COVID-19 DATA ANALYSIS WITH POWER-BI

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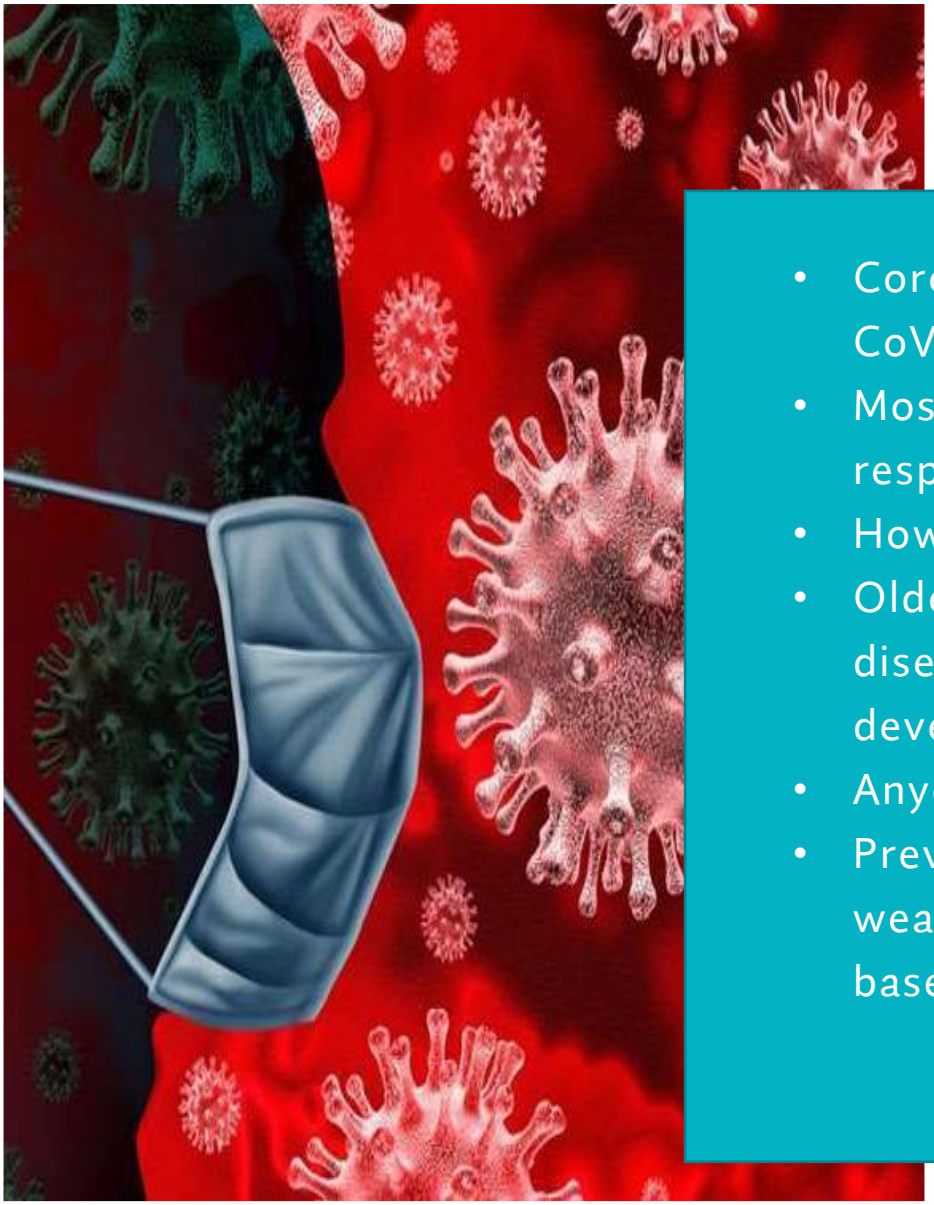
COVID-19 AS PER EXPERTS



ABOUT COVID-19 VIRUS

- Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2.
- Most people who fall sick with COVID-19 will experience mild to moderate respiratory illness which include fever and recover without special treatment.
- However, some will become seriously ill and require medical attention.
- Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness.
- Anyone can get sick with COVID-19 and become seriously ill or die at any age.
- Preventive measures include staying at least 1 metre apart from others, wearing a properly fitted mask, and washing your hands or using an alcohol-based rub frequently. Get vaccinated and follow local guidance.

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ALL ABOUT DATA

DATA

DATA USAGE

Now that we know coronavirus can be deadly, It would be helpful if we can study the word and local data, understand its patterns so as to take necessary precautionary measures and actions.
This includes quarantine measures, handling the inflow and outflow of people in any country or locality.
Increasing medicine production, making available all the necessary medical and essential supplies.

