

Introduction to Physiology

Assessment Report

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Introduction

The King fund report (2021) explains that the rates of obesity in England are high and rising; however, the rate of obesity is higher in women than men. The aim of this health assessment report is to discuss obesity. To meet this objective, the definition of obesity will be discussed, as well as the physiology of obesity. Patient's A case study will be presented with the relevant baseline health status as well as identifying the health issues in the health questionnaire. A health assessment will be undertaken and the normal and abnormal physiological conditions; based on the assessment findings. Relevant recommendations relating to Patient A's lifestyle changes for a healthy lifestyle will be discussed. Key findings will be summarised, and reflection will be undertaken as regards knowledge acquired in this module. A health assessment is a profile of an individual in which contains the individual's vital signs and the person's lifestyle. It gives a lot of information, which explains how the individual lives. The kind of food the person eats, how active the individual is if the person drinks alcohol, and how much. Nuffield health (2021) highlights that 'a health assessment is a detailed health check; it focuses on the prevention of potential health issues.'

What is Obesity

World Health Organisation (2021) defines 'obesity as abnormal or excessive fat accumulation that presents a risk to health.' Obesity is when an individual has too much body weight. For an individual to be described as obese a body mass index is needed to be calculated and the result will stipulate if the individual is obese or not. Due to the importance of obesity, there is now World Obesity Day, the aim is to raise awareness and identify obesity as a disease and give people more information and its root causes and how to put a stop to it. (World Obesity Day, 2021). Obesity is a word used quite often used within healthcare settings. Health professionals often encourage their patients not to be obese due to the problems it can cause. Obesity and being overweight is not only a problem in the United Kingdom but appears to be a global issue.

Physiology of Obesity

Obesity occurs when an individual is eating more food than the body needs. There is an imbalance in what the body needs and what food intake the body is having. Zhang et al (2014) highlight that obesity is attributable to overconsumption of calorie-dense foods and physical inactivity. Obesity is a chronic condition that requires long term management. The stigma of

obesity can sometimes affect the mental and physical health of individuals. (Albury et al, 2020)

Patient A's Case Study

Patient a is a 48-year-old lady, who smokes 10 to 19 cigarettes a day, she has high blood pressure, and her blood pressure is presently 180/90; Patient A's father had a heart attack at the age of 68 years; her sister has hyperlipidaemia; Patient A's height is 165cm and weight is 86kg. Patient A does not take part in the exercise as she states she does not have time as she has a busy life schedule. Patient A's diet consists of a mixture including regular chips and fries, also she eats meats. As regards alcohol Patient A drinks 3 to 6 units a day and drinks a lot more during the weekend. Patient A smokes 10 – 19 cigarettes per day. Patient A's BMI (body mass index) is 31.5 which makes her to in the high-risk category.

Health Assessment of Patient A

Family Cardiac History

- Patient A's father had a heart attack at 68 years and her sister has hyperlipidaemia: this demonstrates that Patient A has a strong family history of cardiac issues. This demonstrates that Patient A could suffer from cardiac issues later in life if she does not change her lifestyle choices. Heart Foundation (2020) explains that there is a higher risk of individuals having cardiac issues if there are family members that have had cardiac issues.

Excessive Alcohol in take

- Patient A explains that she drinks 3 to 6 units of alcohol a day and drinks a lot more at the weekend. Agarwal et al (2021) argue that heavy drinking is associated with a greater waist – hip ratio in midlife with other influences such as physical inactivity which is the case of Patient A as she does not exercise. Excessive alcohol intake can contribute to Patient A been obese.

Excessive Smoking

- Patient A states that she smokes between 10 – 16 cigarettes a day. This is a lot and can affect her health negatively. Hadden (2021) explains that cigarettes remain the most dangerous consumer product ever created. It is also known that smokers are more likely than non-smokers to get a wide range of diseases such as cardiovascular diseases and wide range of cancers.

- **Poor Diet**

Patient A explained that her diet consists of chips, and frozen foods and meat. A balanced diet is very important for the proper functioning of the body. A poor diet can lead to putting on weight and type 2 diabetes, which patient A is at risk of. Diabetes UK (2019) explain that a total of 14% of United Kingdom death are related to diet.

