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MODULE CODE: BMHP5003_BIRM

MODULE: INTRODUCTION INTO PHYSIOLOGY

INTRODUCTION:

In this report I will be assessing the health of Bob and identifying the implications that his current lifestyle could have on his health. From what the case study suggests Bob lives a lifestyle which is quite unhealthy, both physically and mentally and this is detrimental to Bob's quality of life. It is therefore important for him to consider improving his current lifestyle and changing for the better. Also, Bob's story could be representative of how other individuals live and what life can be like for millions of others, it is therefore essential that the lessons learnt from Bob's life analysis are made as an example for others to look at to avoid negative mental and physical health.

Bob overall case study highlights that he lives an unhealthy lifestyle both physically and mentally. Both physical and mental health are interlinked as your physical state is a representation of your mental state, Bob seems to be also struggling with other issues in life such as his family and job. Bob may have underlying issues within himself which aren't allowing him to prosper in life. In this assignment I will be giving suggestions to Bob on how to improve his life alongside critiquing some of the aspects of his life which are hindering his success to a healthy life.

DIET:

Our diet is an integral part to our everyday lives and can be a determining factor of how our life is lived and how long it will last. According to Bob's BMI results he is obese (NHS, 2018). The NHS recommends keeping off 5% of his body weight as this will have a plethora of health benefits such as lowering blood pressure and reducing the risk of developing type 2 diabetes. Bob should also set out goals and work towards them over time, aiming to lose weight. Bob should aim to lose 11 pounds of weight (NHS, 2018). He should try to lose 1-2lbs every week to try and get on the lower side of the BMI range, this will enable him to have a healthier physical well-being which will impact his mental well-being.

Scientists have also highlighted that individuals can gain major advantages in life through improving their diet, cutting down on highly processed foods and foods loaded with sugar, salt and fats, replacing these with fruits, vegetables, nuts, lentils, seafood and whole grains

can be of extreme benefit to an individual's health (O'Connor, 2022). It seems that Bob has diverted his focus away from his diet as he no longer cooks meals anymore and eats as he goes, which suggests that he is eating unhealthy foods as they are easier to access and quickly prepared.

Our diet is also linked with our mood and regulation of the brain, for example serotonin is a neurotransmitter which is influenced by the digestive system (Selhub, 2022), serotonin helps regulate system, Bob may be suffering problems with serotonin which may explain why he struggles to sleep at night and resorts to alcohol. Studies have also compared traditional diets such as the Japanese or Mediterranean diets to Western diets and found that the risk of depression is 25 to 25% lower in the traditional diets (Selhub, 2022).

Scientists explain that this difference is due to traditional diets having greater proportions of vegetables, fruit, unprocessed grains, fish, oils and contain modest amounts of lean meat and dairy. They also do not contain processed, refined foods and sugars which are integral parts to western diet.

Bob may want to also consider shifting to a more traditional diet eating balanced as opposed to purely unhealthy foods and intake of alcohol. Bob's diet will also aid in him losing weight which is one of the goals he should be aiming for. It is important for Bob to also remember that it is never too late to change as the studies have suggested that even when older individuals change their lifestyle and diets there are still significant differences made to their health.

Diet not only helps us lose weight but can also change other aspects of health such as hormone imbalances which is what many people suffer with today (ckgdmchange, 2020). Through restoring hormone imbalance individuals feel in a better mood and ready to take on the day, this may be beneficial for Bob as he may suffer from hormone imbalances due to his lack of sleep and inability to sleep.

EXERCISE:

Judging from the case study it seems that Bob isn't getting enough exercise. This is due to him being extremely overweight. Exercise can be a beneficial tool for Bob to utilise as it can catalyse the augmentation of his physical health and mental health. Exercise has many

health benefits such as reducing the risk of coronary heart disease, stroke, type 2 diabetes and cancer (NHS, 2021). Studies suggest that no matter your age exercise will always be of benefit leading to a longer and happier life (NHS, 2021).

Exercise can also improve other areas of our life such as boosting an individual's self-esteem, mood, sleep-quality, reducing risks of stress and depression (NHS, 2021). This is brilliant for Bob as exercise can solve a lot of his issues, for example improving his sleep quality means he won't have to consume alcohol before sleeping and can stay awake whilst working improving his overall routine. Increasing self-esteem may mean that Bob will be able to be more social and even see his family members again so that he doesn't feel as lonely. Also reducing the risk of depression is great for Bob as he may struggle with it currently due to having no company.

