

HealthCare Analysis



Overview :

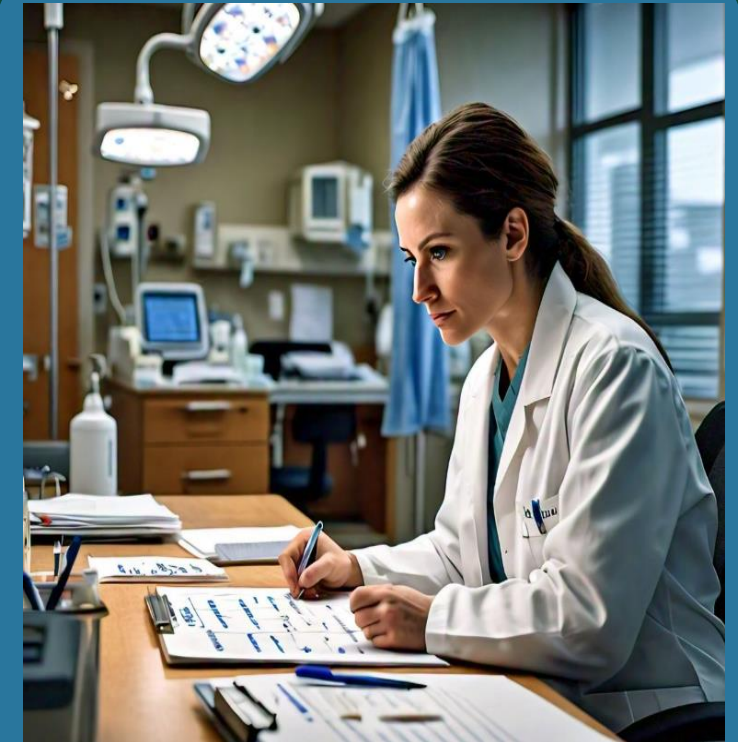


Healthcare data analysis involves extracting valuable insights from medical records, patient demographics, clinical trials, and other health-related data. It's crucial for improving patient outcomes, optimizing resource allocation, and developing new treatments. Key techniques include statistical analysis, data mining, and machine learning. By analysing large datasets, healthcare organizations can identify trends, predict disease outbreaks, and personalize patient care. analysts apply statistical methods and machine learning techniques to identify trends, improve patient outcomes, and support clinical decision-making. Data cleaning and preprocessing are critical to ensure accuracy. Privacy and security measures are essential due to the sensitive nature of healthcare data. Ultimately, the goal is to optimize healthcare delivery, reduce costs and enhance patient care.

Project Goal :

To develop a comprehensive healthcare data analysis system that can:

- Extract valuable insights from large healthcare datasets.
- Identify patterns, trends, and anomalies in patient data.
- Predict disease outcomes and potential risks.
- Optimize resource allocation and improve healthcare efficiency.
- Support evidence-based decision-making for healthcare providers.
- Personalize patient care plans based on individual characteristics.
- Ensure data privacy and security throughout the analysis process.
- Enhance overall healthcare quality and patient satisfaction.



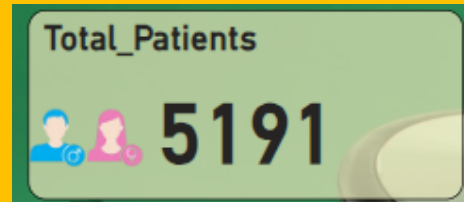
Requirements :

- Total Number of Patient's diagnosis done in the dataset provided to you.
- What is the percentage of patients who has the history of heart Attack.
- What is the percentage of patients who has the history of Stroke.
- Count of female patients who are not overweight.
- Number of patients based on Health Risk.
- Average weight of the people based on Occupation.
- Total number of Overweight patients based on Race.
- Find out the number of Normal Health candidate in each age group.
- Number of patients who possess the habit of smoking and are at the HIGH health Risk.
- Number of patients who exercise less than 30 minutes and at HIGH health or moderate health Risk.

