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Classification and detection of Heart Disease in normal patients using Machine Learning -A Model Approach

Heart disease is the leading cause of death worldwide, with a rate of 237.9 per 100,000 people in 2024. According to the 2023 report Global Burden of Disease (GBD) published in the Journal of the American College of Cardiology. The study also estimates that the age-standardized CVD death rate of 272 per 100,000 population in India is higher than the global average of 235 per 100,000 population, which means India has a higher CVD burden.

Things like diet, exercise, calcium and smoking greatly influence this risk.

Diagnosing heart conditions using visual images from angiography techniques involves examining images of blood vessels to identify problems. To improve heart disease diagnosis from symptoms, using machine learning techniques can help make it more accurate. Image processing algorithms help find and measure coronary artery disease by looking at plaque buildup, narrowed arteries, and other issues.

New machine learning tools are making predictions more accurate by looking at personal details and health history. The issue is worse in poorer countries, showing the need for specific health programs.

This abstract combines insights from various studies that have used different datasets, including those from the Cleveland Clinic and the UCI Machine Learning Repository.

The dataset used in this paper is Cleveland Clinic and the UCI Machine Learning Repository, which contains 14 features. Utilized these datasets comprising clinical variables such as age, blood pressure, cholesterol levels, and more.

The aim of this research is to classify heart disease in normal patients using a machine learning model approach.

Keywords: AI, Dataset, Image Processing, Machine Learning

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Track Classification: Health and Well-being