COVID19 Report

Introduction

The report highlights the findings of analysis of covid19 data from year 2020. COVID-19 is a disease caused by a new strain of coronavirus that was first detected in late 2019. COVID-19 can affect the respiratory system and cause symptoms such as fever, cough, shortness of breath, and loss of taste or smell.

About Data: The data was collected from 'Our World in Data' as a csv file. The file was then divided into 2 separate files- Covid Deaths and Covid Vaccinations, to improve the quality of analysis. Both the tables share columns like location, continent, date and then contain individual columns related to deaths, testing and vaccination.

Method

While the file reported data from Jan 1, 2020, to present, I decided to limit my scope of research to year 2020. I did it because I wanted to focus on the initial response of countries.

I used Postgres SQL to analyze the data.

My initial queries involved finding answers at 3 levels – World, Continent and Countries and then I decided to go deeper at country level to study the impact.

Some of the key aspects of data that I paid attention to are:

- Total Number of cases, deaths, tests, and vaccinations at the 3 levels. I also compared the regions based on percentages for each of the above parameters.
- Average Death per month for each country to visualize the data.

Results

- Total cases, deaths and death rate: By the end of the year 2020, World had over 83.5 million total cases of covid.

Location	Total Cases (in mil)	Total Deaths (in mil)	Death rate
"World"	83.55	01.8	2.18
"Europe"	23.80	00.5	2.29
"North America"	23.07	00.5	2.22
"Asia"	20.70	00.3	1.63
"European Union"	15.54	00.3	2.38
"South America"	13.19	00.3	2.74
"Africa"	02.77	0.06	2.37
"Oceania"	00.03	0.00	3.00
"International"	0.0007	0.00	2.08

- At country level, USA had the highest number of deaths, about 352K but it was Mexico with highest rate of death.
- USA had the highest number of cases as a country in a single day. 251969 cases on December 18, 2020.
- 36 countries had performed less than a million tests while 59 countries had performed more than a million. 95 countries did not report testing.
- About 0.11% of total population had at least one dose of vaccination before 2021.
- Africa Did not vaccinate anyone in year 2020 while North America had the highest percentage of vaccinated at 0.5.

Location	Population	Total Vaccinations	Percentage vaccinated
"Africa"	1340598113	0	0
"International"	Not Available	0	0
"Oceania"	42677809	0	0
"North America"	592072204	2917223	0.49
"Asia"	4639847425	5557636	0.11
"European Union"	444919060	440172	0.098
"Europe"	748680069	499223	0.06
"South America"	430759772	40662	0.00

- Israel had the maximum percentage of vaccinations in the world.
- 164 Countries did not vaccinate in year 2020.