Visualization



- **Total Number of Patient's diagnosis done in the dataset provided to you.**



- **What is the percentage of patients who has the history of heart Attack.**



- What is the percentage of patients who has the history of Stroke.



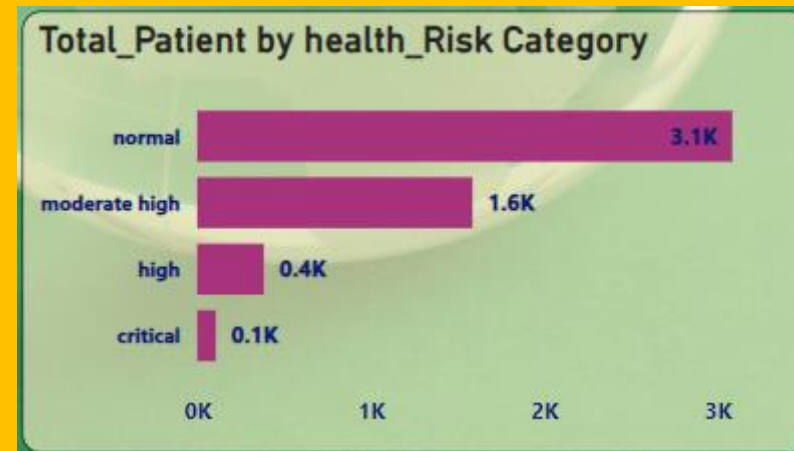
- Count of female patients who are not overweight.



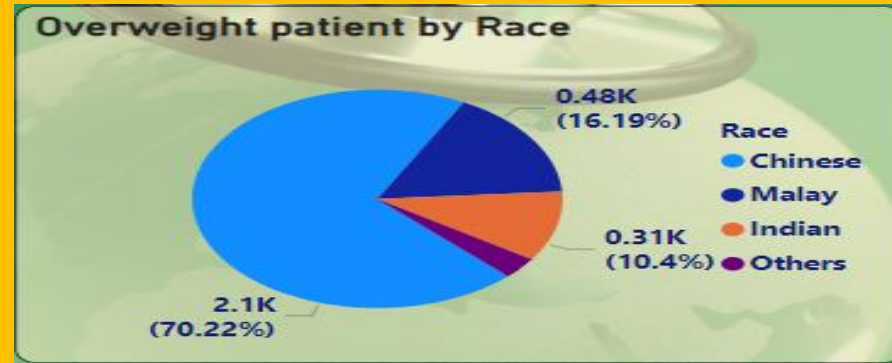
- Number of patients who possess the habit of smoking and are at the HIGH health Risk.



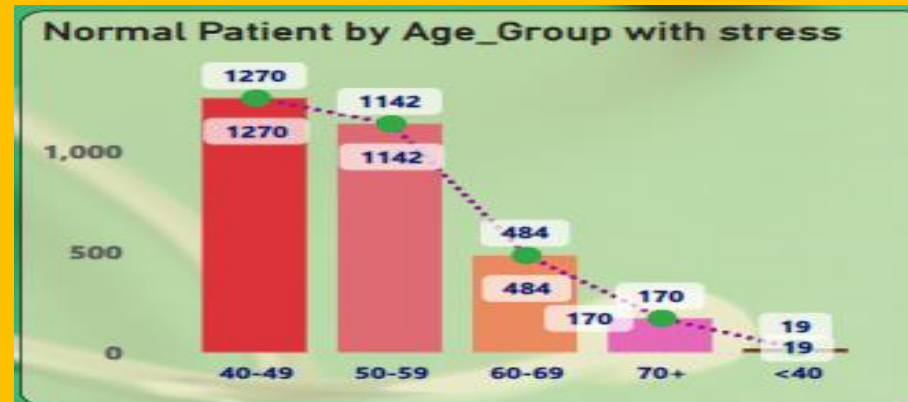
- Number of patients based on Health Risk.



