



Programme: BSc (Hons) Health and Social Care Level 5.

Module: Introduction to Physiology {BMHP5003}.

Assignment Title: Report on impact of Obesity {task2}.

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## Introduction.

In this report, I will be emphasising on the unwanted weight gain that might cause overweight and obesity, and the impact of this disease on human being, and the physiology and psychological consequences that comes with it when someone is in these categories, will be analysis. The paper is still going to discuss some of the causes and risk factors, that can contribute to someone being obesity. This assignment we then move further a little bit more to highlight in regard, to the case study, lifestyle questionnaire that was done on patient A, to shield more light on her health behaviours and the health risk she may be facing and the necessary health promotion activities that she can practice, will be analyses in this report.

**Definition of obesity:** According to World Health Organization, (2021) overweight and obesity can be defined as excessive or abnormal fat accumulation that can cause a risk to someone health. And when someone (BMI) body mass index is over twenty-five, is seen as overweight and over thirty is considered obesity (W.H.O, 2021) see image1 on appendix. And the global burden of the disease in 2017 claims that, the problem has become epidemic proportions, with more than four million people losing their life every year because of being obesity or overweight and the rates of this problem continue to increase in children and adults.

## Physiology and Psychological impact of being obesity.

**Physiology impact:** W.H.O, (2017) highlighted that, obesity stigma is being mentioned all the time in one of the findings from a western Europe country, indicating that 18.7% of people who are obesity suffered from stigma. For someone with severe obesity, the number was higher to 38% and most of them experience the stigma from employers, family, friends and even from educators and health professionals. And the stigma has be linked to be an essential part of the acts of health inequalities, and obesity stigma relates to important psychological and physiological consequences, including decreased self-esteem and increased anxiety, depression which can result to avoidance of medical appointment, physical activity, and disordered eating (W.H.O, 2017).

**The Psychological consequences of obesity:** Psychological impact of obesity or overweight start from experiencing anxiety and lowered self-esteem, and some serious problems such as eating disorders like, binge eating, anorexia, bulimia, and depression as well.

The reason why this is so, because our civilized practice is so singular in a way that it value, toned bodies and youthful slim. With rare exceptions, just thin proportional shape is regarded sexy.

Overweight or obese people are looked down upon (MentalHelp, 2021).

Sarwer and Polonsky, (2016) highlighted, that a lot of patients suffering from obesity, have engage themselves with mental health healing just to tackle the emotional impact of the disease or modify their eating habit (Sarwer and Polonsky, 2016).

## Cause and/or Risk Factors:

**Causes:** There are a lot of factors that can play a role in retaining and gaining excess body weight. These include environment factors, genetic, watching television, prenatal and early life encourage poor diet and lack of exercise which can be seen in image2 in appendix, which will be discussed briefly as well.

**Activity and Food:** Weight can be gain when the calories someone consumed is higher than the one, they burn through activity, this type of imbalance can be seen as one of the highest contributors to weight gain that can lead to being overweight or obesity.

**Environment:** Our environment might as well, have an influence in the way we maintain a healthy weight, for instances not having affordable gyms, sidewalk and area parks can makes it difficult for someone to physically be active. Too much of food portions might also increase people calories intake, that making even, more physical engagement compulsory to maintain a healthy weight and why also in some neighborhood, some people might not have access to shops that deal with affordable healthy food likes, vegetable, and fresh fruits (NIH, 2012).

**Medical conditions and Medication:** there are a lot of medical problems that can only be cure with pharmaceutical medicine and gaining weight is a popular side effect of many such drugs, including diabetes medicine, antipsychotics, and antidepressants (Gunnars, 2018). This medication, may reduce your metabolism and increase your appetite, also increase your rate of fat storage and even after your body power, to burn fat. And additionally, a lot of common medical problems can predispose you in gaining weight and a good example of that, is hypothyroidism.

**Genetic:** changes in genes within human populations happened too slowly to be accountable for the obesity crises. Moreover, the way someone answer to a surrounding that support intake of high-calories foods and physical inactivity suggests, that genetic do involve in developing obesity.

Genes can influence obesity in a way that, he gives the body directions for answering to changes in its surrounding. Variants in a lot of genes may lead to obesity by increasing food intake and hunger. Rarely, a visible way of inherited obesity from the family is trigger by a particular kind of variants of a single genetic (monogenic obesity). Most of the obesity, probably comes from complicated conversations among different genes and environmental factors that is difficult to understand (multifactorial obesity) (CDC, 2021).

