INTRDOUCTION

The COVID-19 pandemic triggered one of the most extensive global vaccination campaigns in history. Understanding vaccination trends, effectiveness, and distribution is crucial for policymakers, healthcare professionals, and researchers.

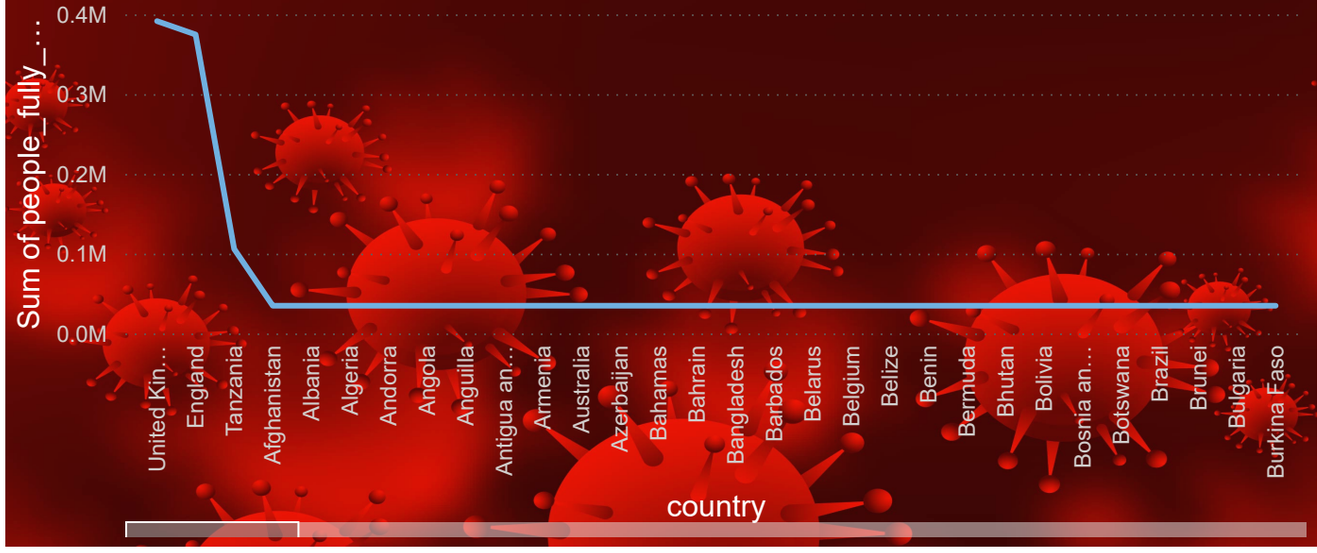
This analysis aims to explore a comprehensive vaccination dataset to uncover key insights such as vaccination rates across countries, the effectiveness of different vaccines, and forecasting future vaccination trends. The study involves data preprocessing, exploratory data analysis (EDA), predictive modeling, and deployment to provide meaningful insights.