- Total number of Overweight patients based on Race.



- Find out the number of Normal Health candidate in each age group.



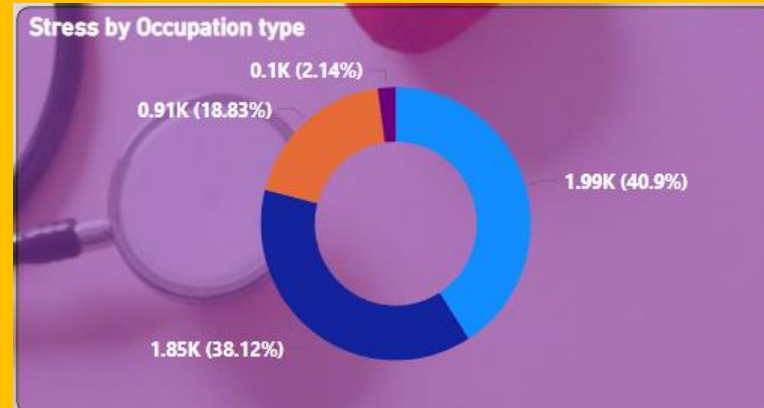
- Number of patients who exercise less than 30 minutes and at HIGH health or moderate health Risk.



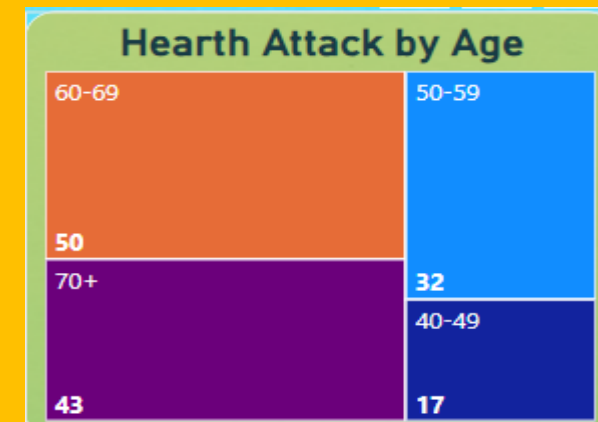
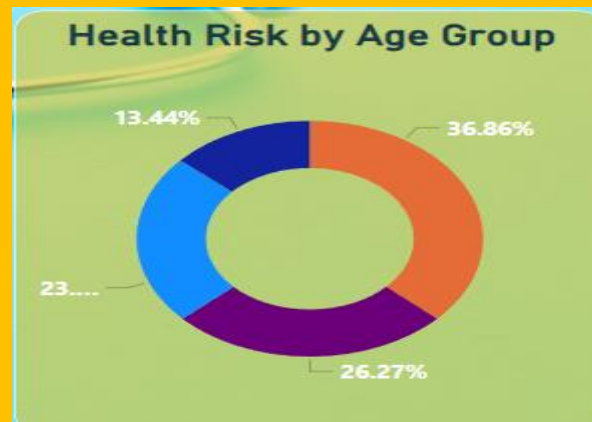
- Average weight of the people based on Occupation.



