

Maxine Guymer: 2241348

Module: BMHP5023

Lecturer: Felicity Peacock

Case Study “BOB”

Introduction

This report aims to provide a detailed and critical evaluation of the overall health and well-being of a fictional character, Bob, a fifty-six-year-old long-distance lorry driver. It will explore key dimensions of health, including physical, mental, and social well-being. By examining these interconnected areas, the report will assess how Bob's lifestyle, occupational demands, and personal circumstances contribute to his current health status.

The report will also analyse key indicators of physical health, such as body mass index (BMI), blood pressure, and cholesterol levels, as well as the risk of developing conditions including cardiovascular disease and type 2 diabetes. It will further consider mental and emotional well-being, focusing on stress, loneliness, low self-esteem, and symptoms of anxiety and depression. In addition, social and environmental factors will be explored, including working conditions, access to healthy food, and levels of social interaction.

Overview of Bob's Lifestyle and Current Health

Bob is a 56-year-old male, who works as a long-distance lorry driver. His job involves very long hours, and he is often away from home for several days at a time. His lifestyle is unhealthy, as he struggles with being overweight and has a poor diet. Bob is also experiencing depression and suffers from anxiety. He is married with two young children and often works away from home, which means he spends a lot of time away

from his family. Because of his busy schedule, he usually eats food on the go and often stops at cafés and roadside services, where healthier food choices are limited. Bob is overweight, weighing 105 kg and standing at 6 feet tall. He spends most of his day sitting while driving and has very little time for exercise. He is currently experiencing shortness of breath, and even simple activities such as climbing the stairs have become difficult. His blood pressure is high at 160/99, and he also has high cholesterol levels and is prediabetic. Bob often suffers from dehydration and headaches. In addition, he struggles with anxiety and depression and often feels lonely and isolated due to the amount of time he spends away from home. Bob is also a heavy smoker, smoking around 30 cigarettes a day, and at weekends he drinks two bottles of wine each night.

Physical Health

Based on Bob's weight and height, his Body Mass Index (BMI) can be calculated as follows:

Weight = 105 kg

Height = 1.83 m

First, the height is squared:

$$1.83 \times 1.83 = 3.3489$$

The weight is then divided by this value:

$$105 \div 3.3489 = 31.4$$

Therefore, Bob's BMI is approximately 31.4. According to standard BMI classification, this places him in the obese (Class 1) category (Furey, 2025).

Obesity

Being overweight or obese can make the heart work harder, which can raise blood pressure. Over time, this puts extra strain on the heart and blood vessels. As a result, Bob is at a higher risk of serious health conditions such as heart disease, stroke, and type 2 diabetes. His blood pressure reading (160/99) shows that his heart is already

under pressure, and combined with his high BMI, it suggests his overall health is at risk. This means Bob needs to make lifestyle changes, such as improving his diet, increasing physical activity, and reducing stress, to help lower both his weight and blood pressure and improve his long-term health.

Effects of obesity

According to (Djalalinia et al, 2025) The large increase in overweight and obesity across many countries has become a major global health concern. It is estimated to cause more than 3.4 million deaths worldwide, as well as reducing quality of life and increasing disability. Being overweight or obese can lead to many health problems. These include some cancers such as breast, bowel, kidney, and pancreatic cancer Type 2 diabetes, high blood pressure, stroke, heart disease, asthma, back pain, osteoarthritis, blood clots, gallbladder disease, and a higher risk of disability. Together, these conditions cause more than three million deaths around the world each year.

High Blood Pressure & Cardiovascular Disease (CVD)

High blood pressure, also known as hypertension, is a widespread condition in which the force of blood against the artery walls is consistently elevated. If left untreated, it can significantly increase the risk of cardiovascular diseases, including heart attacks and strokes. As blood pressure levels rise, so does the likelihood of developing other serious health complications (Guy's and St Thomas' Specialist Care, 2026) such as kidney damage and failure, vision loss and vascular dementia (NHS, 2024).

Bob has a family history of cardiovascular disease (CVD), which increases his risk of developing the condition. Research shows that relatives of people with CVD have around a 40% higher risk, while children of parents with early-onset CVD have a 60–75% increased risk of developing the disease themselves (Kolber and Scrimshaw 2014).

Diabetes

Bob is at risk of developing Type 2 diabetes. Type 2 diabetes is a common health condition that happens when the body does not produce enough insulin, or when the insulin it does produce does not work properly, which is known as insulin resistance. Insulin is important because it helps the body use glucose (sugar) for energy. When there is not enough insulin, or it is not working effectively, the amount of glucose in the blood becomes too high (NHS, 2025).

