

Malaysia COVID-19

Descriptive Analysis and Future Insights

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Introduction

Global Pandemic: The novel coronavirus (COVID-19) pandemic has affected millions of people's lives in many countries and continents. The global economy was affected and many lost their beloved ones and were unemployed.

Dashboard: A collection of datasets imported to Power BI Desktop by visualizing and conducting the analysis



The Dataset

Malaysia's COVID-19 dataset

What

Dataset including confirmed cases, recoveries, deaths, vaccinations, and other factors.

How

Dataset is obtained from official sources, the Ministry of Health Malaysia's GitHub Repository

When

The timeline from 2020 to the latest date, 2023

Why

Dataset is gathered and maintained to track the impact of public health measures and the spread of COVID-19.

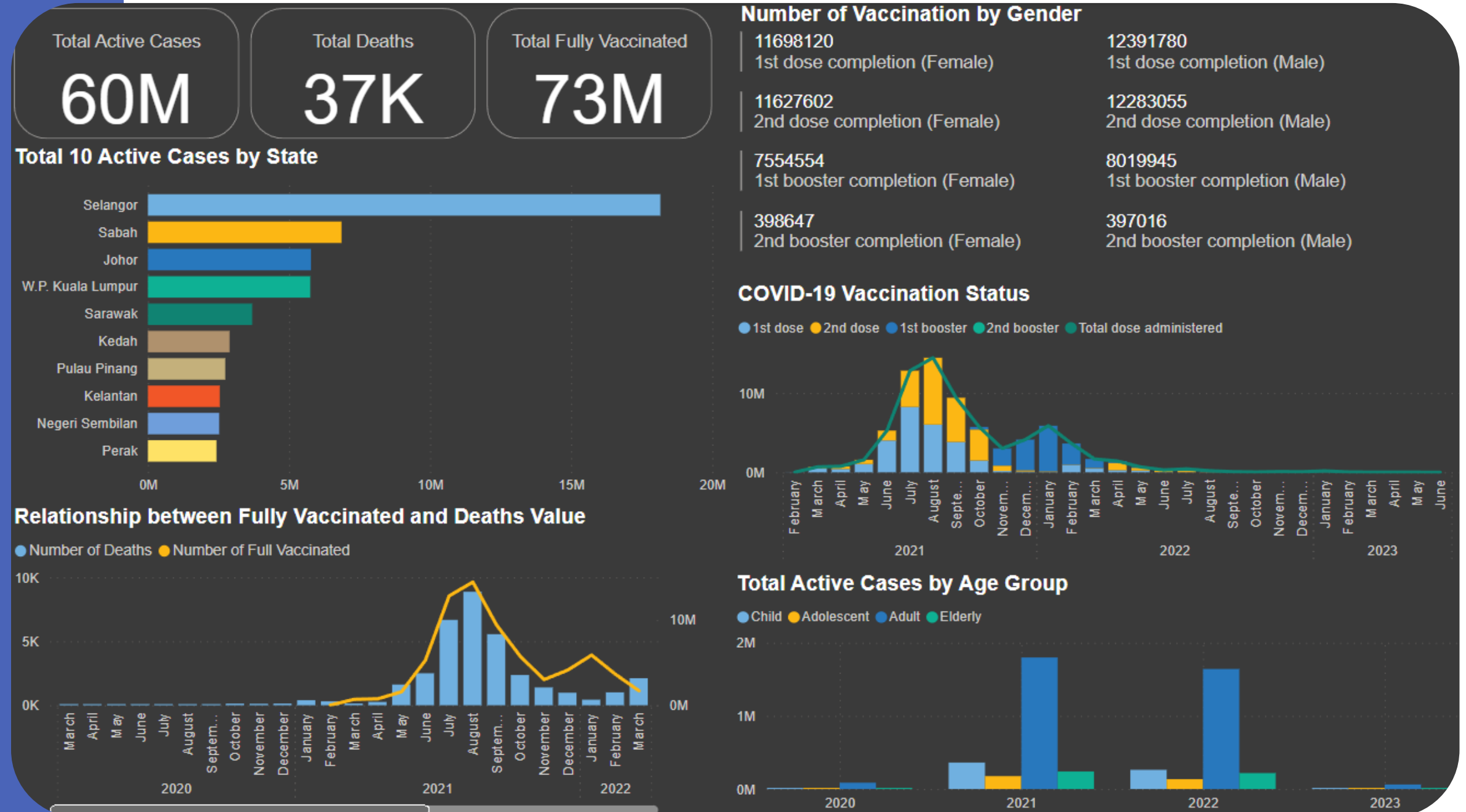
Where

Dataset focuses specifically on COVID-19 cases within Malaysia, including different states, regions, and districts



