Factors that Influence the Chance of Heart Attack

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08/12/2020

Abstract

As the world continues to grow, the Internet and technologies develop rapidly. People tend to have long working hours and more pressure during their daily life. Meanwhile, a heart attack has always been the most significant substantial hidden danger to human health since the heart is considered as the most crucial feature of living-beings. In this paper, a logistic regression model is fitted on "target" from "Heart" dataset. (Naresh, 2020) to determine the factors that cause a high chance of heart attack.

Keywords

Heart Disease, Heart Attack, Health Care, Heart Condition, Health, Health Condition, Logistic Regression, Binary Classification

Introduction

The speed of life has now become more compact with the advent of remote equipment and communication technology, allowing people to work longer, and the pressure of employees is also rising rapidly. At the same time, people generally do not take good care of their bodies in such an atmosphere, leading to the onset of different diseases. Cardiac disease is one of the most common circulatory system disorders, which often cannot be stopped from dealing a fatal blow to patients because of its sudden, unpredictable occurrence. It is an immense health threat.

Therefore, I want to identify the high-risk and low-risk population in this project and find out which factors are more significant relatively. By using supervised learning through 14 variables that may be correlated with heart disease, such as the age of the patient, gender, type of chest pain, resting blood pressure, fasting blood sugar and so on, statistical models are generated and analyzed.

In this paper, one dataset, called it "Heart" dataset (Naresh, 2020), will be used to investigate what factors are positively correlated to the chance of heart attack. The detail about data will be discussed in the Data section. In the Model section, the logit behind logistic regression and the model equation will be addressed there. Results of the data and model analysis, including summary tables and graphs, are provided in the Results section. Interpretation of the results, weaknesses and further steps will all be discussed in the following Discussion section. The reference section is at the end of this paper.

Data

Model

- Model Equation

Results

- Data
- Model

Discussion

- Data
- Model Result
- Weaknesses and Future Work

References

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