Type 2 diabetes increases the risk of serious long-term health problems. If uncontrolled, it can damage blood vessels, leading to heart disease and stroke. It can also cause foot problems that may result in infections or even amputation, as well as eye damage that can lead to blindness, kidney disease, and gum disease. Although it is rare in type 2 diabetes, Bob could also develop a dangerous condition called hyperosmolar hyperglycaemic state (HHS), where very high blood sugar builds up over time, usually triggered by infection and dehydration (National Health Service [NHS] 2025).

Individuals with prediabetes have an increased likelihood of developing cardiovascular disease, with studies suggesting a risk around 15% higher than those without the condition. This makes it essential to address other contributing risk factors, such as smoking, raised blood pressure, and high levels of low-density lipoprotein (LDL) cholesterol (Harvard Health Publishing, 2024)

Lifestyle Factors

Bob has a 30-year history of smoking; he currently has one pack of Camel unfiltered cigarettes a day. Because Bob smokes, he is at a much higher risk of developing serious health problems. Smoking damages the heart and blood vessels, increases blood pressure and heart rate, and makes the blood more likely to clot. This raises Bob's risk of heart disease, heart attacks, strokes, and peripheral arterial disease, which can reduce blood flow to the legs. Smoking also increases Bob's risk of developing several types of cancer, including throat and mouth cancer, lung cancer, stomach cancer,

pancreatic cancer, and kidney cancer. If Bob continues smoking, these health risks are likely to increase over time (Bupa, 2026).

Bob consumes more than 14 units of alcohol per week, If Bob continues drinking alcohol at his current level, it could seriously damage his health. Drinking too much, either regularly or in one session, can affect the entire body not just the liver. Alcohol misuse can also harm the brain, stomach, pancreas, lungs, heart, blood vessels, and immune system (National Institute on Alcohol Abuse and Alcoholism [NIAAA] 2026)

Diet

Bob consumes a diet containing high salt, processed foods and often snacks on sweets and nuts due to boredom. If Bob eats too much salt, it can increase his blood pressure, which puts extra strain on his heart and blood vessels. Over time, this raises the risk of serious health problems like heart attacks and strokes. It can also lead to damage in the kidneys and make the heart work harder than it should.

Around 1.89 million deaths each year are associated with consuming too much sodium, which is known to increase blood pressure and the risk of cardiovascular disease. The World Health Organization (WHO) advises that adults should limit their sodium intake to less than 2,000 mg per day, which is equivalent to under 5 g of salt, or just under one teaspoon. (World Health Organization (WHO) 2025)

When Bob is on the road, he avoids drinking too much to avoid stopping regularly and suffers from dehydration and headaches. Dehydration occurs when the body loses more fluids than it can take in, and it can become serious if not addressed. It can usually be prevented by regularly drinking fluids such as water (NHS Inform, 2026).

If Bob becomes dehydrated, it can affect many important systems in his body, including the circulatory, digestive, and urinary systems. Severe dehydration can also lead to confusion, organ failure, and in extreme cases, death. When Bob is dehydrated, his blood can become thicker, making it harder for his heart to pump it around the body.

This can cause low blood pressure, leading to dizziness, fainting, or even shock (Health and Wellbeing WPCN, 2026).

Mental and Emotional Wellbeing

Bob is experiencing loneliness, social isolation, low self-esteem, and symptoms of anxiety and depression. These issues are closely linked to his weight and lifestyle and may be reinforced by emotional eating as a coping mechanism. Poor sleep further contributes to reduced emotional resilience and difficulty managing stress. A healthy adult typically requires 7–9 hours of sleep per night to support physical and mental recovery. Poor sleep quality can negatively affect mood, energy levels, and overall wellbeing. In Bob's case, disrupted sleep patterns may worsen stress, low mood, and fatigue, and may also reduce motivation to engage in physical activity or make healthy choices (NHS, 2026)

Long periods away from family can lead to emotional strain, including feelings of isolation and guilt about missing important events (AFAP, 2024). Bob's job places him in a similar situation, which may contribute to reduced emotional wellbeing and increased stress. Bob's long working hours may also contribute to burnout, which can reduce concentration, motivation, and productivity while increasing stress levels (Indeed Editorial Team, 2025). Poor work-life balance may also limit time with family, further affecting emotional wellbeing.