EDA

Malaysia's COVID-19 Dashboard



CHECK OUT THE POWER BI DASHBOARD [HERE!](#)

Summary Statistics 1

Total Active Cases

60M

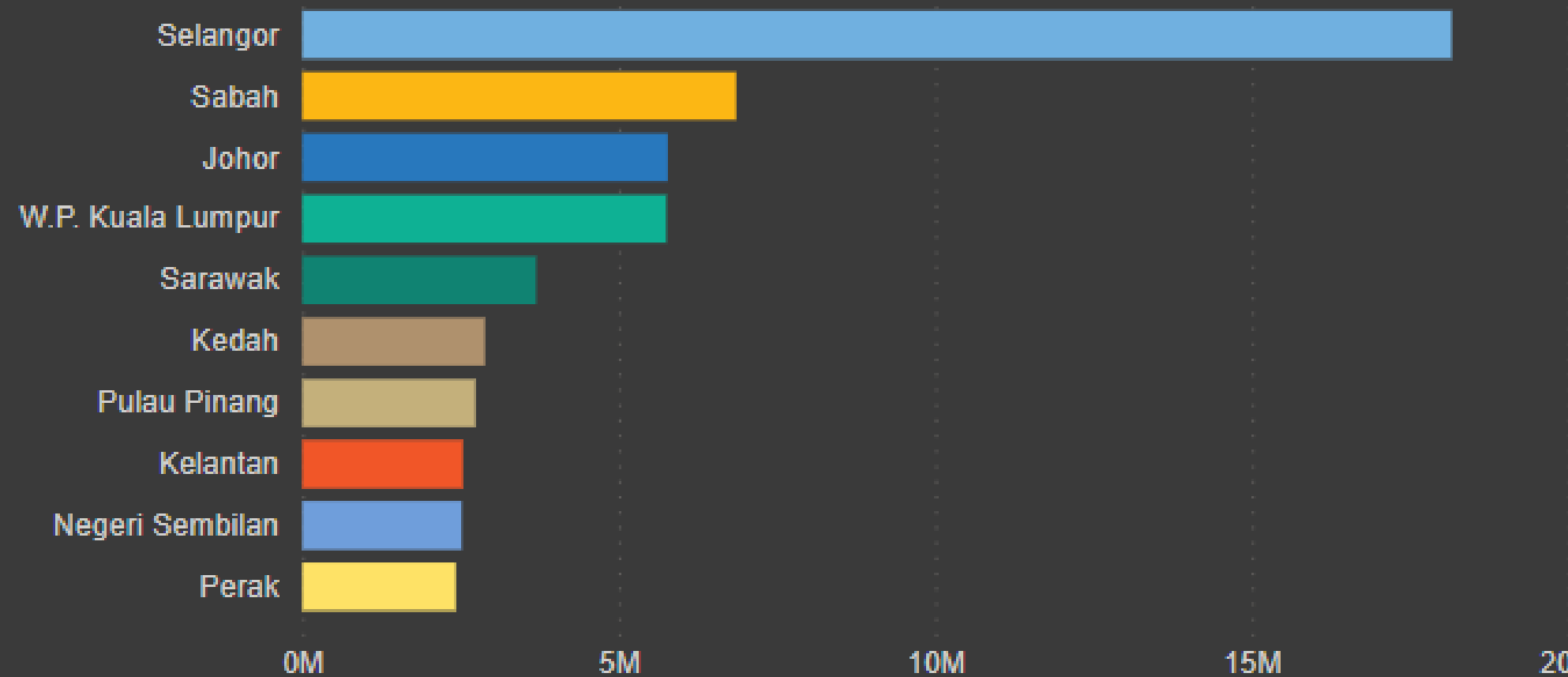
Total Deaths

37K

Total Fully Vaccinated

73M

Total 10 Active Cases by State

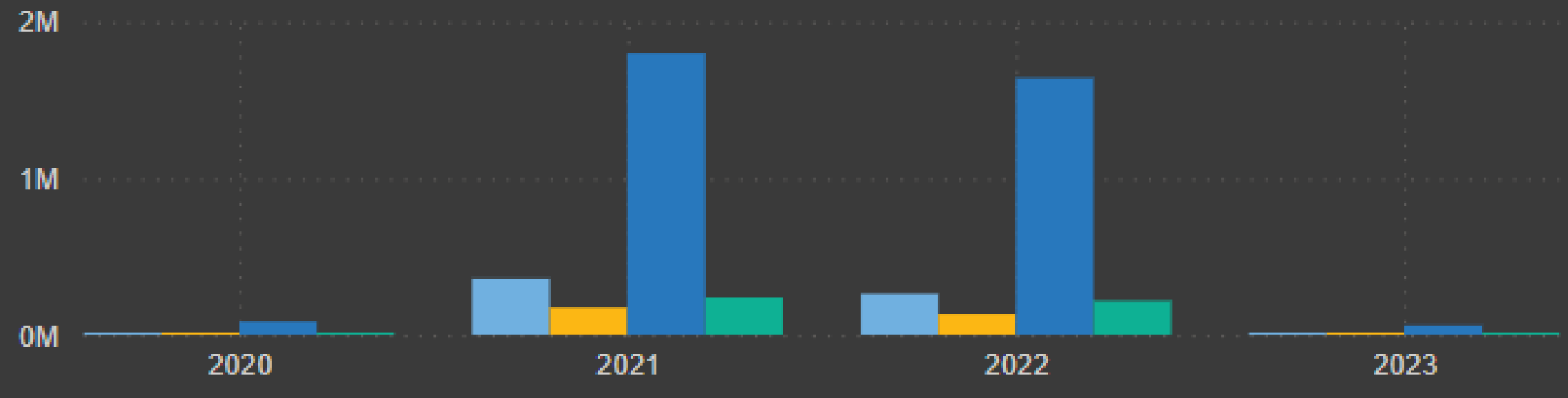


- 60 million confirmed cases
- 37 thousand Malaysians died from COVID-19
- 73 million Malaysians went for vaccination
- Selangor reported the highest number of confirmed cases, with approximately 18 million compared to other states

Summary Statistics 2

Total Active Cases by Age Group

● Child ● Adolescent ● Adult ● Elderly



- The adult category reported as the highest group among Malaysia's population
- By probability, the adult category tends to having infections compared to other group