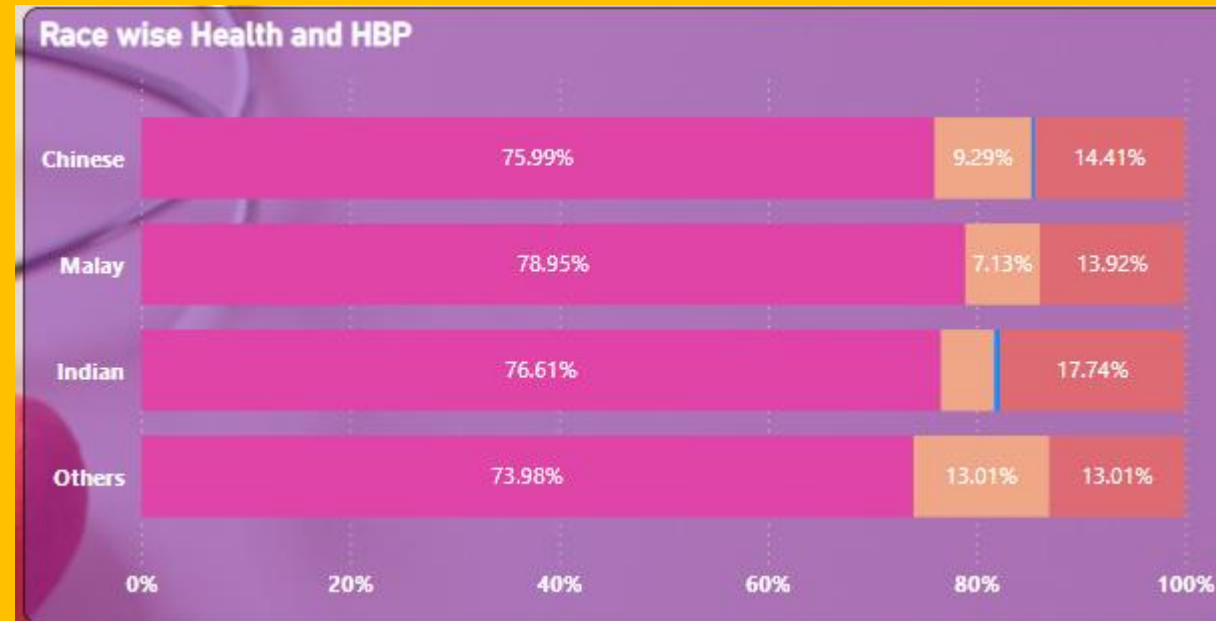
- **Stress By Occupation Type**



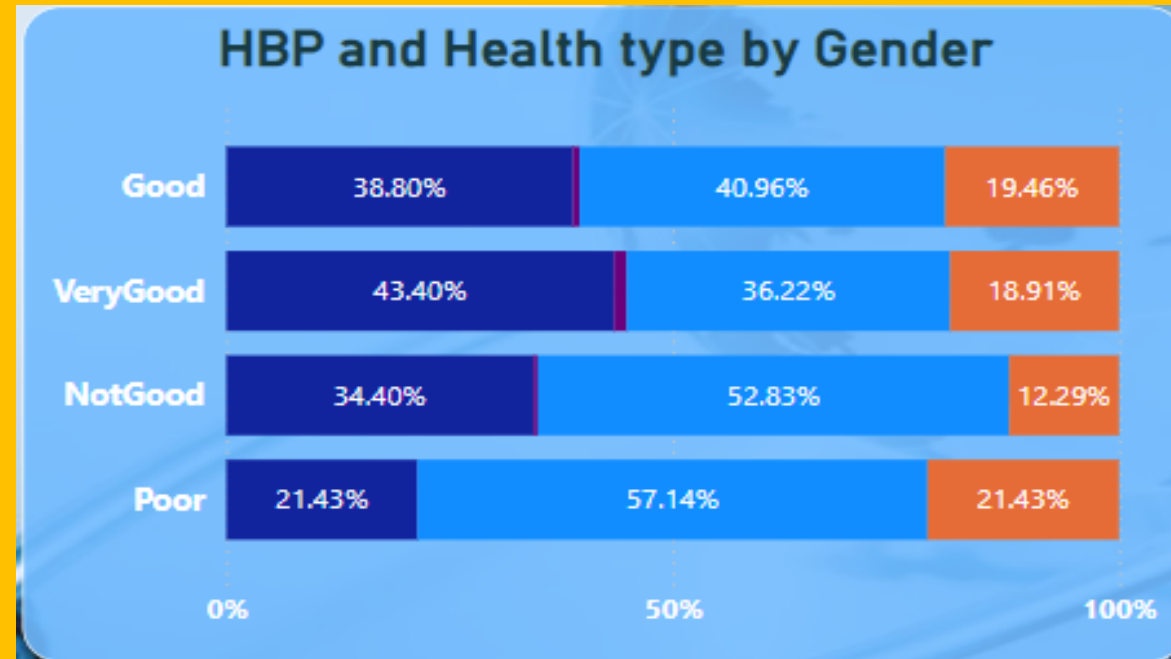
- **Health Risk and Heart Attack by Age Group**