Recommendations

Research suggests that regular physical activity can reduce symptoms of moderate depression, with around 35 minutes of exercise five times per week showing benefits (Private Therapy Clinic, 2026). Activities such as walking or cycling can improve mood through the release of endorphins. Bob already enjoys cycling, which could be a positive coping strategy. Increasing physical activity, such as using a gym while travelling or cycling during breaks, may help improve both physical and mental wellbeing.

The Eatwell Guide explains how different types of food should be eaten in the right proportions to make up a healthy, balanced diet. It shows the main food groups and

how much of each we should have overall. Bob can also look this up online to find more information and understand how to make healthier food choices (NHS, 2024).

According to NHS (2022) to reduce the risk of ill health caused by inactivity, it is recommended that a person exercises regularly for at least 150 minutes each week and try to reduce the amount of time spent sitting down.

There are different methods that can help with smoking, such as nicotine replacement therapy (like patches or gum), prescription medication, counselling, and support groups (NHS, 2026). Conclusion

In conclusion, Bob's health and wellbeing are being negatively affected by his lifestyle, working conditions, and personal habits. His obesity, high blood pressure, smoking, alcohol intake, poor diet, and lack of exercise increase his risk of serious conditions such as cardiovascular disease and Type 2 diabetes. His anxiety, depression, stress, and loneliness are also affecting his mental and emotional wellbeing.

Bob's job as a long-distance lorry driver makes it harder for him to maintain a healthy lifestyle because of long hours, lack of exercise, unhealthy food choices, and time away from his family. If no changes are made, his health is likely to worsen over time.

However, small lifestyle changes can make a big difference. Improving his diet, exercising more, reducing smoking and alcohol intake, and getting support for his mental health could improve both his physical and emotional wellbeing and reduce his future health risks.

Ahmed, S.K. and Mohammed, R.A. (2025) 'Obesity: Prevalence, causes, consequences, management, preventive strategies and future research directions', *Metabolism Open*, 27, p. 100375. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC12486175/> (Accessed: 8 May 2026).

AFAP (Australian Federation of Air Pilots) (2024) *Handling the emotional toll of being away from home*. Available at: <https://www.afap.org.au/membership/services/welfare->

[services/welfare-articles/ArtMID/4295/ArticleID/881/handling-the-emotional-toll-of-being-away-from-home](#) (Accessed: 5 May 2026).

American Heart Association (2024) *The facts about high blood pressure*. Available at: <https://www.heart.org/en/health-topics/high-blood-pressure/the-facts-about-high-blood-pressure> (Accessed: 5 May 2026).

S., Qorbani, M., Peykari, N. and Kelishadi, R., 2015. *Health impacts of obesity*. Pakistan Journal of Medical Sciences, 31(1), pp.239–242. Available at: [PMC Article](#) [Accessed 13 May 2026].

British Heart Foundation (2024) *Ultra-processed foods: how bad are they for your health? Heart Matters Magazine*. Available at: <https://www.bhf.org.uk/information-support/heart-matters-magazine/news/behind-the-headlines/ultra-processed-foods> (Accessed: 6 May 2026).

Bupa (2026) *The effects of smoking*. Available at: <https://www.bupa.co.uk/newsroom/ourviews/benefits-giving-up-smoking> (Accessed: 8 May 2026).

Djalalinia, S., Qorbani, M., Peykari, N. and Kelishadi, R., (2015). Health impacts of obesity. *Pakistan Journal of Medical Sciences*, 31(1), pp.239–242. Available at: [NCBI PMC Article](#) [Accessed 13 May 2026].

Furey, E. (2025) *BMI Calculator Body Mass Index*. Available at: <https://www.calculatorsoup.com/calculators/health/bmi-calculator.php> (Accessed: 5 May 2026).

Guy's and St Thomas' Specialist Care (2026) *The four stages of hypertension*. Available at: <https://guysandstthomasspecialistcare.co.uk/news/the-four-stages-of-hypertension/> (Accessed: 10 April 2026).

Harvard Health Publishing (2024) *The hidden dangers of prediabetes*. Available at: <https://www.health.harvard.edu/diseases-and-conditions/the-hidden-dangers-of-prediabetes> (A Djalalinia, ccessed: 10 April 2026).

Health and Wellbeing WPCN (2026) *Risks of dehydration*. Available at: <https://www.healthandwellbeingwpcn.co.uk/risks-of-dehydration> (Accessed: 8 May 2026).

Indeed Editorial Team (2025) *Work-life imbalance: What it means and its effect*. Available at: <https://uk.indeed.com/career-advice/career-development/work-life-imbalance> (Accessed: 3 May 2026).

