The Deadly Duo: Covid-Diabetes Connection Shaheer Tariq



Introduction

From 2020 through 2023, various deaths occur around the world have been covered. To make the data set useful for our purpose, we gathered several factors that affect the World and used an exploratory data analysis graph to represent them. We have also used a variety of data cleaning strategies to clean up our unclean and unnecessary data. The findings indicate that death ratio is growing every year, with a sharp increase between 2020 and 2023. The death rate increase because of the diabetes as well.

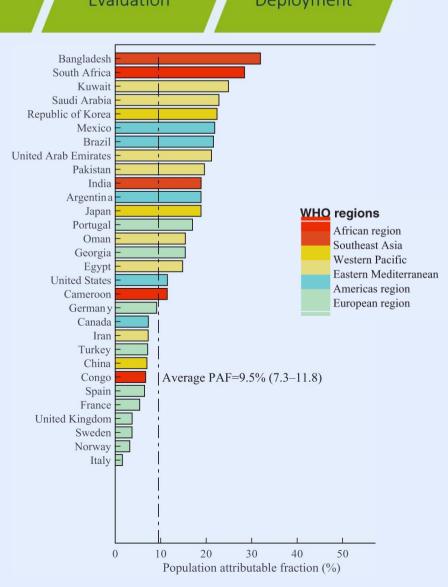
Problem

- In order to show the deaths due to diabetes at the time of corona virus from 2020 through 2023 along with that year's gross year, total deaths, and deaths due to diabetes, a challenge had to be addressed.
- We created the graphic so that the continent balls indicate the size of the deaths.



Data Processing

- Data set was collected by official website of WHO.
- To illustrate our data, we used total deaths caused by diabetes, total deaths of each continent by year, bu grouping years and continent columns, total deaths, new deaths and diabetes prevalence.
- We cleaned data so that we could eliminate columns that wouldn't be useful for visualization graph.
- We changed the order of the columns to group related data columns together, making it easier for us to comprehend and display the data.
- Null values were also replaced using data cleaning techniques (i.e Dropna, Filna).



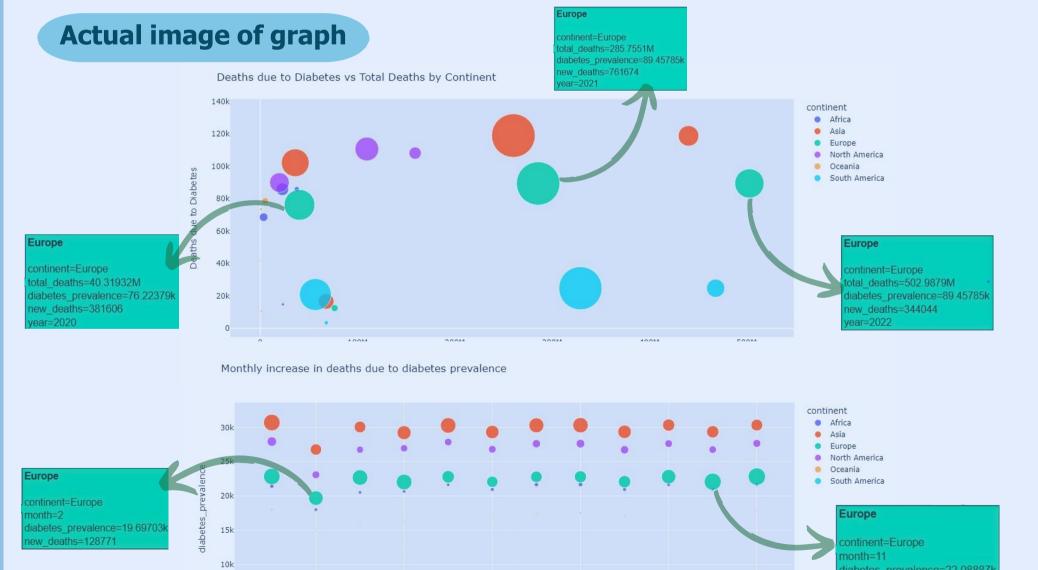
Exploratory Data Analysis

- We must now use a graph that is appropriate for the Total death and Death caused by diabetes that we must depict.
- To illustrate the total deaths of the continents we shall use a scatter plot.
- We'll keep the Deaths caused by diabetes on the y-axis and the Total deaths on the x-axis.
- For various Total Deaths, different colors will be used.
- The scatter plot's balls' sizes will indicate the Total death's.

Result

Data Modeling

- Data was train by using algorithm for arranging data in ascending order so that we can easily visualize the deaths due to Diabetes in covidera.
- We have grouped year and continent columns so that we can easily visualize the total deaths and deaths occur by the diabetes.
- we take average of each month of given years and use average of each month (i.e. January of year 2020, 2021, 2022 and 2023) so that we make a clear and concise scatter plot.



"The graph shows that how the death rate grows after the increase in diabetes, how the size of deaths increases yearly as well as at 2022 death rate reduces day by day."