Summary Statistics 3

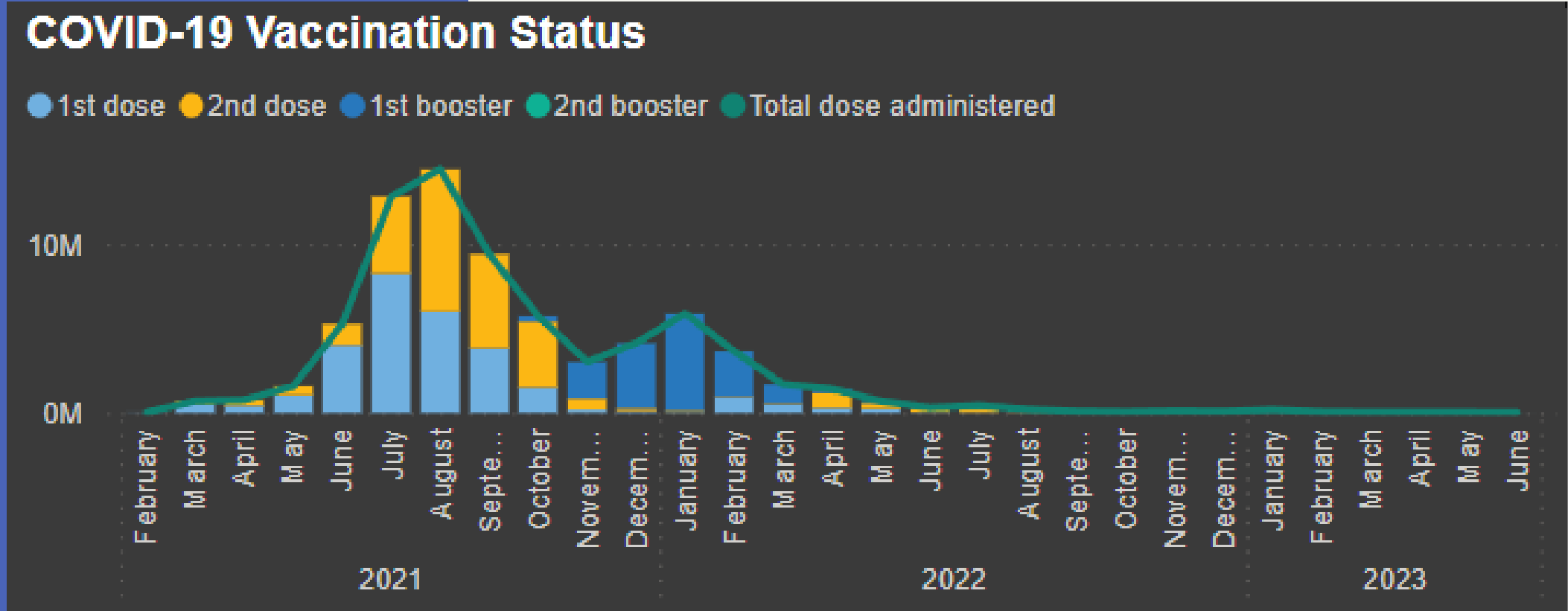
