

# Example of research paper on cardio respiratory disease

[Health & Medicine](#), [Obesity](#)



## **Cardio-Respiratory Disease**

Cardio-respiratory disease is an umbrella term used to describe various diseases of the cardio-respiratory system which make it impossible for the heart and lungs to supply enough blood and oxygen to the body during sustained physical exercise. Cardio-respiratory diseases are also termed as cardiovascular diseases due to the commonality of diseases affecting the heart and blood vessels. This essay describes cardio respiratory diseases in terms of etiology, predisposing and risk factors, disease diagnosis, treatment and the discharge criteria.

## **Etiology of Cardio-respiratory diseases**

Each condition under the umbrella term “ cardio-respiratory diseases” has a unique pathophysiology. Heart arrhythmia is a condition which causes abnormal heart rhythms. Healthy arteries and heart tissue is strong and flexible. Loss of flexibility is the major cause of cardio-respiratory diseases. This hardening of arteries leading to restricted blood flow is called atherosclerosis. It is the most common cardiovascular condition and is caused by buildup of fat deposits in the arteries. Heart defects commonly develop before birth but can also result in adults due to accidents and infections. Bacterial and viral infection of the cardio-respiratory system, allergens, toxins and diseases such as connective tissue disorder cause infection in the heart, blood vessels and lungs and can result to cardio-respiratory disease.

## **Risk Factors for Cardio-respiratory disease**

Risk factors or predisposing factors are factors that make it more likely for a person to develop a certain disease. Cardio-respiratory diseases have various risk factors. Age and sex are the most important as men are at a greater risk than women and growing old increases the risk for cardiovascular diseases significantly (Gallassi, Reynolds & He, 2006). Poor diet with high salt and cholesterol levels promotes the hardening of arteries while smoking increases risk of respiratory diseases and arrhythmia. In addition high blood pressure, diabetes and obesity makes other risk factors worse. High stress levels and hereditary factors have also been cited as risk factors for cardio-respiratory diseases (Wang & Smith, 2010).

## **Diagnosis of Cardio-respiratory disease**

Blood tests and imaging techniques are the major diagnostic procedures for cardio-respiratory disease. Blood tests include tests for blood sugar, fats and lipids, cholesterol and triglycerides and heart attack markers (Madsen, Lundstedt, & Trygg, 2010). An electrocardiogram is used in the diagnosis of arrhythmia while echocardiography creates images of the heart to identify areas of abnormal muscle contraction based on sound waves. Cardiac MRI and electron-beam computed tomographies (EBCT) are advanced diagnostic imaging techniques while a chest x-ray is routinely used for comprehensive imaging of the cardio-respiratory system (Genest et al., 2009).

## **Treatment and discharge criteria**

Various methods are used in the treatment and management of cardio-respiratory diseases. Surgical methods are used for heart defects while

antibiotics are used for infections. In extreme cases heart transplants are used. However, preventive measures are the most effective in reducing mortality by cardio-respiratory disease. Life style changes such as stress control, quitting smoking and alcohol intake, reducing weight and increased cardio-respiratory fitness reduces the risk of developing cardio-respiratory disease. A low fat diet with high fiber, fruits and vegetables minimizes the risk of fat deposits in the arteries and obesity through decreased body fat levels. After treatment, patients are advised on these life style changes that will minimize the risk of cardio-respiratory disease and improve health and well being.

## References

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