

LCHS4008 Introduction to Public Health

Assessment 2 -Report on a Health Issue

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1.0 Introduction

Heart Disease, otherwise known as Cardiovascular Disease (CVD), is a common disease nowadays. Unhealthy diet, obesity, physical inactivity, smoking, alcohol addiction, cholesterol, stress and anger are notable reasons those put human being into risk of heart disease (Clark, Gardner and McDonagh, 2025). Practice of anyone of the activities aforementioned blocks arteries and obstructs blood circulation. As a result, the blood vessels cannot work until the patient is brought under surgery. Signs and symptoms of the disease include shortness of breath, chest pain, dizziness, nausea, fatigue, chest pressure, physical weakness etc. Consequently the symptoms turn into Arrhythmias, heart failure, Coronary Artery Disease (CAD), Valvular Disease and Stroke. Heart Disease is identified as as a “global Killer”. In 2022, around 19.8 million people died globally which represents 32% of the whole. Of those, 85% were affected by abrupt heart attack (World-Heart-Federation, 2023a). Around 39,000 people were reported to be died due to circulatory condition in 2022 in UK (BHF, 2023).

2.0 Main body

2.1 Consequences of Heart Disease in the community and for the NHS

Heart Attack is a common form of heart disease. Myocardial Infarction mainly happens by clotting of plaque. The tissues in the red blood cell die because of muscle block. It deters blood circulation hampering the oxygen flow in the vein and capillary (Dariusz and Gerry, 2022). Chest pain and senselessness are common symptoms here.

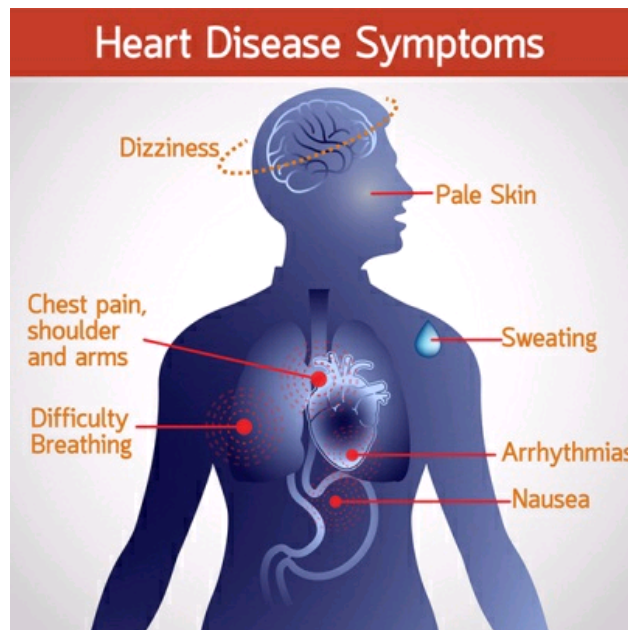


Diagram: Heart Disease Symptoms

Source: (Ganeshdiagnostic, 2023)

While muscles become unable to pump blood as per the body need, it leads to heart failure. The fluid build-up causes shortness of breathe and swelling of the legs. Asphyxia can be fixed for the short time but in the long time, this may cause abrupt and premature death to the patient carrying the symptoms.

Stroke, otherwise known as “brain attack”, may cause due to interruption of blood circulation in the artery of nerve (Jones, Buckley and Furze, 2020). Rupture blood vessel hampers supply of oxygen to the various parts of brain. Three major strokes are identified; Haemorrhagic Stroke, Ischemic Stroke and Transient Ischemic Attack. Stroke may cause permanent disability of nerves often leading to dementia and sensory changes.

Sudden Cardiac Arrest is another consequence of heart disease. In such case, the body stops functioning. The patient with sudden cardiac arrest lacks in breathing function and consciousness. The patient under this situation should be treated immediately. Delay in treatment may cause death.

Acute Limb Ischemia is a less dangerous disease than death but it can disable leg permanently. Blockage in the arteries of leg gradually damages the tissues in the leg muscles (Julious, 2024). Primarily the patient feels sever pain in both legs starting with throb. It's a Vascular Emergency causing pulselessness and critical trauma.

