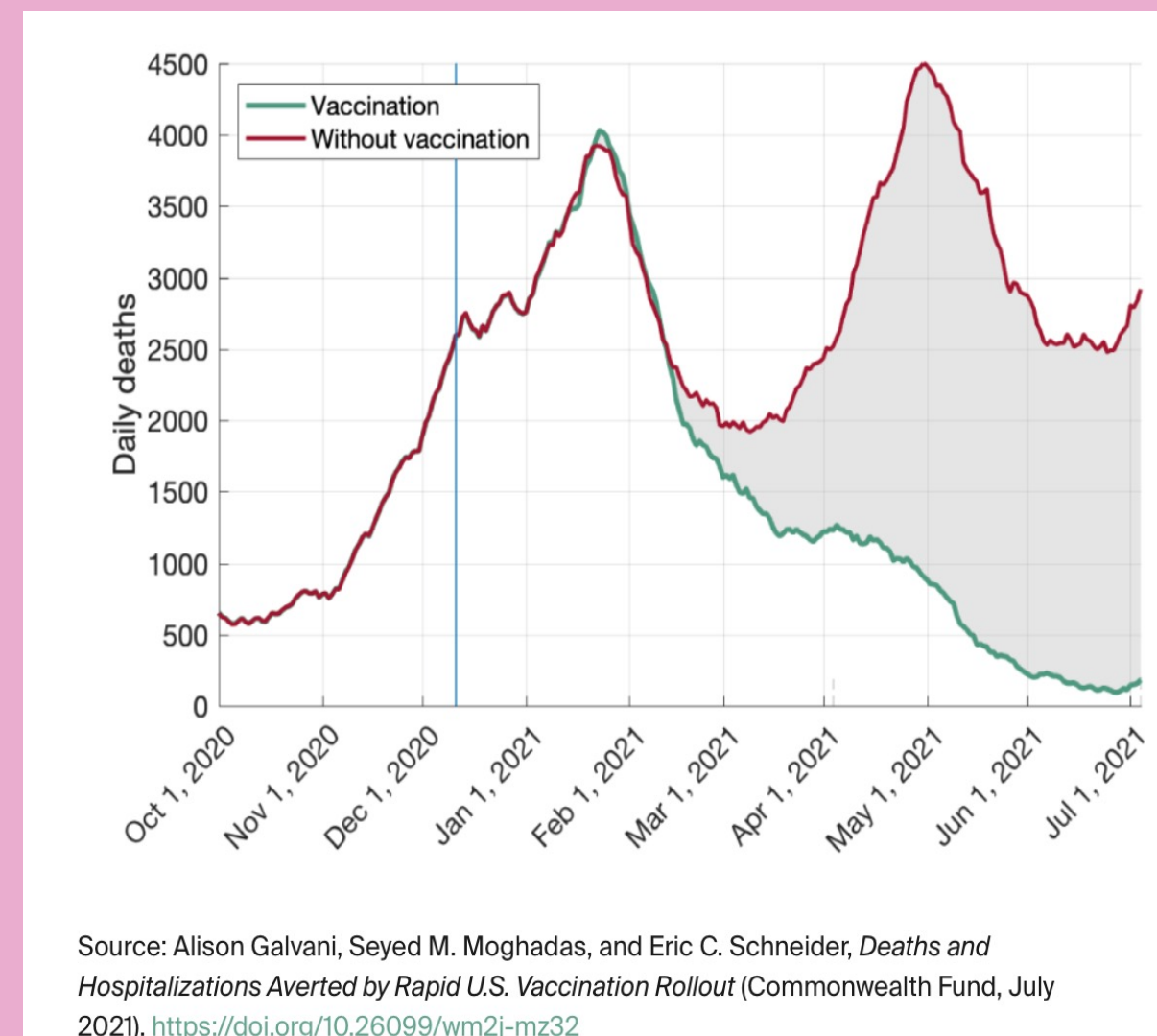
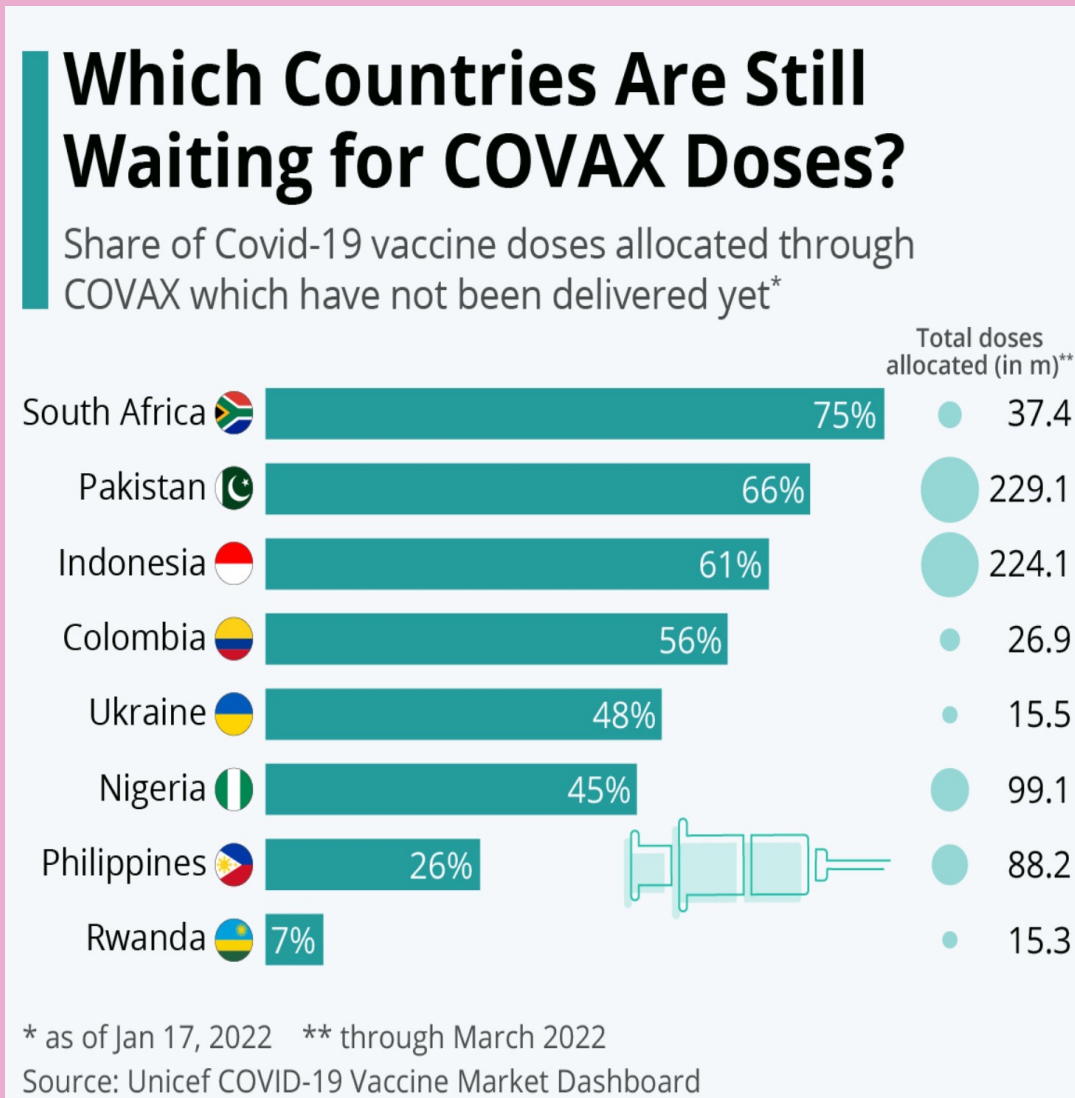


