

HUMAN DISEASE PROJECT: OBESITY

Student's Name

Course

Professor's Name

University

City (State)

Date

### Human Disease Project: Obesity

Obesity is a significant problem for humanity. For a long time, there have been some issues that revolve around eating disorders and, more frequently, their association with overweight and obesity. Obesity is defined the accumulation of too much bodyweight that is caused by environmental factors or genes. The problem has become more prevalent in the 20<sup>th</sup> and 21<sup>st</sup> centuries due to the changes in diet, lack of exercise as a result of strict work schedules, and the genetic factor (Yanovski, 2018, p. 4). The global statistics on obesity has doubled since the 1980s, with the most recent data showing that over 2.8 million obese people die from this condition, which is exceptionally high in comparison to other related diseases such as diabetes and heart diseases. Besides causing a health burden, obesity contributes to reduced productivity and increased absenteeism in societal activities.

#### **Anatomy**

The health condition is characterized by excess accumulation of body fat, and there are over 20% of individuals globally who have more than the average body weight. The association of obesity to cardiovascular diseases such as high blood pressure, heart disease, stroke, and diabetes can lead to disabilities and death. Individuals who have a body mass index that is more than 30 are termed as obese (Yanovski, 2018, p. 1-3). Moreover, the condition is a growing concern in the United States, and health practitioners in the medical research agencies claim that obesity is a bariatrics. There are arguments on whether or not obesity is a lifestyle issue, or it is just a lifestyle disorder than an occurrence that can be controlled. Some critics claim that the condition is aggravated by eating dysfunction, and it might not always be challenged by a balanced diet if the individual has other conditions. On the other hand, some claim that it can be controlled by only having a balanced diet.

### **Physiology**

The leading causes of obesity are lack of physical activity and overeating that lead to the accumulation of body fat at a faster level than usual. The imbalance in calorie intake that leads to weight gain is not necessarily from a single meal, but it requires a regular intake of fat and sugary foods that are stored in the body in the form of glucose. Other factors that influence the emergence of obesity include age, gender, genetic makeup, and psychological factors, as well as social-economic conditions (Bray, Frühbeck, Ryan & Wilding, 2016, p. 1947). Regarding physical activity, it is a general knowledge that most Americans have a tight working schedule, and they easily indulge in the consumption of foods with high-calorie levels as opposed to home-made meals that are healthy and balanced. Furthermore, the reasons behind low physical activity are a modern activity that is characterized by driving to work, long TV viewing, and the use of machines which replace human labor.

On the other hand, genetic factor contributes to obesity significantly due to the lack of metabolic speed and the inability of the body to eliminate the excess fat. It is believed that increased weight is passed on genetically which creates a predisposition of an individual to this condition. Furthermore, other medical conditions, including heart disease and diabetes, lead to a high accumulation of fats in the body at a level that is uncontrollable. According to Bray, Frühbeck, Ryan & Wilding (2016), such disorders and diseases as Cushing's syndrome and polycystic ovarian syndrome (PCOS) contribute to the excessive storage of fats in the body that cause obesity. Also, the sedentary lifestyle that includes long working conditions with minimal exercises, and its combination with genetic factors leads to binge eating which is a key contribution to the development of obesity.

### **Pharmacology**

Obesity is a lifestyle disease that can be managed depending on the psychological factors and genetic elements at play. According to the FDA, there are several therapeutic interventions and treatment guidelines to counter obesity. One of the most common pharmacotherapy is weight management that begins with proper diet intake to consistently eliminate the accumulated fats (Bray, Frühbeck, Ryan & Wilding, 2016, p. 1950-1953). Although the condition is considered behavioral, it requires diet change, and in severe cases, medical intervention may be necessary. Regarding lifestyle intervention, the changes in diet and physical activity are the cornerstones to dealing with obesity, and it requires modification of diet with the expected outcome on weight loss. Moreover, the use of drugs such as an Orlistat to control excessive weight gain and regulate fat in the body, eliminates the chances of developing obesity. In 2012, the FDA approved the use of phentermine/Topamax combination to counter the emergence of obesity through weight loss.

Obesity is a public health crisis that has been a concern for decades as a result of excessive accumulation of fat into the body resulting in a health and economic burden. While genetic makeup and poor eating habits, as well as the lack of physical activity, have been associated with obesity, there are instances when medical conditions contribute to the progression of obesity. Although there has been medication to deal with the condition, including the use of medicine, weight management is the most successful intervention against obesity.

Reference list

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