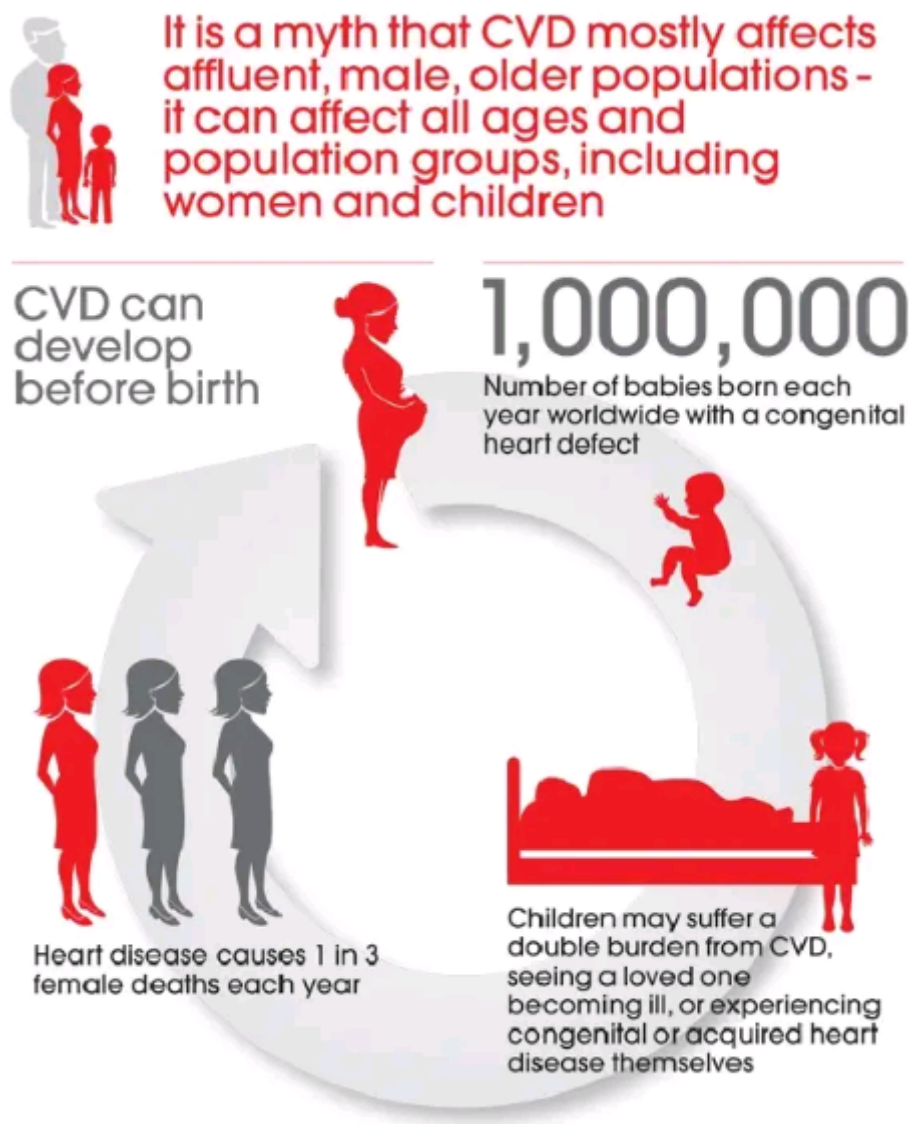


Diagram: Communal effect of Heart Disease

Source: (World-Heart-Federation, 2023b)

Heart disease impacts community negatively. Family losses an earning source through premature death. Their live becomes harder to survive due to lack of a reasonable monthly income. Heart failure, heart attack and disabilities are converting a breadwinner into a burden. It is creating high income disparity and health inequalities in the society.

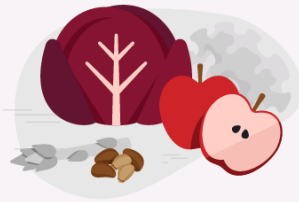
As a medical facilitator, National Health Service (NHS) is the direct sufferer of this situation. A lion's share of national budget is spent for the treatment of heart disease patients. The emergency and special care chamber is over populated with such patient and this is creating immeasurable pressure to the physicians at a stretch. Critical Surgery is a factor of time and patients are to be kept under rigid surveillance in post-operative unit (Kpodonu, 2021). Serving all the patients with quality is being hampered sometimes in NHS.

2.2 How the disease is controlled

A physically fit person should regularly take balanced diet including fresh vegetables, protein enriched food, fruits, whole grain etc. Several medical journals revealed that 45% of cardio metabolic death causes from poor diet (HealthHarvard, 2022). To ensure 150 minutes of walking every week can reduce the risk of heart disease (Mayoclinic, 2023a). Excess level of stress accelerates obesity. Dieticians say that walking for a certain time daily exhales stress and activate our nerves. Burning calories deters blood vessels from being clotted. Regular exercise charms the body cells too.

5 WAYS TO PREVENT HEART DISEASE & STROKE

By American Heart Association News



< NUTRITION

Adults should eat more plant-based foods such as vegetables, fruits, nuts, legumes and whole grains, and choose fish, lean vegetable or lean animal proteins. Minimize processed meat and sweetened drinks.