Global COVID-19 Vaccination Analysis

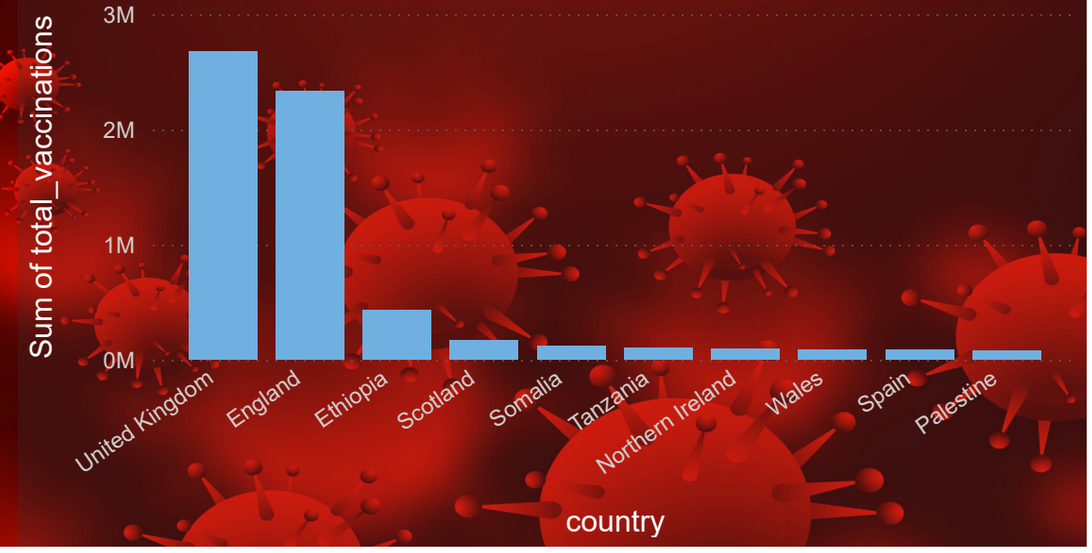
Sum of total_vaccinations by country

Sum of total_vaccinations_per_hundred by Year

Sum of people_fully_vaccinated by country



Sum of total_vaccinations by country



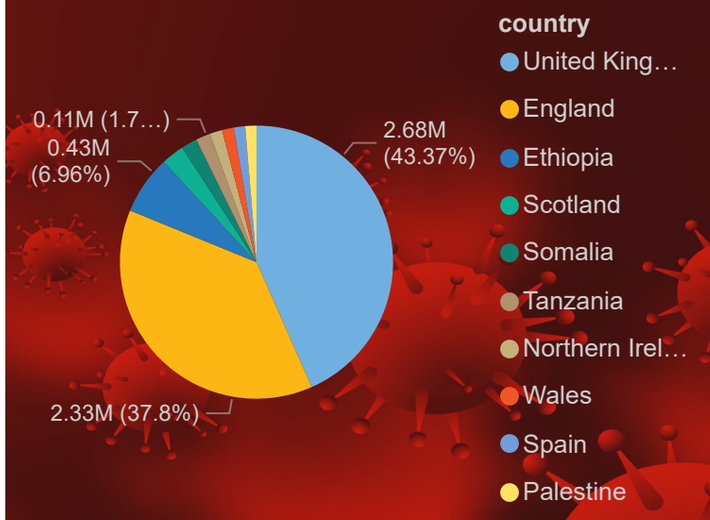
11.06M
Sum of total_vaccinations

724.38
Sum of total_vaccinations_per_hundred

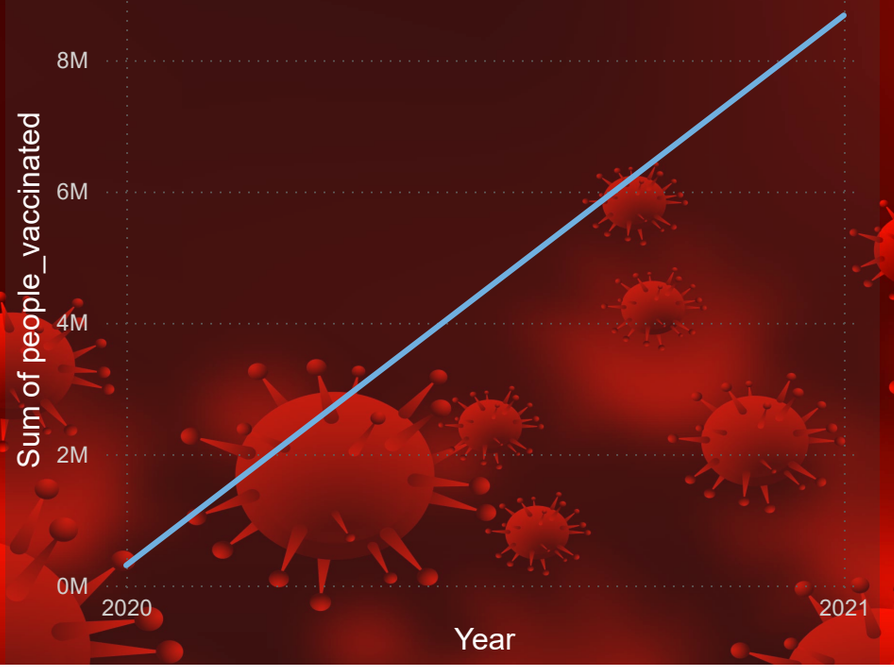
459.71
Sum of people_fully_vaccinated_per_hundred