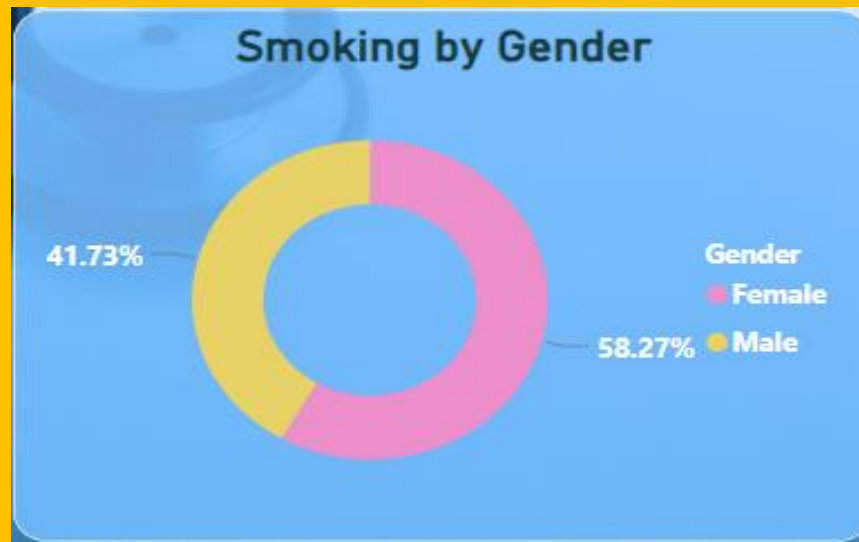
- Race wise Health type and High Blood Pressure(HBP)



- Health type and High Blood Pressure(HBP) by gender



- **Smoking by Gender**





Dashboards



Healthcare Analysis

Age_Group

All

Diabetes

All

Exercise

All

Fruits_Veg

All

Total_Patients



5191

Heart attacked(%)



2.74%

Stroke (%)



