Heart Disease Prediction

This project will focus on predicting heart disease.

What is heart disease?

Heart disease is a general term that includes many types of heart problems. It's also called cardiovascular disease, which means heart and blood vessel disease.

Heart disease is the leading cause of death, for that we have to know factors that can make you more likely to develop heart disease

We will be using some common Python libraries, such as pandas, numpy, and matplotlib.

Dataset:

dataset take from data.world

This is a data set used to predict heart disease. Patients were classified as having or not having heart disease based on cardiac catheterization, the gold standard. If they had more than 50% narrowing of a coronary artery they were labeled as having heart disease.

In this cohort, there are 270 patients and there are 14 independent predictive variables or column attributes.

Dataset Description

Attribute

Description

Age : Age of a patient [years]

Sex : Gender of the patient [Male, Female]

ChestPain :chest pain type [TA: Typical Angina, ATA: Atypical Angina, NAP: Non-Anginal Pain, ASY: Asymptomatic]

RestingBP: Blood pressure in Hg (Normal blood pressure - 120/80 Hg)

Cholesterol:Serum cholestrol level in blood (Normal cholesterol level below for adults 200mg/dL)

FastingBS:Fasting Blood Sugar (Normal less than 100mg/dL for non diabetes for diabetes 100-125mg/dL)

RestingECG :resting electrocardiogram results [0: Normal, 1: having ST-T wave abnormality (T wave inversions and/or ST elevation or depression of > 0.05 mV), 2: showing probable or definite left ventricular hypertrophy by Estes' criteria]

MaxHR :maximum heart rate achieved [Numeric value between 60 and 202]

ExerciseAngina :exercise-induced angina [1: Yes, 0: No]

Oldpeak oldpeak =:ST [Numeric value measured in depression]

ST\_Slope :the slope of the peak exercise ST segment [1: upsloping, 2: flat, 3: downsloping]

HeartDisease :output class [No heart Disease,Heart Disease]

Who is more likely to develop heart diseases?

There are many different factors that can make you more likely to develop heart disease. Some of these factors you can change, but others you cannot.

Age. Your risk of heart disease goes up as you get older.

Sex. Some factors may affect heart disease risk differently in women than in men.

Not getting enough physical activity.

High blood pressure.

High cholesterol levels.

Diabetes