Research by: Shehar Bano

Discussion (and Results, where applicable)

Introduction (/Background)

- My research is focused on a Comparative Analysis of COVID-19 vaccine rollout and examining Equitable distribution in Pakistan and the United States and its Effects on Inflation Rates.
- The COVID-19 Pandemic disrupted lives and economies across the globe, necessitating unprecedented efforts to curb its impact.
- Vaccination emerged as a crucial tool in this battle, highlighting the necessity for effective vaccine distribution strategies.
- This comparative analysis focuses on Pakistan and the United States, two countries that approached vaccine distribution differently but shared common challenges in ensuring equitable access.
- Through this study, I explored the strategies adopted, the obstacles faced, and the potential effects of vaccination efforts on inflation rates in both countries
- This research was Such insights can inform policymakers' decisions, aid in forecasting economic trends, and contribute to post-pandemic policy formulation.



This Image shows the availability of Vaccines in developing countries

This graph represents a comparison of daily deaths with and without COVID Vaccine from October 2020 – Jun 2021 in US.

- Diverse socio-economic contexts make Pakistan and the United States compelling case studies. Pakistan's limited financial resources, underdeveloped healthcare infrastructure, and vast population underscored the complexity of vaccine distribution.
- In contrast, the United States' extensive resources and advanced healthcare system posed different challenges. However, examining these contexts reveals universal considerations for effective vaccine rollout, regardless of disparities.

Interplay of Vaccine and Inflation Rates

- U.S. GDP fell by 8.9 percent in the second quarter of 2020.
- The lockdown decision in Pakistan helped to restrict the spread of the virus, it greatly exacerbated the already poor economic conditions of the country and badly exposed Pakistan's outdated governance system.

Methods

Procedures and Methods:

Experimental Design:

- Data collected from January 2021 to December 2022 for both Pakistan and the United States.
- Random sampling of provinces/states and major cities/metropolitan areas.
- Control variables: Population density, GDP per capita, healthcare infrastructure.
- Statistical methods: Descriptive statistics and multiple regression analysis.

Data Collection:

- Data sources: Government reports, healthcare institutions, economic databases.
- COVID-19 Vaccine Distribution Data: Weekly data collection, verification with healthcare institutions.
- Inflation Rate Data: Monthly data collection from economic databases.

Reagents and Equipment:

- Data analysis software: R or Python.
- Internet access.
- Statistical tools.

Subjects:

- Pakistan: General population.
- United States: General population.

Conclusions & Next Steps

- This analysis offers crucial takeaways for policymakers. First, equitable vaccine distribution requires international collaboration and addressing disparities. Learning from Pakistan's partnership with China, policymakers can emphasize international solidarity and transparent distribution strategies.
- The intersection of public health and economic outcomes underscores the necessity of holistic strategies. Policymakers should consider these linkages, integrating health and economic variables into forecasting model
- Lessons from the United States emphasize the importance of healthcare resilience and vaccination campaigns for swift economic recovery, while Pakistan's challenges underscore the significance of adaptable healthcare systems.

References

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10014452/>
- <https://www.whitehouse.gov/wp-content/uploads/2022/04/Chapter-3-new.pdf>

Acknowledgments

- Special thanks to the Laidlaw Foundation for its generous support of Barnard students.