EXERCISE >

Each week, adults should engage in at least 150 minutes of a moderate-intensity activity, such as brisk walking, or at least 75 minutes of a vigorous activity, such as jogging.



< TOBACCO

At each health care visit, tell your doctor whether you have smoked any tobacco product in the previous month – and, if so, work with your doctor to create a plan to quit.



SOCIAL DETERMINANTS >

Talk to your doctor about factors that affect your health, such as housing, food security, transportation, self-image and culture.



< ASPIRIN

Because of the risks of bleeding, don't take aspirin for prevention unless your doctor prescribes it. Aspirin can help in some cases, but talk to your doctor about whether it's right for you.



Source: American Heart Association/American College of Cardiology prevention guidelines
Published: March 17, 2019 | © 2019 American Heart Association, Inc.

Diagram: Ways to prevent Heart Disease

Source: (Heart, 2019)

Inhaling tobacco is injurious to health for long time. Primarily, the inhaler may face coughing without any serious symptoms (Ozner, 2021). But in the term, smoking is responsible for heart disease. Alcohol consumption is detrimental to kidney and liver. As body absorbs alcohol beyond its refining limit, it creates pressure in lungs. Alcohol is one of those which can take away life instantly. It directly affects sensory system of human body. Research says

that, human body can process only 10-12 grams of alcohol every hour (ABCCA, 2020). Exceeding the limitation emerges critical heart injury. So, to keep kidney and liver fresh, one should avoid taking alcohol. Weight management is indispensable for mitigating health risk as this is closely connected with heart disease. Under a normal condition, human body maintains a general weight scale which is identified as “Body Mass Index (BMI)”. BMI is the standard value calculating the standard deviation between the weight of skeleton and body height (Prabhakaran, Anand and Reddy, 2022). Rest of the unnecessary weight is gained from fat and cholesterol. Avoiding cholesterol-enriched food dwindle the risk of heart disease.

Sound sleep is the mystery to sound health. Medical Science suggested standard sleep includes 12-15 hours for infants, 8-10 hours for teenagers, 7-9 hours for adults and 7-8 hours for old (Mayoclinic, 2023b). Less sleep than the standard time ceiling cause acceleration of heartbeat and creates pressure on the nervous system. Patients with high blood pressure should consult with the doctors and check-up health regularly. Prescribed medicine should be taken in time. Irregular medication cracks body resistance system down. Patients with diabetes are highly suggested to take tolerable level of carbohydrate.

2.3 The factors influencing the health and well-being of people affected by Heart Disease and people around them

The factors influencing the health and well-being can be classified into various categories; medical, biological, lifestyle, behavioural, social, economic and psychological factors. National Health Service (NHS) conducts period researches on this subject matter. A patient of heart attack or heart failure cannot lead a regular life. Every step of his movements requires acute surveillance because first attack facilitates a second chance but the second attack may cause death. Physical activity and quality sleep are mandatory to revive the red blood cells (Romero, Nazal and Lanas, 2025). Health literacy and social support help to reduce mental stress. The people surrounding the patient should support him mentally. Not making him scared of the disease is not an ethical task at all. As they need care and compassion, NHS emphasizes on the favourable home environment for them. Healthy diet supports the Mediterranean meal system. Dinner is highly discouraged by the doctors as the fat is not burnt while sleeping. Patient with heart disease losses the normal physical fitness. So, they should avoid the factors that may emerge hypertension. Balanced and Nutrient-rich food improves heart condition. Oily food is strictly prohibited for such type of patient. Especially the street food contains excess oil.

Treatment system in hospital slightly differs from that of health and social care. Hospital mitigates the primary life risk where health and social care emphasizes on full recovery and

nurture (Viera, 2024). Health and social care is highly supported by the neighbourhood and community engagement. People including the relatives support the process. For a continuous improvement, heart disease patient requires quality healthcare access. The surrounding people can support him mentally, not financially.

Community healthcare programme is mostly effective to prevent such type of disease. For example, family history of disease matters in heart disease. A person's parents previously affected by the heart attack puts that person into risk of being affected with this disease. Community healthcare programme helps to identify the vulnerable group. Economic stability is a considerable factor that influences the well being of patient. While a breadwinner is affected, he lacks of proper financial support (Clark, Gardner and McDonagh, 2025). Sometimes, that person is socially disregarded. A society free from discrimination and violence can ensure a better support system. Society is highly responsible to respond their needs promptly. Otherwise, it cannot build up a supportive neighbourhood generation to generation.