Kolber, M.R. and Scrimshaw, C. (2014) 'Family history of cardiovascular disease', *Canadian Family Physician*, 60(11), p. 1016. Available at: PMC article (Accessed: 8 May 2026).

National Health Service (NHS) (2026) *NHS stop smoking services help you quit*. Available at: <https://www.nhs.uk/live-well/quit-smoking/nhs-stop-smoking-services-help-you-quit/> (Accessed: 3 May 2026).

National Institute on Alcohol Abuse and Alcoholism (NIAAA) (2026) *Alcohol's effects on the body*. Available at: <https://www.niaaa.nih.gov/alcohols-effects-health/alcohols-effects-body> (Accessed: 8 May 2026).

NHS Inform (2026) *Dehydration*. Available at: <https://www.nhsinform.scot/illnesses-and-conditions/nutritional/dehydration/> (Accessed: 10 April 2026).

NHS (2022) *8 tips for healthy eating*. Available at: <https://www.nhs.uk/live-well/eat-well/how-to-eat-a-balanced-diet/eight-tips-for-healthy-eating/> (Accessed: 5 May 2026).

NHS (2022) *Why we should sit less*. Available at: <https://www.nhs.uk/live-well/exercise/why-sitting-too-much-is-bad-for-us/> (Accessed: 25 April 2026).

NHS (2023) *Calculate BMI for adults*. Available at: <https://www.nhs.uk/health-assessment-tools/calculate-your-body-mass-index/calculate-bmi-for-adults> (Accessed: 5 May 2026).

NHS (2023) *Eight tips for healthy eating*. Available at: <https://www.nhs.uk/live-well/eat-well/how-to-eat-a-balanced-diet/eight-tips-for-healthy-eating/> (Accessed: 6 May 2026).

NHS (2023) *Salt in your diet*. Available at: <https://www.nhs.uk/live-well/eat-well/food-types/salt-in-your-diet/> (Accessed: 10 April 2026).

NHS (2024) *The Eatwell Guide*. Available at: <https://www.nhs.uk/live-well/eat-well/food-guidelines-and-food-labels/the-eatwell-guide/> (Accessed: 8 May 2026).

NHS (2025) *What is type 2 diabetes?* Available at: NHS – What is type 2 diabetes? (Accessed: 25 April 2026).

NHS (2025) *Complications of type 2 diabetes*. Available at: <https://www.nhs.uk/conditions/type-2-diabetes/complications/> (Accessed: 8 May 2026).

NHS (2026) *The risks of drinking too much*. Available at: <https://www.nhs.uk/live-well/alcohol-advice/the-risks-of-drinking-too-much/> (Accessed: 10 April 2026).

NHS (2026) *Tips on cutting down alcohol*. Available at: <https://www.nhs.uk/live-well/alcohol-advice/tips-on-cutting-down-alcohol/> (Accessed: 5 May 2026).

NHS England (2026) *Respiratory disease*. Available at: <https://www.england.nhs.uk/ourwork/clinical-policy/respiratory-disease/> (Accessed: 3 May 2026).

Private Therapy Clinic (2026) *Depression & motivation: a brief guide*. Available at: <https://privatetherapy.com/blog/depression-motivation-a-brief-guide/> (Accessed: 3 May 2026).

Sleep problems – Every Mind Matters (NHS) Available at: <https://www.nhs.uk/every-mind-matters/mental-health-issues/sleep/> (Accessed: 5 May 2026).

Tulane University School of Public Health and Tropical Medicine (2020) *Understanding the effects of social isolation on mental health*. Available at: <https://sph.tulane.edu> (Accessed: 3 May 2026).

University of Edinburgh (2024) *Adults face health threat from lack of physical activity*. Available at: <https://www.ed.ac.uk/news/2024/adults-face-health-threat-from-lack-of-physical-ac> (Accessed: 10 April 2026).

University of Utah Health (2018) *Salty six: Foods with surprising amounts of sodium*. Available at: <https://healthcare.utah.edu/healthfeed/2018/01/salty-six-foods-surprising-amounts-of-sodium> (Accessed: 10 April 2026).

World Health Organization (WHO) (2024) *Nearly 1.8 billion adults at risk of disease from not doing enough physical activity*. Available at: <https://www.who.int/news/item/26-06-2024-nearly-1.8-billion-adults-at-risk-of-disease-from-not-doing-enough-physical-activity> (Accessed: 10 April 2026).

World Health Organization (WHO) (2025) *Sodium reduction*. Available at: <https://www.who.int/news-room/fact-sheets/detail/sodium-reduction> (Accessed: 8 May 2026).

