Data Visualization - Project 2

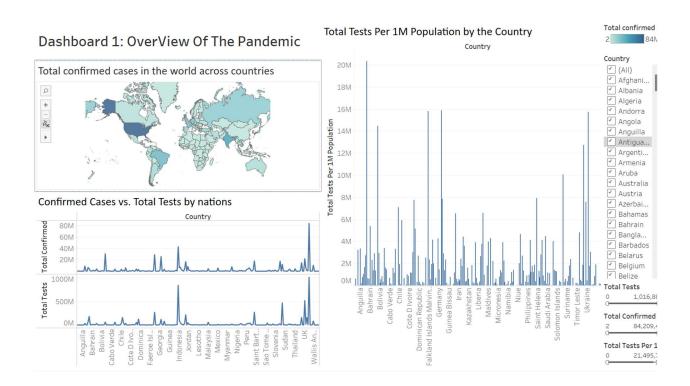
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Dashboard 1: Overview of the Pandemic

Charts Included:

- Total Confirmed cases in the world across Countries.
- Total Tests per 1M population by the Country.
- Confirmed cases Vs Total Tests by nations.



Narrative:

The 'Pandemic Overview' dashboard provides a graphic representation of the pandemic's worldwide effects. The total confirmed cases by country are displayed on the choropleth map at

the top, with darker hues denoting a higher number of cases. This provides a quick geographical understanding of the spread of the epidemic.

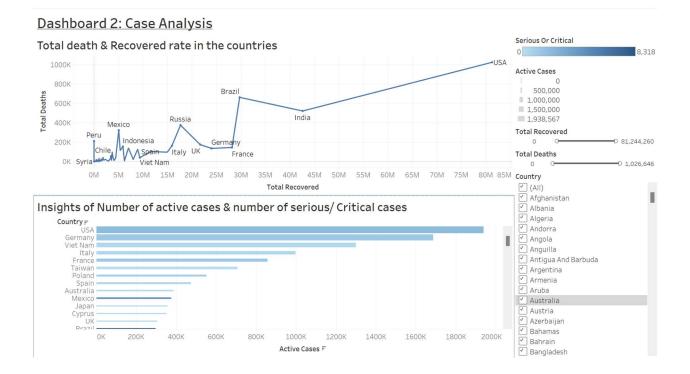
A dual-axis line chart showing the total number of confirmed cases compared to the total number of tests performed by country is located just beneath the map. This graph provides answers to queries such as "How are testing and case trends related?" and "Are countries with more tests reporting more cases?"

A bar graph displaying the total number of tests administered per million individuals is displayed to the right. This gives the absolute numbers on the map and line a per capita perspective.

Dashboard 2: CASE ANALYSIS

Charts Included:

- Insights from Number of Active cases & Number of Critical cases/serious cases.
- Total Deaths & Recovered Rates in the countries.



Narrative:

Our 'Case Analysis' dashboard explores patient conditions and results in various nations. The scatter plot at the top allows for a rapid evaluation of health outcomes in proportion to the number of patients by contrasting total fatalities with recovered rates. It can provide information on the severity of the effects of the disease and the effectiveness of medical therapies.

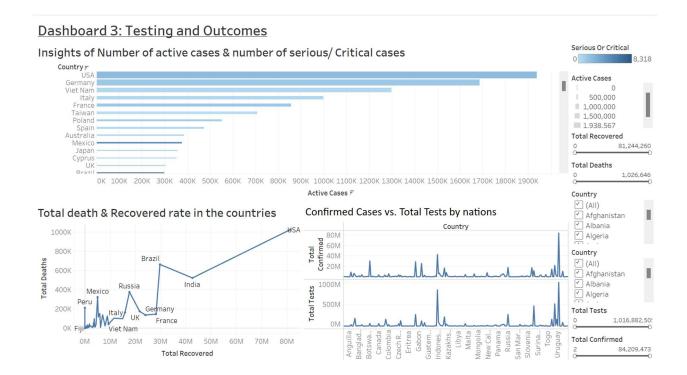
The horizontal bar chart showing the number of active cases compared to serious or critical cases by country is displayed beneath the scatter plot. By highlighting the areas where the load of important patients is concentrated, this figure highlights the present difficulties facing healthcare systems.

This dashboard provides information on the success of managing patient recoveries as well as the strain on medical resources resulting from critical situations by telling the tale of outcomes and current patient status. It's a glimpse of concern where critical cases are high and hope in recovery rates.

Dashboard 3: Testing and Outcomes

Charts Included:

- Confirmed cases vs Total Tests by nations.
- Total Death & Recovered rates in the countries.
- Total tests per 1Million population in the country.



Narrative:

The purpose of the 'Testing and Outcomes' dashboard is to establish a global correlation between testing data and health outcomes. The top bar chart illustrates the testing coverage in relation to population, showing how each nation responded to the virus's discovery.

The scatter plot and line chart are below, side by side. The testing narrative is continued in the line chart, which illustrates the correlation between the quantity of tests conducted and the verified cases. It provides an answer to the query of whether more testing is associated with the discovery of cases.

Next to it, a scatter plot compares overall mortality with recovery rates to analyze the health outcomes. This comparison highlights both the devastating effects of the virus and the successes of individuals who have recovered.

When combined, these visuals depict the response and outcome in terms of patient health outcomes and the attempts to monitor the virus through testing, highlighting the dynamic character of the pandemic's progress.

Data Story:

Let's Take a data-driven tour of the Pandemic's Reach and Response to learn how different countries have handled the dangerous seas of a worldwide health emergency. Our narrative is told through three illuminating dashboards, which are the stand-alone chapters that add to the overall tale of this extraordinary occurrence.

Chapter 1: The World's Infectious Thread

'The Global Thread of Infection,' the initial dashboard, presents an image of infection rates that spans borders and oceans with a choropleth map unfolded. As cases increase, countries get darker, exposing a patchwork of national experiences. Immediately, the worldwide scope of the task is evident, but the details are found in the trends displayed in the line chart that goes along with it, which tracks the virus's march in tandem with testing efforts. The story is anchored with a bar chart that shows the scope of testing across demographics, which is an essential opening move in the conflict.

<u>Chapter 2: The Frontlines of Today</u>

The second dashboard, "The Current Frontlines," allows us to zoom in and shows the ongoing conflicts in each nation. A depressing picture of the current fight is provided by a horizontal bar chart that exposes the weight of active and critical cases. By contrasting the depressing reality of fatalities with the encouraging total of recoveries, the scatter plot broadens our perspective and provides us with both a measure of loss and a glimmer of hope.

Chapter 3: The Results and Attempts

Testing and outcomes are connected in our last chapter, "The Outcomes and Efforts." The line chart reappears, this time with greater depth as it tells the tale of tests and verified cases. Next to it, the scatter plot reframes fatalities and recoveries as the results of national policy and the efficacy of healthcare, rather than just as numbers. The upper bar chart provides a commitment meter that assesses how thoroughly each nation tested in reaction to the virus danger.

Link of Tableau Public:

Project 1 Info5709 SashiKiran Maddineni | Tableau Public

Datasets:

https://www.kaggle.com/datasets/josephassaker/covid19-global-dataset

Reference:

https://www.youtube.com/watch?v=6oFTdbrugUs

(pdfs) Class notes in canvas from professor.