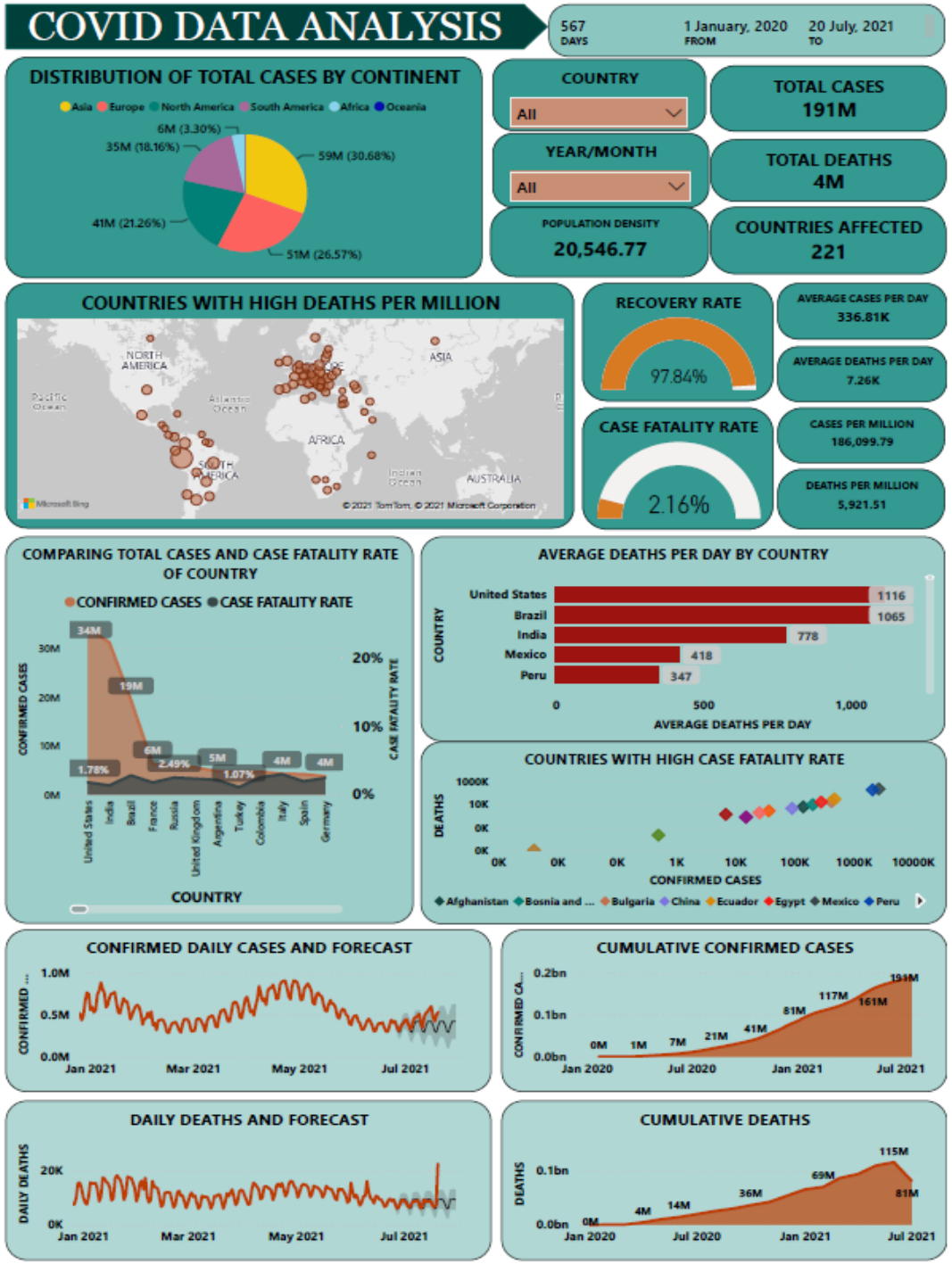
DATA SOURCE

https://github.com/owid/covid-19-data/blob/master/public/data/owid-covid-data.csv

DATA TRANSFORMATION

Data transformation was done using Power Query in Power BI
Handling null values, Utilizing DAX functions, creating measures and calculated fields were done using the same

POWER BI DASHBOARD



FINAL DASHBOARD

KEY POINTS

- Power-BI was used for data visualization creating dashboard.
- It gives an overview of covid-19 surge across various continents and subsequently in those countries from January,2020 till July,2021.
- Dashboard, which is very interactive with multiple slicers, tooltips and highlighters, even provides specific information pertaining to continent, country or specific duration in a year.
- In this visualization we can see patterns and how countries perform in curbing the pandemic situation by comparing population density, deaths per million, average cases per day, average deaths per day, case fatality rate i.e deaths pertaining to covid-19, cumulative confirmed cases and deaths. Default view of few card shows maximum values. On selection using slicers or highlight will provide specific value.
- Timeseries analysis and forecasting also helps in predicting the future wave.

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INSIGHTS

CONTINENT WISE

Asia was leading in world with maximum cases at 30.03% followed by Europe with 26.01%.
Europe was leading in total deaths at 27.30% followed by South America at 25.90%

CONFIRMED CASES

Top 10 countries with maximum number of confirmed cases were USA, India, Brazil, France Russia, UK, Argentina, Turkey, Columbia and Italy.

DEATHS

USA, Brazil, India, Mexico and Peru were leading in average deaths per day.

CASE FATALITY RATE

Top 10 countries with high case fatality rate were Vanuatu, Yemen, Peru, Mexico, Sudan, Syria, Ecuador, Egypt, Somalia and China.

POPULATION DENSITY

Macao, Monaco, Singapore, Hong Kong, Gibraltar, Bahrain, Maldives are topmost densely populated countries in world. Yet these countries seem to have managed to control covid surge.

DEATHS PER MILLION

This is a key indicator of covid containment and case management. Ecuador, San Marino, Bolivia, Ecuador, and Kyrgyzstan toped the list with high deaths per million.

FINAL THOUGHTS

We could clearly see that countries with high population density have managed to curb pandemic with proper regulation, preventive measures and availability of medical facilities.

The measures used by these countries can be followed by countries with high death per million so as to address the covid issue.

With the help of PowerBI we have derived valuable insights aided with impressive visualizations.

THANK YOU