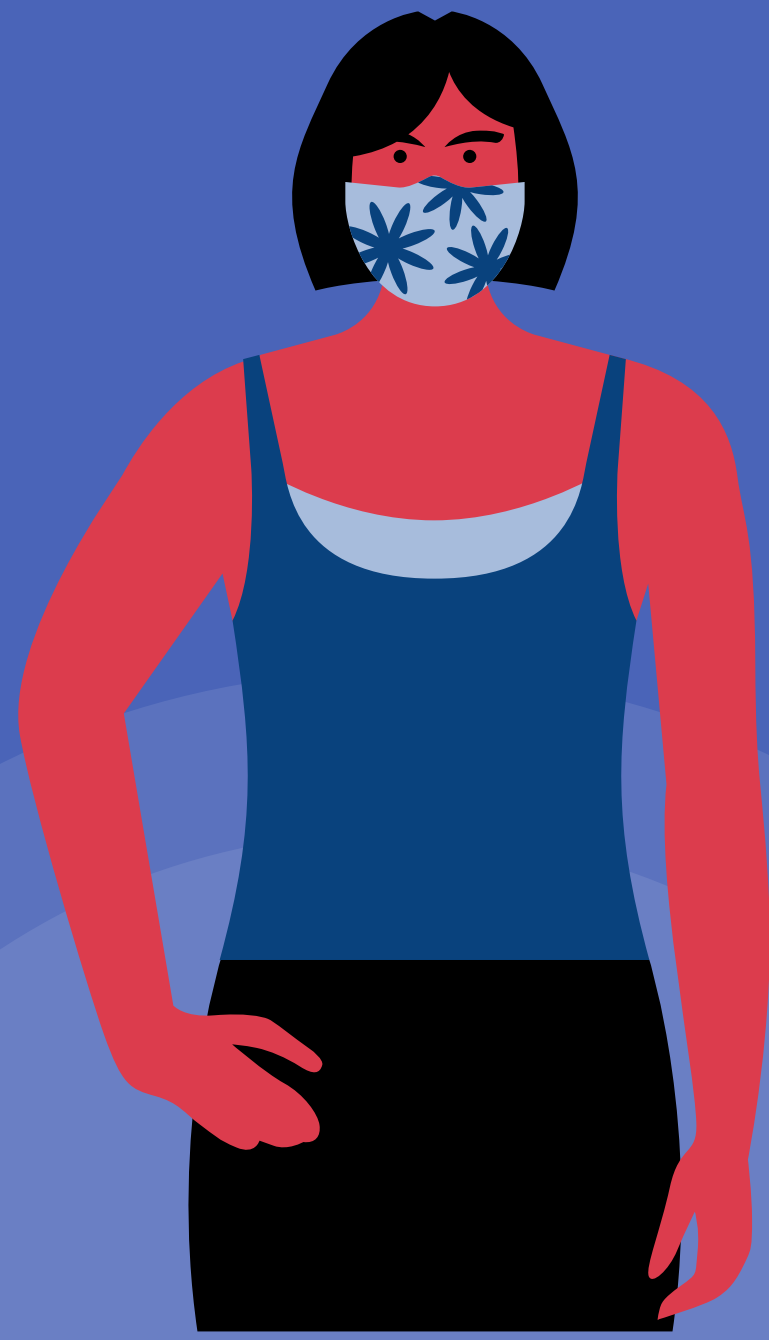
Number of Vaccination by Gender