3.0 Conclusion

The researches reported Heart Disease alarmingly. Excessive consumption of fast food, cholesterol, unhealthy food habit and uncontrolled lifestyle is causing premature death globally. One cannot predict this disease until he is affected. By the time the disease is detected, patients find less scope to get back to the normal situation (Julious, 2024). In most of the cases, Critical Surgery is the only way to rescue the patient from danger. A healthy diet and active lifestyle are highly recommended as preventive measures to get rid of this situation. Health diet includes fresh vegetables, fruits, protein, grains etc. Besides, it is required to limit taking sugar and salt. A life full of lethargy is the sources of commonly occurred heart diseases. Medical Scientists stated that modern age of technology made people sluggish significantly. Consequently, obesity takes place and heart disease nests in the human body subconsciously (Jones, Buckley and Furze, 2020).

4.0 References

- ABCCA (2020) *Alcohol Facts*. Available at: <https://www.abc.ca.gov/education/licensee-education/alcohol-facts/#:~:text=Alcohol's%20Path%20Through%20the%20Body,an%20hour%20per%20stand%20ard%20drink>. (Accessed: December 7, 2025).
- BHF (2023) *Facts and figures*. Available at: [https://www.bhf.org.uk/what-we-do/news-from-the-bhf/contact-the-press-office/facts-and-figures/#:~:text=Coronary%20heart%20disease%20\(also%20known,million%20of%20them%20are%20undiagnosed](https://www.bhf.org.uk/what-we-do/news-from-the-bhf/contact-the-press-office/facts-and-figures/#:~:text=Coronary%20heart%20disease%20(also%20known,million%20of%20them%20are%20undiagnosed). (Accessed: December 6, 2025).
- Clark, A., Gardner, R. and McDonagh, T. (2025) *Oxford Textbook of Heart Failure*. Oxford University Press.
- Dariusz, K. and Gerry, K. (2022) *Fast Facts: Heart failure*. Karger Medical and Scientific Publishers.
- Ganeshdiagnostic (2023) *Heart Disease Symptoms*. Available at: <https://www.ganeshdiagnostic.com/blog/complete-guide-to-heart-disease> (Accessed: December 7, 2025).
- HealthHarvard (2022) *10 foods that may impact your risk of dying from heart disease, stroke, and type 2 diabetes*. Available at: <https://www.health.harvard.edu/blog/10-foods-that-may-impact-your-risk-of-dying-from-heart-disease-stroke-and-type-2-diabetes-2019100717965#:~:text=In%20the%20Special%20Health%20Report,Stroke> (Accessed: December 7, 2025).
- Heart (2019) *Ways to prevent Heart Disease*. Available at: <https://www.heart.org/en/news/2019/03/17/new-guidelines-healthy-lifestyle-managing-risks-are-key-to-preventing-heart-attack-stroke> (Accessed: December 7, 2025).
- Jones, J., Buckley, J. and Furze, G. (2020) *Cardiovascular Prevention and rehabilitation in practice*. John Wiley & Sons.
- Julious, P. (2024) *'Healthy heart: Heart Disease Prevention and Reversal Techniques.'*

Independently Published.

Kpodonu, J. (2021) *Global cardiac Surgery capacity development in low and middle income countries*. Springer Nature.

Mayoclinic (2023a) *Strategies to prevent heart disease*. Available at: <https://www.mayoclinic.org/diseases-conditions/heart-disease/in-depth/heart-disease-prevention/art-20046502> (Accessed: December 7, 2025).

Mayoclinic (2023b) *How many hours of sleep are enough for good health?* Available at: <https://www.mayoclinic.org/healthy-lifestyle/adult-health/expert-answers/how-many-hours-of-sleep-are-enough/faq-20057898> (Accessed: December 7, 2025).

Ozner, M. (2021) *Heart attacks are not worth dying for*. Gatekeeper Press.

Prabhakaran, D., Anand, S. and Reddy, K.S. (2022) *Public Health Approach to Cardiovascular Disease Prevention & Management*. CRC Press.

Romero, T., Nazal, C.N. and Lanas, F. (2025) *Global Challenges in Cardiovascular Prevention in Populations with Low Socioeconomic Status*. Springer Nature.

Viera, A.J. (2024) *Cardiovascular Diseases, An Issue of Primary Care: Clinics in Office Practice, E-Book: Cardiovascular Diseases, An Issue of Primary Care: Clinics in Office Practice, E-Book*. Elsevier Health Sciences.

World-Heart-Federation (2023a) *WORLD HEART REPORT 2023*. Available at: <https://world-heart-federation.org/wp-content/uploads/World-Heart-Report-2023.pdf> (Accessed: December 6, 2025).

World-Heart-Federation (2023b) *Communal effect of Heart Disease*. Available at: <https://world-heart-federation.org/resource/women-children-heart-disease-act-now-protect-hearts-love/> (Accessed: December 7, 2025).

Declaration

I hereby declare that this work is entirely my own and has been completed without the use of any artificial intelligence tools or assistance