- **High blood pressure**

Patient A's blood pressure was reported to be 180/90, an ideal blood pressure is between 90/60 to 120/80. Blood pressure UK (2021) agrees with this line of thought and states that a normal blood pressure is 90/60 to 120/80. Patient A having such a high blood pressure can cause complications such as stroke. NHS Inform (2020) explains the impact of high blood pressure on individuals can cause diseases such as coronary heart disease, strokes, and heart attacks, hence Patient A must be careful as regards her high blood pressure.

- **Body Mass Index**

Patient A's body mass index was calculated, and this was worked out by (weight divided by height squared) this showed that Patient A's body mass index was over 30 which showed that she was high risk. The normal adult body mass index is between 18.5 to 24.9. Using the Body Mass Index weight calculator of the NHS as regards patient A it was recommended that patient A needs to lose 4.3kg. She would need to lose 1 – 2lb a week to be at the lower end of the normal range of her BMI. Abbasi et al (2017) highlight those obese individuals have a fourfold greater risk of developing type 2 diabetes.

Recommendations: Lifestyle changes for a healthy lifestyle

It is estimated that obesity is responsible for more than 30,000 deaths each year. (Public health England, 2017). Patient A has numerous lifestyle changes that need to be made however, it is important to not just take into consideration the physical aspect of Patient A, but a holistic approach needs to be considered, which will include physical, spiritual, economical, mental, and cultural aspects of her life. Gov.Uk (2021) explains that the new office for health promotion aims to improve and level up the health of the nation by tackling obesity, improving

mental health, and promoting physical activities. This shows that obesity is a nationwide issue, and the government is trying to curb this pandemic by encouraging people to make healthier choices and to stay active. This is where health promotion plays an important role in advising Patient A as regards lifestyle changes that can bring about gradual but permanent positive changes to her life. To make it easier and for Patient A so that she is not overwhelmed, with all the changes that she needs to make it will be easier to start of slowly.

Change in diet

Patient A needs to change her diet, it is important that vegetables and fruits are included in patient A's diet. The British Nutrition Foundation (2018) highlights that in (2016) Public Health England started the eat well guide, which emphasizes the importance of individuals eating at least 5 portions of a variety of fruit and vegetables a day. Beans, pulses, fish, and eggs should be included in individual's meals. This can be introduced to Patient A, and she can choose the vegetables and fruits that she likes.

Physical activity

Patient A states that she does not have time for time for exercise, hence she seldomly does any exercise. This is not helpful for Patient A as she needs to be active. If Patient A is working, she can walk to work if it is not far from where she lives or take a bus and get off two stops before she gets to work and walk. The Public Health (2017) states that 10 minutes of brisk walking each day in midlife for health benefits helps in physical fitness, improve mood improved the quality of life and increases body leanness and healthier weight. Alternatively, if Patient A does not work, she can each morning or evening can walk around where she lives for 10 minutes.

Reducing or stopping the amount of Cigarette Patient A Smokes

There are different incentives that the government has put in place to help individuals to stop smoking. Public Health England (2019) evaluated the Stoptober campaign in 2018 and it showed that 19% of all smokers and recent ex-smokers quite due to this incentive. This could help patient A. Patient A can also be referred to the smoking cessation, who will be able to advise and help her to reduce the number of cigarettes she smokes a day. The British Lung Foundation (2019) explains that individuals are around three times more likely to stop smoking successfully if a combination of stop smoking treatment and specialist help. There may be underlying issues why Patient A is smoking which may be psychological, however, the

smoking cessation will be able to assess the situation and if Patient A all needs to be referred to a psychologist that could be done.

Reducing or stopping the amount of alcohol Patient A drinks

Age UK (2021) highlights that the government guidance concerning drinking alcohol is that men and women should not regularly drink more than 14 units a week, and this needs to be spread out. Diabetes UK (2019) also agrees with this argument and states that 14 units of alcohol a week is recommended. This indicates that Patient A's is drinking excessively as she is not able to say exactly how much she drinks, as she says she drinks more at weekend but did not give a figure. Patient A needs to be educated on the benefits of not drinking excessively. The fact that Patient A's health will improve when she reduces her alcohol intake should be an incentive to drink less. Drinkaware (2021) highlights the benefits of the reduction of alcohol intake, which are the low risk of developing liver cirrhosis, mouth cancer, stroke, breast cancer, heart disease and high blood pressure.

