Predicting Heart Disease with Machine Learning

組別:第5組

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01.

Dataset Introduction

01 Dataset Introduction

The heart disease dataset, obtained in 1988, contains medical information of patients who have undergone clinical testing for heart disease.

Number of Observations: 1025
Number of Attributes: 13

Data Link:
https://www.kaggle.com/datasets/johnsmith88/heart-disease-dataset

01 Dataset Introduction

Attribute Information:

1. age
2. sex
3. chest pain type (4 values)
4. resting blood pressure
5. serum cholesterol in mg/dl
6. fasting blood sugar > 120 mg/dl
7. resting electrocardiographic results (values 0,1,2)
8. maximum heart rate achieved
9. exercise induced angina
10. oldpeak = ST depression induced by exercise relative to rest
11. the slope of the peak exercise ST segment
12. number of major vessels (0-3) colored by fluoroscopy
13. thal: 0 = normal; 1 = fixed defect; 2 = reversible defect


02.
Research Motivation
& Purpose

02 Research Motivation & Purpose

- To address the need for accurate and efficient diagnosis of heart disease
- To study the relationship between various health factors and heart disease
- To identify key risk factors associated with heart disease
- Develop models that accurately predict the presence or absence of heart disease

03.

Introduction to SDGs Used

03 Introduction to SDGs Used

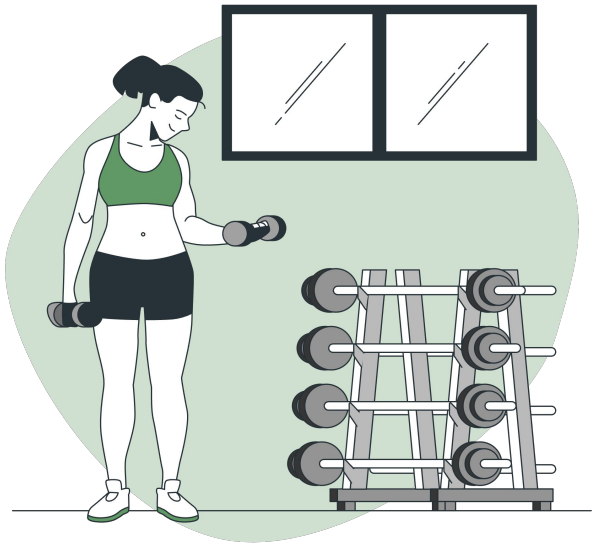
10. Reduced Inequalities

Reduce inequalities within and among countries

3. Good Health and Well-Being

Ensure healthy lives and promote well-being for all at all ages

03 Introduction to SDGs Used

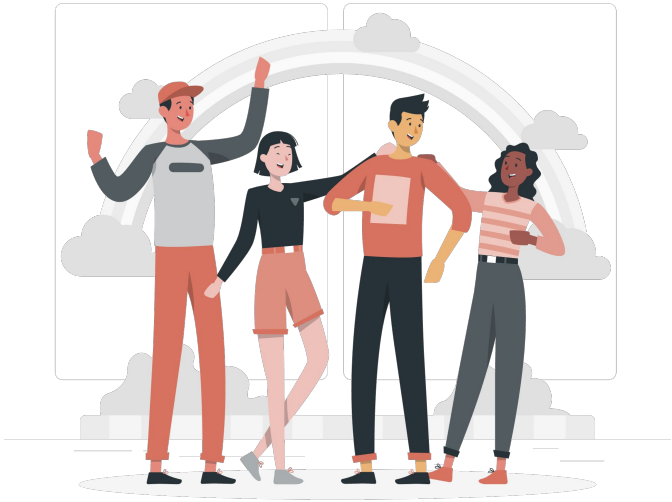


SDG 3: Good Health and Well-being

This dataset can aid in the development of accurate predictive models and improve our understanding of heart disease.