1.73%

Female not overweight



1409

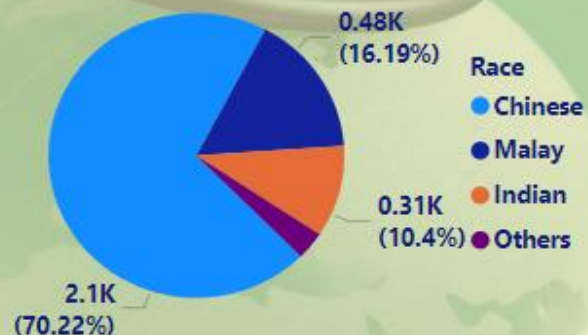
Smoking Habit with High health Risk



37



Overweight patient by Race



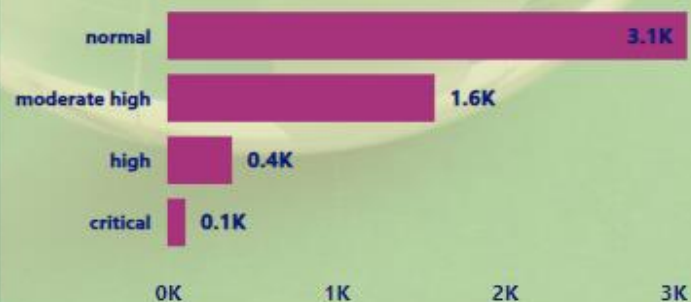
Overweight and BMI by Age Group



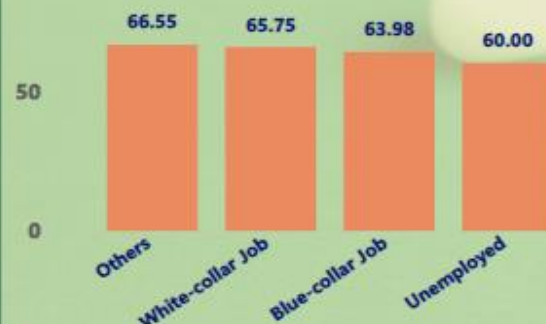
Normal Patient by Age_Group with stress



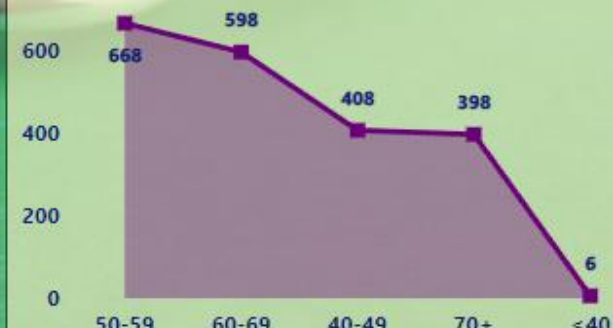
Total_Patient by health_Risk Category



Avg_weight by Occupation



Health Risk by Age_Grp





Healthcare Analysis

Overweight

2989

Indian

405

Healthy

1310

Good Health

3839



Healthy

All

HeartAtta...

All

Race

All

Occupatio...

