of Covariates Along the BMI Distribution, www.nature.com/oby/journal/v18/n8/full/oby2009417a.html

Rubin, M.S., Colen, C.G, & Link, B.G. (2009). Examination of Inequalities in HIV/AIDS Mortality in the United States from a Fundamental Cause Perspective, 100, 1053-1059

Top 7 reasons why young India is getting OBESE, http://www.rediff.com/getahead/slide-show/slide-show-1-health-top-5-reasons-why-young-india-is-getting-obese/20120416.htm

NNHS: National Center for Health Statistics
WIN: Weight Control Information Network
AOA: The American Obesity Association
ICO: International Congress on Obesity
ITF: The International Obesity Taskforce
IASO: International Association for the Study of Obesity
CDC: The Centers for Disease Control and Prevention