ANALYZING THE IMPACT OF COVID-19 VACCINATION IN VIETNAM

2020 - 2022

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1. INTRODUCTION

- Background: COVID 19 globally & in Vietnam
- Problem: Understanding how vaccinations affected case and mortality trends in Vietnam
- Objective: Compare new COVID-19 case trends in Vietnam before and after vaccination rollout and after publicly implemented (2020-2022)

2. DATA AND METHODOLOGY

- Data Source: Our World in Data (OWID), WHO
- Time Range: 01/01/2020 - 31/12/2022
- Scope: Vietnam
- Key Dates:
    + 08/03/2021: first vaccine dose administered
    + 01/07/2021: public vaccination campaign began
- Tools: Excel (cleaning), Tableau (visualization)
- Metrics: New cases per millions, deaths, recovery trend

3. DATA PREPARATION

- Filter dataset for Vietnam only
- Split periods:
    + Pre-vaccination (Jan 2020 - Mar 2021)
    + Early vaccination (Mar - Jun 2021)
    + Public rollout (Jul 2021 - Dec 2022)
- Handle missing values, standardize date format

4. ANALYSIS AND RESULTS

- Visualizations: Line graphs (cases, deaths per million) with reference line on 01/07/2021
- Key findings:

    + Before vaccination: Few cases was founded, but it fluctuates with average mean of 167 cases and 2 deaths, some days reached 600 cases
    + After vaccinations: When Vietnam exposed severely to COVID-19 the most, before publicly implemented, the number plummeted over 3000 cases and 11 deaths
    + Public implementation: the number of cases and deaths even increased more with an average of 1 million cases and 289 thousand deaths. However, after the government encouraged people to take vaccines, cases were first decreased in March 2022 and deaths were in August 2021.

5. DISCUSSION

- Interpretation: Vaccination reduced severity and deaths despite infection surges
- Stakeholders: WHO, Vietnam Ministry of Health

6. CONCLUSION

- Vaccination was crucial in mitigating the impact of COVID-19 in Vietnam
- Demonstrates how data analytics can support public health decision-making