All

scnZone

All

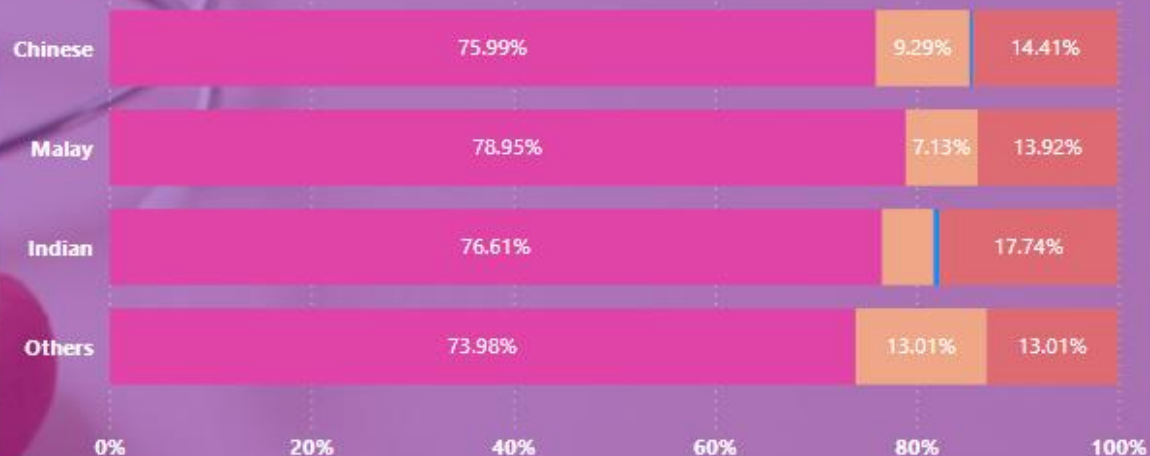
Smoking

All

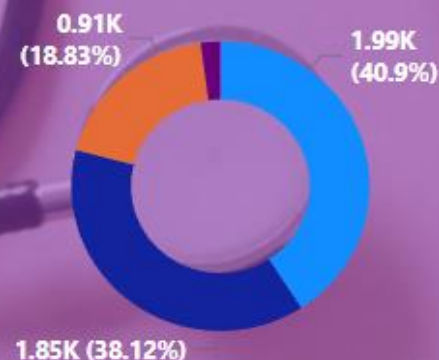
HBP and Health Risk by Exercise



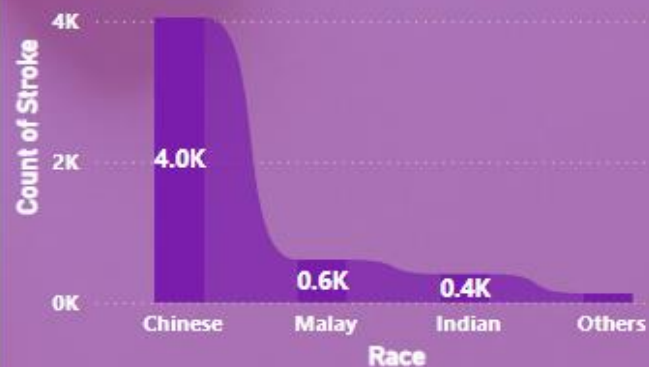
Race wise Health and HBP



Stress by Occupation type



Stroke by Race and Healthy



BMI by Race and Gender





Healthcare Analysis

Critical State



107

Positive Habit



750

Male



2166

Race



4

Age(40-49)



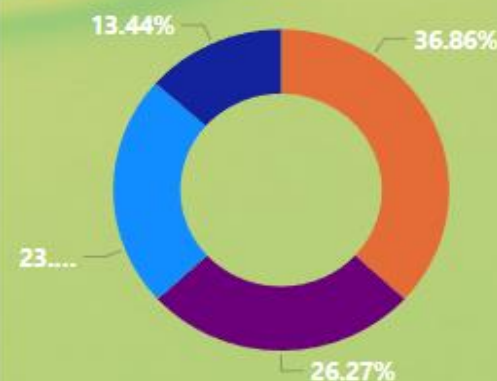
1684

Female



3025

Health Risk by Age Group



Healthy

☐ Healthy

☐ Unhealthy

HBP

☐ No

☐ Yes

Gender

☐ Female

☐ Male

Habits

☐ Negative Ha...