624.13
Sum of people_vaccinated_per_hundred

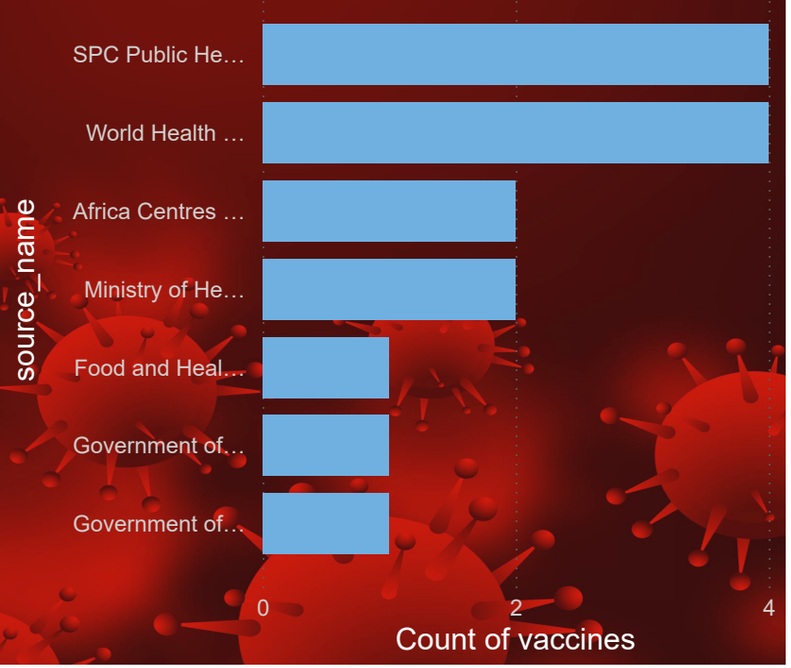
Sum of total_vaccinations by country and vaccines