**Risk factors:** when someone have a body mass index (BMI) that is, 30 or above. It means that person is more likely to develop some certain health conditions that may include the following, stroke and heart diseases, pregnancy complication, depression, and gallbladder diseases, which can be seen on image3 appendix:

**Heart Disease and Stroke:** putting on extra weight, makes that person more prone to high cholesterol and high blood pressure, of which both of this health conditions make stroke or heart disease more likely to happen.

**Gout:** this is a disease that normally affects the body joints. And this type of issue occurs when someone have a lot of uric acid in his or her blood, which the extra uric acid can easily form a crystal that insert in the joints and this very common with people who are obesity or overweight, because the more you weight the more likely you develop gout (Ratini, 2020).

**Pregnancy Problems:** pregnant women who are overweight or obesity, this health condition may increase the risk of some health issue that can happen within that time they are pregnant, and they might start having gestational diabetes, or even developing preeclampsia, which is developing high blood pressure when they are pregnant which can lead to some severe health issue for baby and mother if left untreated.

**Gallbladder Diseases:** obesity and overweight can also increase the chances of developing gallbladder sickness, such as cholecystitis and gallstones. Because of the imbalances in the substance that formed bile, cause gallstone. And once there is too much cholesterol in bile, this may lead to gallstones (NIH, 2018).

**Depression:** Tyrrell, et al., (2018) argued that a lot of people affected by this so call obesity, experience depression and some findings has indicated a strong correlation within a major

depressive disorder and obesity, because discrimination may be inevitable for people affected by obesity based on their weight over the time, this might lead to lack of self-esteem and feeling of sadness.

Liver Disease: a liver disease that is known as nonalcoholic steatohepatitis or fatty liver disease, these may happen when there is too much fat that build around the liver, this excess fat can easily allowed scar tissue to develop or destroy the liver and this type of disease usually, had no symptoms but eventually, it can result to liver failure (Cafasso, 2020).

#### Case Study for Patient. A:

This case study is regarding the lifestyle questionnaire that was done on patient A, to evaluate her health behavioral, and according to the question that was throw at her in respect to her health behaviors, it showed she is 48years old, born on the 1<sup>st</sup> of January 1973, with a height of 165cm, and weight of 86kg and smokes between ten to nineteen sticks of cigarettes per day. And her blood pressure is about 180/90, with no history of shock or stroke in the past.

And due to her busy life scheduled she does not involved herself in any form or type of exercised, also she do consumed closed to three to six units of alcohol daily, she eats junk food as well like, frozen meals, fries an chips, red meat and with a family history of high cholesterol and heart attack, because her elder sister have issue with high cholesterol, while her father died at the age of 68 years old as a result of heart attack.

#### Intervention for Patient A:

There is severe health risk for patient A, after her BMI calculator shows 31.5, which indicate she is already obesity, these can be seen on image5 appendix, with no regular excesses and poor diet together with drinking, smoking and her family background of high cholesterol and heart attack, it shows there may be high chance of her failing prone to other sickness such as gout, pregnancy problem, heart diseases and stroke, gallbladder diseases and diabetes (Mayo Clinic, 2020).The good thing is that, with she changing her behaviour in regard to calories intake, that is by eating a heathy balanced diet and increase physical activities, I believe this can really change the whole situation to a positive one.

Diet: I believe the most suitable way to achieve this goal, is for patient A, to change her high-energy and unhealthy food choice, such as chips and fries, red meat, frozen meals, and alcohol for a healthier choice like, eating a lot of vegetables, fruit, milk and dairy nutrition, beans, fish, wholegrain varieties like, rice and bread. And try as much as possible to avoid food that is containing high amount of salt because this can increase your blood pressure. Lastly, before you consume any type of food or drink please try and check the calorie information so that, to make sure you done go more than your daily limit.

Exercise: physical activity like running, cycling, brisk walking or joining your local sport centre, all this will help you to maintain a healthy weight lost. And it can also have a great number of health advantage and can help manage and prevent more than twenty health condition such as, lowering the chances of type2 diabetes (NHS, 2019).

Swimming: this has been proven to cut down the risk of some serious health condition, such as stroke, type 2 diabetes, and heart diseases. And can also help promote weight loss and improve mobility, strength and general flexibility, it can also boost your mood and decreases level of stress to increase your mental wellbeing and also lower strain on body joints compared with other exercise like football or running and likewise swimming is regarded as a beneficial activity for person of any ability or age (NHS, 2020).