Conclusion

This academic report has focused on the health assessment of Patient A, the abnormal physiological conditions were discussed and what is normal parameters were highlighted. The case study of Patient A was discussed and valuable changes that needed to be made for Patient A to live a more productive and healthier life was discussed. The necessary government incentives to assist different areas of Patient A's life were discussed and useful lifestyle recommendations were explored.

The advice given for Patient A took into consideration, that it could have been a while that she has had these habits hence it may take a while for her to totally, make life changes, hence Patient A needs to be encouraged and supported in her journey to the needed lifestyle changes.

Upon reflection, it could be stated the health assessment questionnaire was very insightful as it gave me a chance to think and research on physiological issues as regards obesity and to investigate what the government establishments are doing to make people healthier. The king fund was highlighted, and it showed that obesity is one of the areas that have been reported and various recommendations have been given. This report has shown that obesity is one of the areas that the government has focused upon to reduce its prevalence in the United Kingdom, as it causes various diseases, such as some cancers, cardiac problems, and

respiratory diseases, which could be avoided, just by losing weight and choosing to eat the right foods and in the right proportion. Patient A can change her lifestyle, she just needs the right support and to be determined.

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LIFESTYLE QUESTIONNAIRE

Introduction:
In order to help us focus our Health Promotion activities in the practice, we would be grateful if you could fill in this short questionnaire. If you have already completed one on a previous visit, please return this questionnaire to the receptionist.

Name: Patient A Date of Birth: 1st Jan 1973

Do you smoke? Yes ☒ No ☐

If Yes, do you -

smoke less than 1 cigarette/day	☐
1-9 cigarettes/day	☐
10-19 cigarettes/day	☒
20-39 cigarettes/day	☐
more than 40 cigarettes/day	☐
smoke a pipe	☐
smoke cigars	☐

If No, have you -

never ever smoked ☐

given up smoking in the last year ☐

not smoked for more than 1 year ☐

Do you have high blood pressure? Yes ☒ No ☐

Have you ever had a heart attack or suffered from angina? Yes ☐ No ☒

Have you ever had a stroke, "shock" or any weakness down one side? Yes ☐ No ☒

Have any of the following - mother, father, brothers or sisters had -

a heart attack below the age of 60	Yes ☐
a heart attack above the age of 60	Yes ☒
a stroke	Yes ☐
trouble with very high cholesterol (hyperlipidaemia)	Yes ☒

Father had heart attack at the age of 68
50th was a cholesterol

Practice Use Only

Health Education Smoking Hugh Rossie

BP 180/90 BM 32.3 31.5

Height 165cm 1.65 mtrs

Weight 81kg

EXERCISE
Healthy exercise usually involves activity that lasts for at least 20 minutes, raises your pulse and produces hard breathing. In younger people this might be running, cycling or sport, or brisk walking for older people.

Do you take this type of exercise -

- ☐ daily
☐ 3 times weekly
☐ once weekly
☐ once monthly
☒ seldom

I cannot take exercise because of disability

Don't like time to exercise
Do to busy life schedule.

DIET

Please tick the one category which is closest to your usual eating pattern.

- ☐ I eat no meat, fish or dairy produce
☐ I eat no meat
☐ I eat a mixture including daily fruit and vegetables
☒ I eat a mixture including regular chips and fries
☐ I eat frozen meals (eg TV dinners) 3 or 4 times/week
☐ I eat mainly snacks
☐ I eat a special medical diet

Please specify eats meats?

ALCOHOL

Please tick the statement which most closely describes your usual average alcohol intake. (1 unit is 1 glass wine, 1/2 pint beer or a single measure of spirit.)

- ☐ I never drink alcohol
☐ I drink less than 1 unit per day
☐ I drink between 1 and 2 units a day
☒ I drink between 3 and 6 units a day
☐ I drink between 7 and 9 units a day
☐ I drink more than 9 units a day on average

Drinks a lot more in the weekend.

Practice Use Only

Health Education Alcohol
Alcohol Brief Intervention

☐
☐