☐ Positive Habits

Health

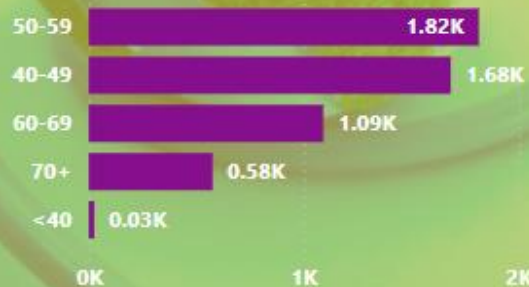
☐ Good

☐ NotGood

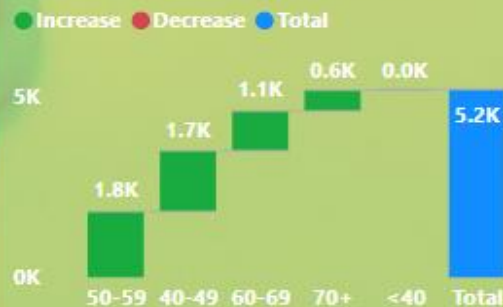
☐ Poor

☐ VeryGood

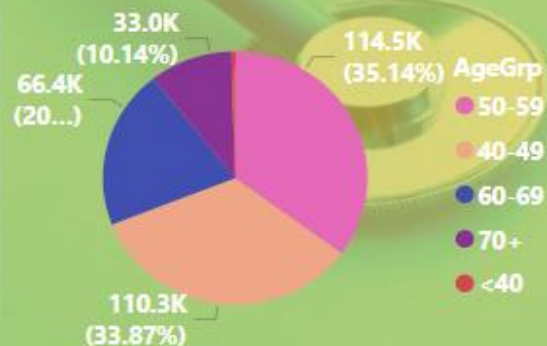
Height by Age Group



Smoking by Age



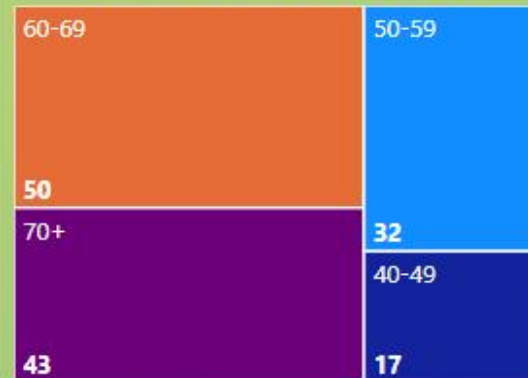
Age wise Weight



Height by Age Group




Hearth Attack by Age





Healthcare Analysis

Active_Smoker

 559

HBP

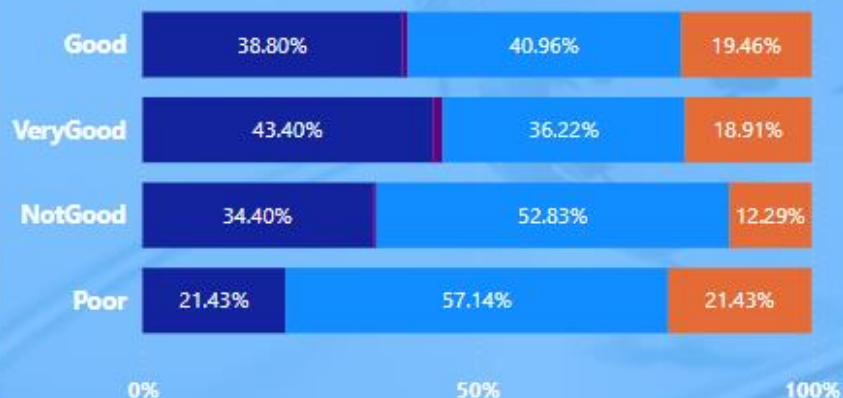
 1108

Negative habit

 4441



HBP and Health type by Gender



Exercise < 30 minutes and high and moderate health risk



859

Fruits and Vegetable by Gender



Habits

All

Diabetes

All

Age Group

All

Smoking by Gender



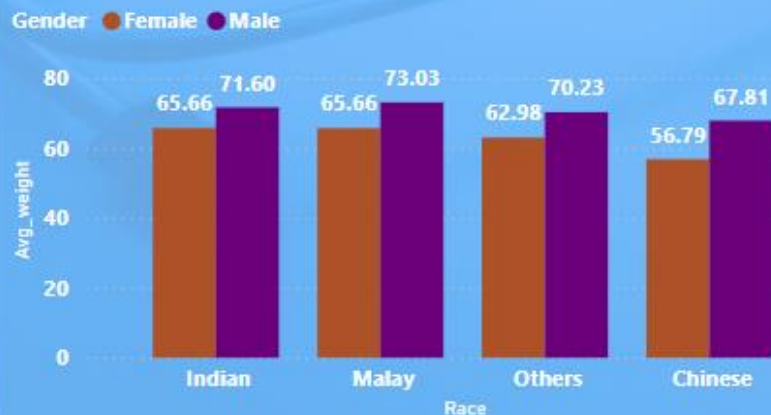
Exercise

All

Health Risk

All

Avg_weight by Race and Gender



- **Dashboard Link**

- <https://app.powerbi.com/view?r=eyJrIjoieDlmZWl2NGYtMDU1Zi00MGVlLWJhYjYtZTg5MTAzOWEyMzE1IiwidCI6ImRmODY3OWNkLWE4MGUtNDVkOC05OWFjLWM4M2VkN2ZmOTVhMCJ9>

Thank You