### Conclusion:

This assignment paper had really made me to have a clear understanding regarding obesity disease, its psychology and physiology consequences on human. And improve my knowledge about all the cause and the different risk factor that may emerge when someone is obese and the necessary treatment and intervention. I believe this is going to help me in future when dealing with obesity patients.

### Appendix:

1. image1 Source: (Cordlifeindia, 2018)



- 2.

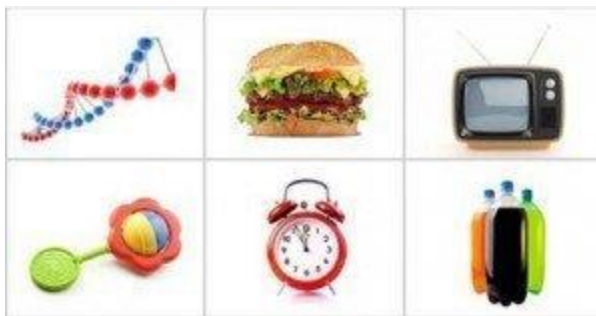


image2 Source: (Harvard T.H Chad, 2021).

- 3.



image3 Sources: (Brain, 2021)

## Appendix

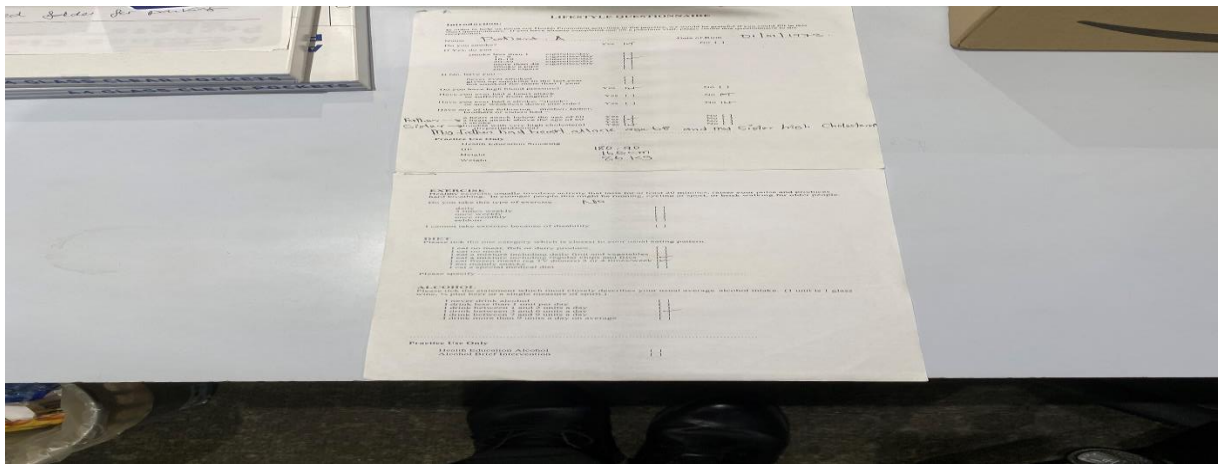
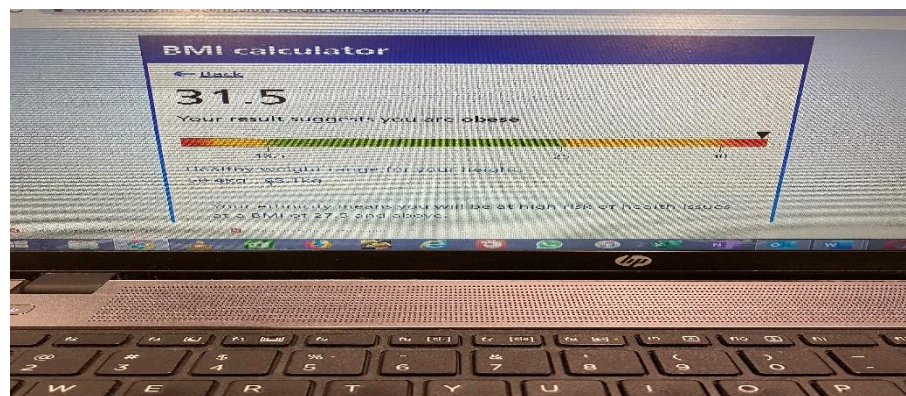


Image4 Patient A, lifestyle questionnaire (Class excesses, week6).

Image5 Source: (NHS, 2018)



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