11698120	12391780
1st dose completion (Female)	1st dose completion (Male)
11627602	12283055
2nd dose completion (Female)	2nd dose completion (Male)
7554554	8019945
1st booster completion (Female)	1st booster completion (Male)
398647	397016
2nd booster completion (Female)	2nd booster completion (Male)

Based on this summary, both females and males have downfalls to get booster injections.



Summary Statistics 4



1st dose

An increasing rate due to the initial stage of COVID-19 vaccination on March 2021

2nd dose

Continue increasing and reaches the maximum on August 2021

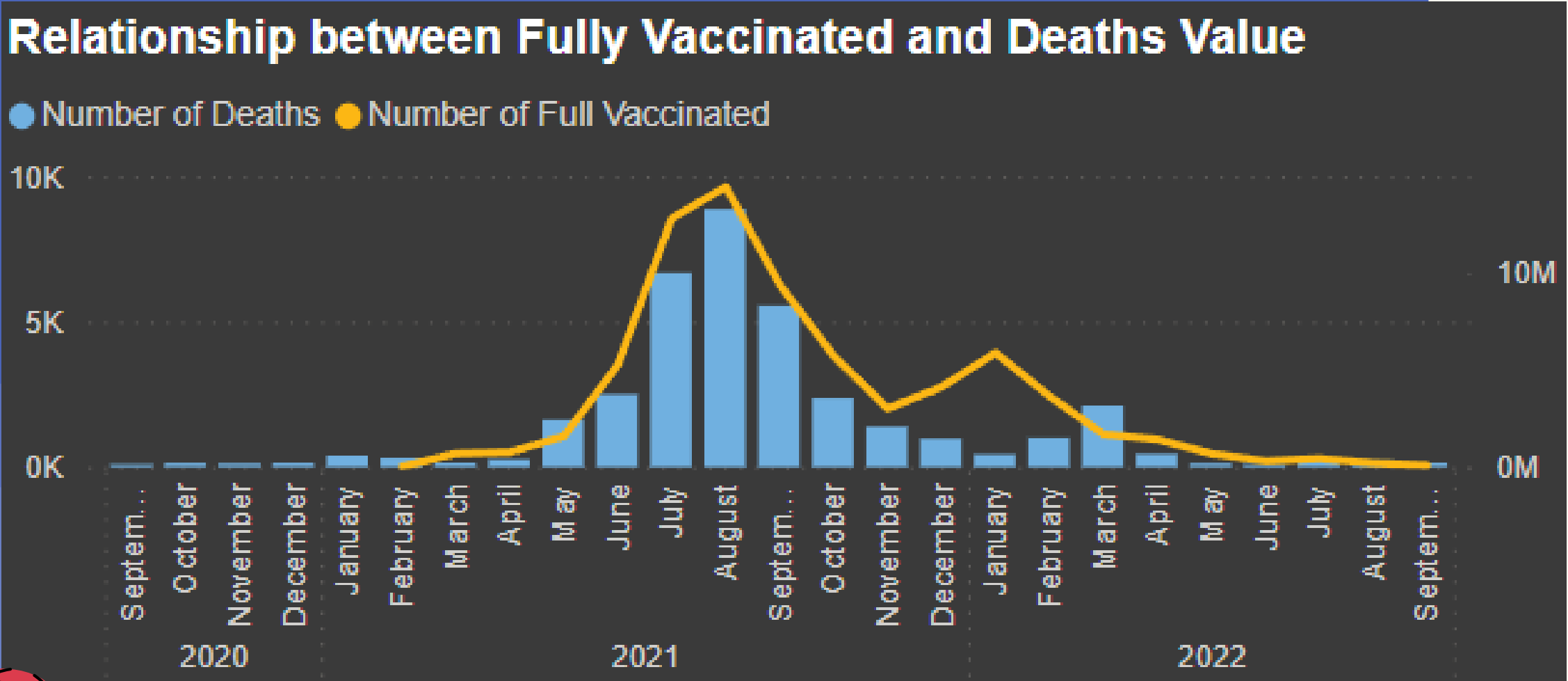
1st booster

Experiencing decreasing in number but increasing due to the mutation of COVID-19 on Nov 2021

2nd booster

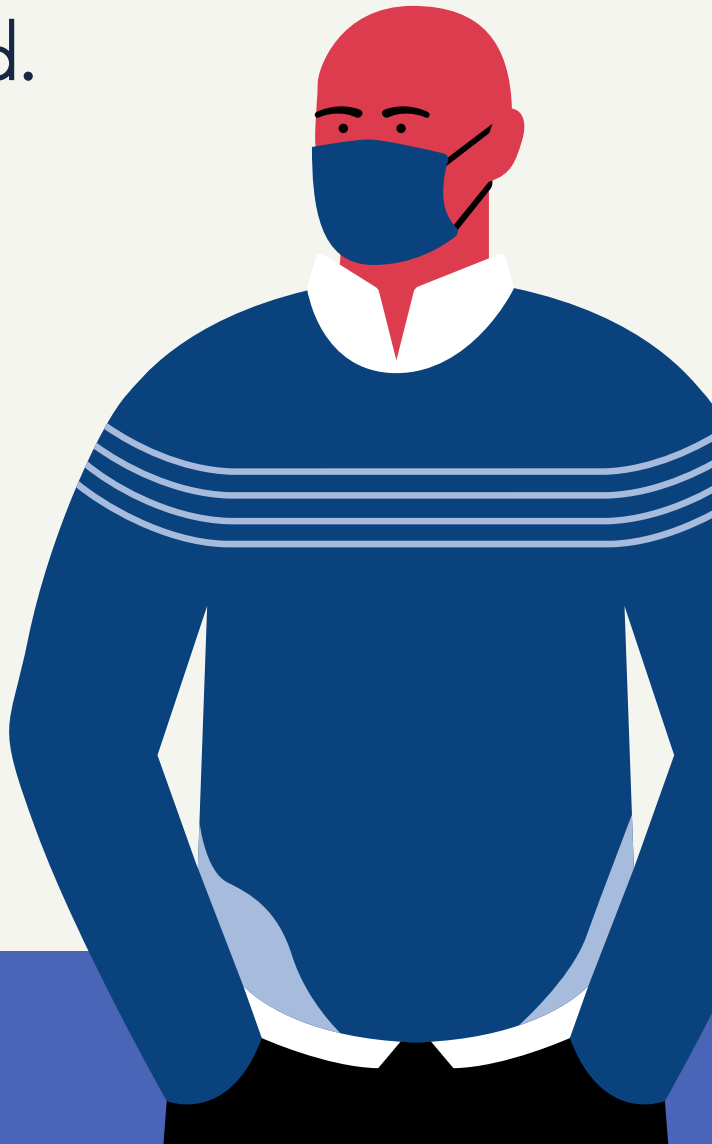
Least number due to herd immunity successfully created among Malaysia community

Summary Statistics 5



The relationship

Both numbers of deaths and vaccination reaches the highest in August 2021. By looking at the decline in deaths number, the vaccine proves its effectiveness to curb the virus's spread.





Future Insights & Conclusion

Future Insights

To avoid any virus outbreaks like COVID-19, it's important to identify the initial locations of the outbreak. By implementing a novel deep-learning architecture that combines geolocations and historical data, the model predicts the possible outbreak location hence reducing its spread globally.

Conclusion

- The analysis shows vaccination has higher correlation to active cases and deaths rate
- The vaccine has proven its effectiveness to prevent the virus spread, thus reducing the number of active cases
- With vaccination coverage, the deaths rate also reduces

References:

Malaysia Covid-19 Dataset: <https://github.com/MoH-Malaysia/covid19-public>