Sum of people_vaccinated by Year



Count of vaccines by source_name



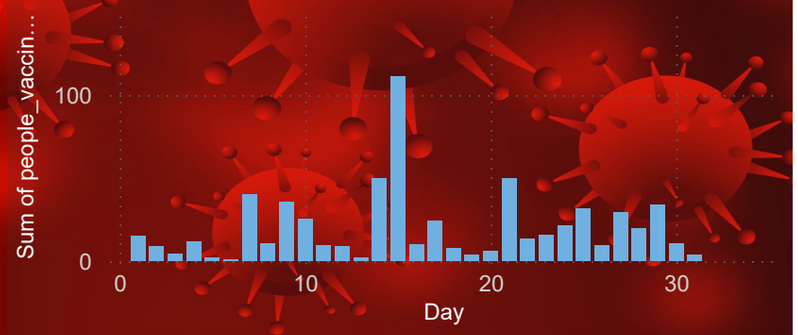
205

Count of vaccines

7.10M

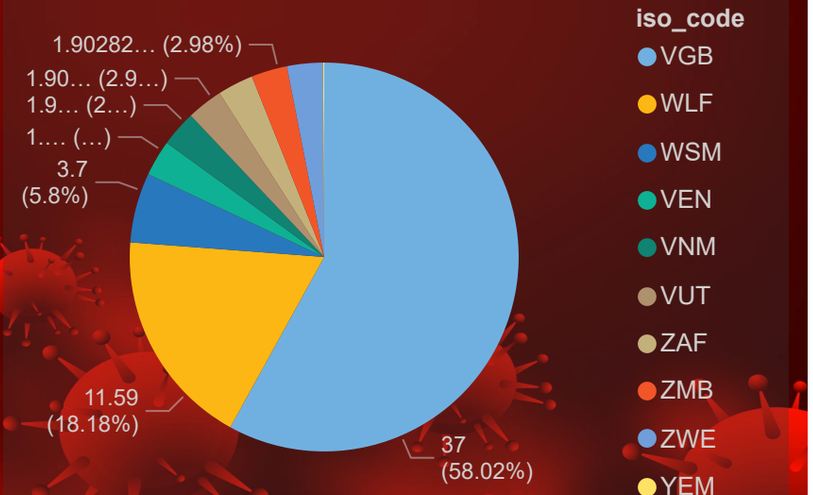
Sum of people_fully_vaccinated

Sum of people_vaccinated_per_hundred by Day



Sum of people_fully_vaccinated_per_hundred by country

Sum of people_vaccinated_per_hundred by iso_code



country

All

date

02-12-2020

19-10-2021

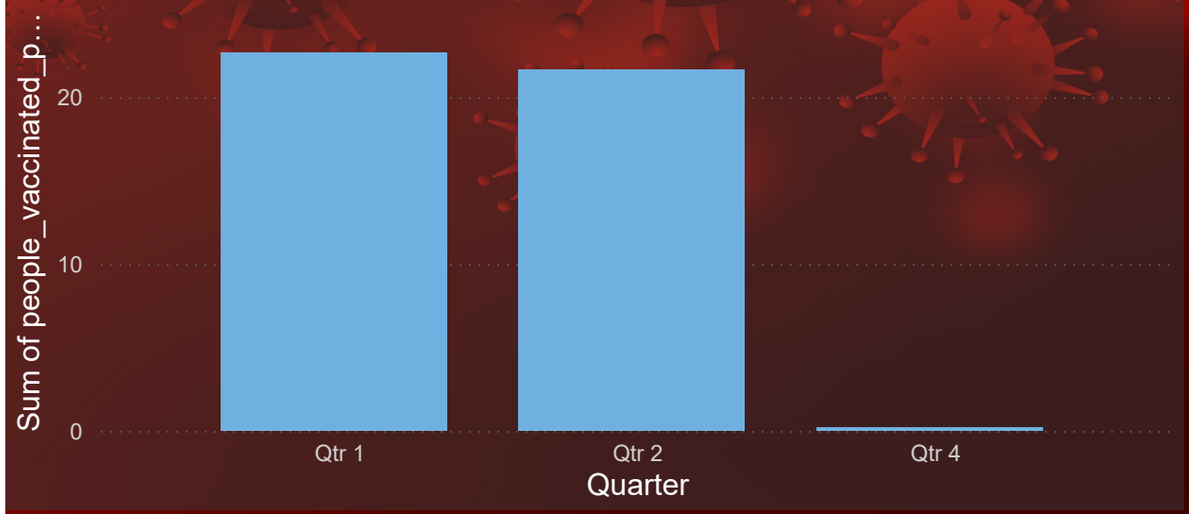
iso_code

All

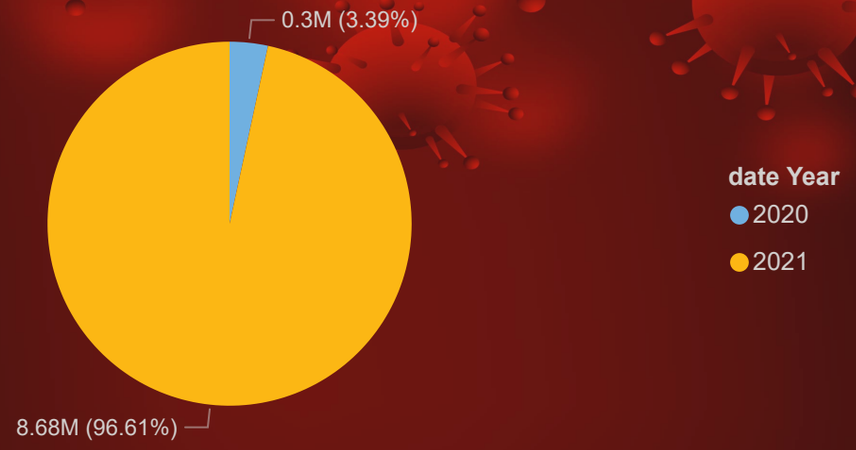
vaccines

All

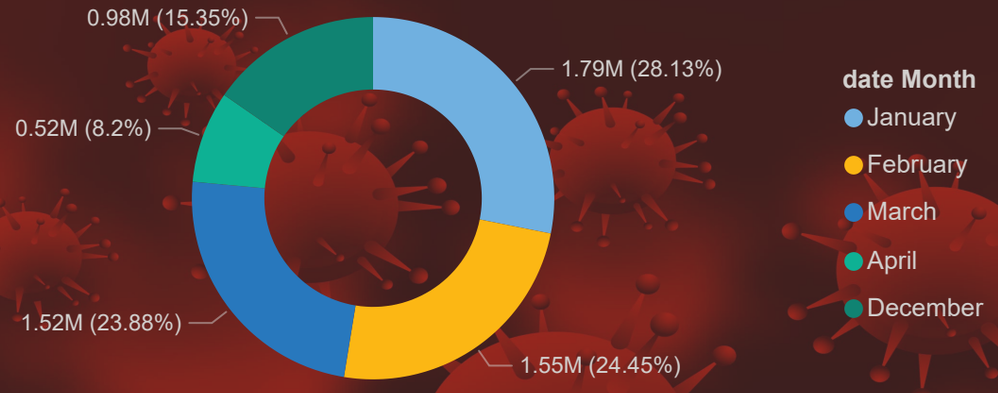
Sum of people_vaccinated_per_hundred by Quarter



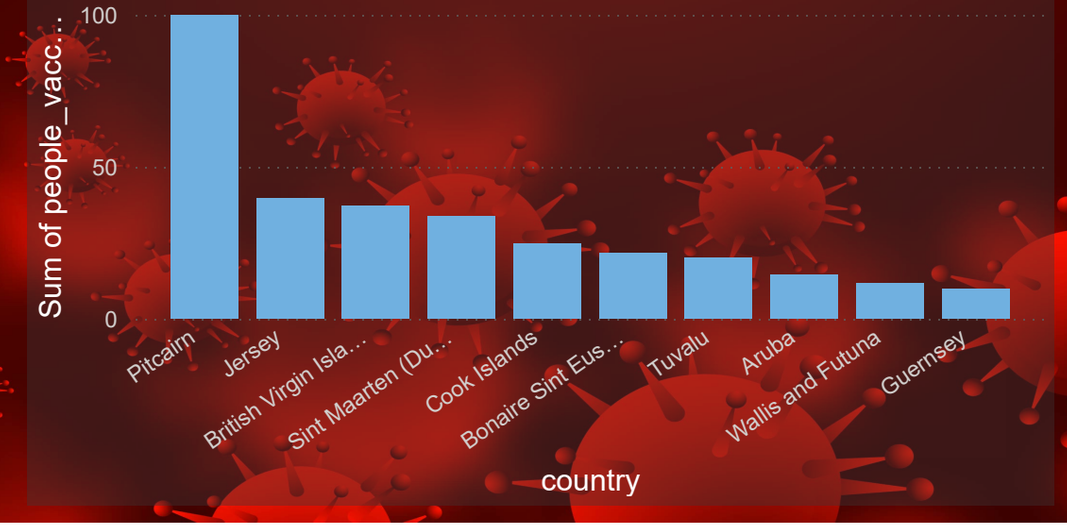
Sum of people_vaccinated by Year



Sum of people_fully_vaccinated by Month



Sum of people_vaccinated_per_hundred by country



CONCLUSION

The analysis of global COVID-19 vaccination data provides key insights into vaccination trends, effectiveness, and distribution across various countries. The findings reveal significant disparities in vaccination rates, with some countries achieving high coverage while others lag behind. The effectiveness of different vaccines has also been examined, offering valuable data for policymakers and healthcare professionals to improve future vaccination strategies.

Furthermore, predictive modeling has helped forecast future vaccination trends, which can aid in planning and resource allocation. The study highlights the importance of continuous monitoring and data-driven decision-making to combat global health crises effectively.

Overall, this project underscores the critical role of vaccination programs in controlling pandemics and emphasizes the need for equitable vaccine distribution worldwide.