- better diagnosis & treatment
- prevention of this critical health issue

03 Introduction to SDGs Used



SDG 10: Reduced Inequalities

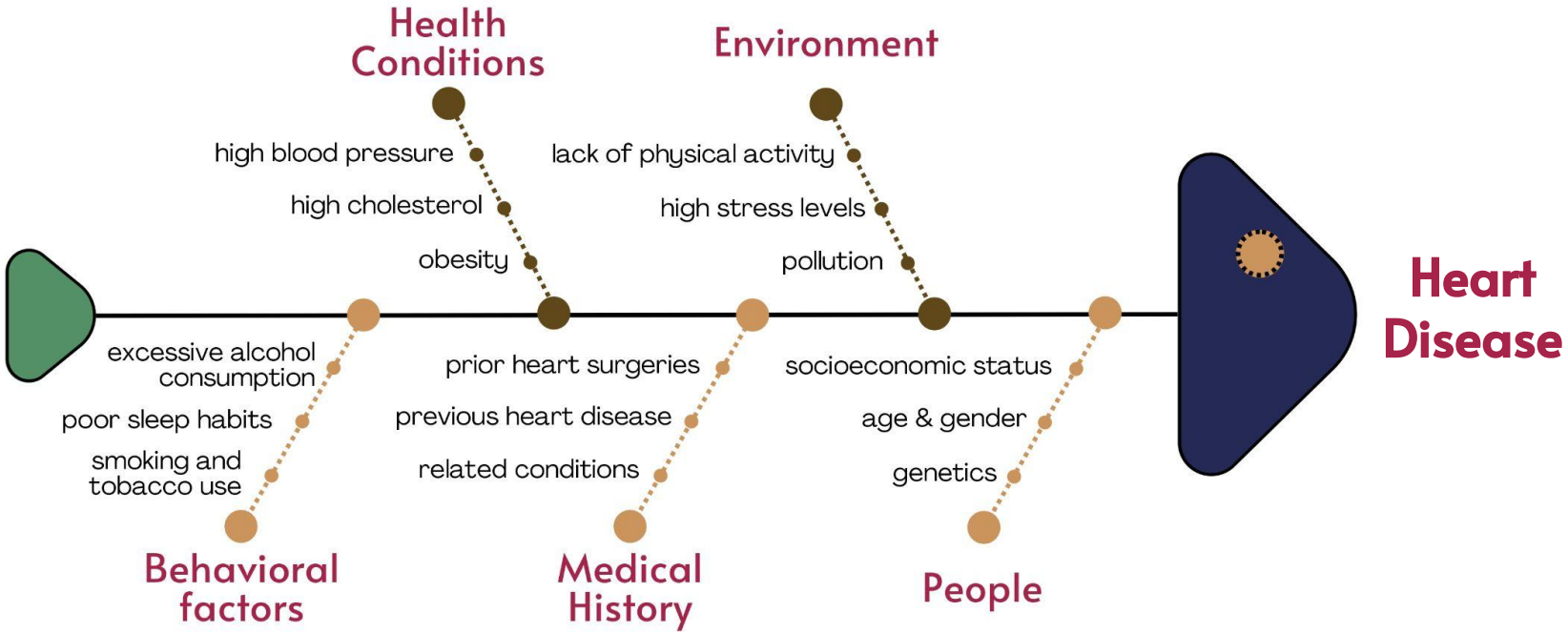
Identifying the specific risk factors related to heart disease among different demographic groups can help to reduce health inequalities by informing the development of targeted interventions and policies.

- reduce the incidence of heart disease among vulnerable populations
- promote health equity and reduce health inequalities

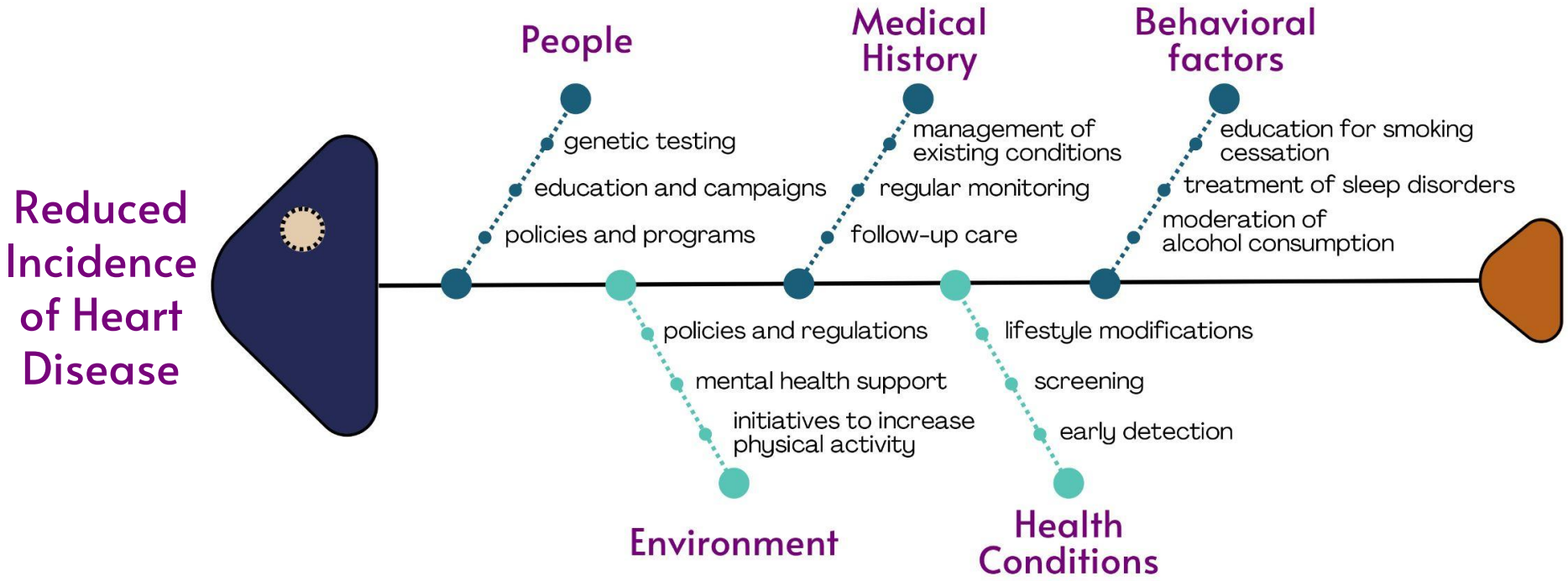
04.

Fishbone Diagram

04 Fishbone Diagram



04 Fishbone Diagram



THANKS!