Through increasing his self-esteem Bob may be able to find another job that he enjoys, as it suggests in the case study, he does not enjoy his work as he finds it boring, Bob talking to more individuals and meeting new people may build him a stronger network and open more doors and opportunities for him to find something catered more towards him. It has been found that in all age groups exercise also helps increase brain functioning and memory (American Physical Therapy Association, 2020). With Bob's brain functioning at a higher capacity, he may be more capable to do things he wouldn't have been able to have done prior to exercising.

Exercise can also aid in weight management, combating cancer, lower blood pressure, improve heart health increase life span and much more (American Physical Therapy Association, 2020). This is also beneficial for Bob as one of his aims should be to lose weight 1-2lbs per week, this is made more achievable through exercise. Living longer is also good for Bob as it gives him more time to get the things that he wants out of life instead of doing the things he hates for the rest of life, living longer also allows Bob to experience the growth of his grandchildren and spend more time with them.

Through increasing his self-esteem Bob could also find a new partner to spend more time with, as it may get difficult being alone all the time and being in the city-centre with a lot of

noise pollution doesn't could add to the pressures of being alone. Having a new partner enables Bob to talk about his experiences and share how he feels, rather than bottling up his emotions and becoming vulnerable, Bob can also gain feedback from another individual, gaining insight to another person's perspective of life. Therefore, it is essential Bob considers exercising and tries towards it as it could potentially improve his quality of life, aiding him in becoming a better person.

LIFESTYLE:

Lifestyle is a factor which determines a lot of our mental health, for example individuals with lifestyles that have better foods, better physical health, cleaner air and other factors tend to be much healthier than those with poorer lifestyles. It seems that Bobs lifestyle does not positively impact his life, for example he is lonely in the city centre, he spends most of his time on the road, he has been smoking since the age of 20 and is an alcoholic.

By smoking Bob has increased the likelihood of him getting lung cancer by 15 to 30 times, this is also the likelihood of him dying from cancer (CDC, 2020). This is a lifestyle choice which Bob must avoid. There are multiple ways in which Bob can stop smoking if he stays dedicated, Bob can remove tobacco products from his home, talk to his doctor to help him quit, set a goal of how many days he will abstain from cigarettes and keeping busy (Robinson, 2019). After just one day of quitting smoking an individual's risk of heart attack decreases, after 9 months of quitting smoking the lungs have significantly healed themselves, after 5 years of smoking circulation improves and the arteries become wider again and if individuals go on longer without smoking the risk of death is that of an individual who has never smoked before (Fletcher, 2018).

Bob is also very lonely which is unhealthy, research has suggested that loneliness is associated with the risk of mental health issues such as depression, anxiety, low self-esteem, sleep problems and stress (Mind, 2019). There are different ways in which Bob could avoid loneliness for example keeping in contact with individuals online, reading books, gardening and watching movies (British Heart Foundation, 2021). Starting new hobbies and finding new interests is a great way for Bob to get his mind off things, it will also allow him to talk to individuals who are interested in the same things as him keeping him company.

Interacting online will also allow Bob to keep in contact with his family even though they live far away.

The concentration of NO₂ is 50% higher than it should be in Birmingham (Birmingham City Council, 2021). This paired with Bobs habit of smoking is detrimental to his lungs and can cause some serious damage. Bob can ameliorate his situation by going on walks where there are many trees such as woodlands, planting plants around his home can also improve his air quality, giving up smoking will better his lungs ability to maintain a health circulation against the poor air pollution. These are problems that Bob must be made aware of as it is his life that could be on the line.

Through implementing a healthy lifestyle Bob will live a happier life, having a lifestyle which causes Bob to exercise more, give up smoking, be more social, achieving more, eating healthier and getting more control over life. These are the factors which Bob must be Conscious of to be successful and to have a better quality of life where he is comfortable with who he is as an individual.

CONCLUSION:

There are many factors for Bob to consider on his quest for a better life, however the general points are getting his physical health in check which will in turn have a positive impact on his mental health. Advice for Bob can be utilised by others suffering from loneliness, poor health and lack of support. Bob must give up old habits which have been damaging his health for years and get support for whatever he needs.

It is imperative that individuals talk to trusted friends, family or professionals about any issues they may be facing as these issues can snowball into much larger problems which will further deplete their quality of life.

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