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TASK-8 : Timeline Analysis of Covid-19

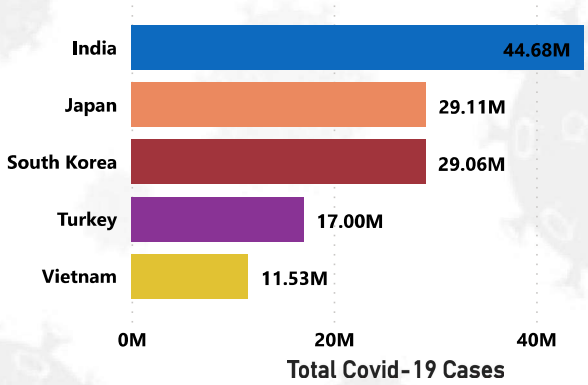
Objective :

- **Create a storyboard showing spread of Covid-19 cases in your country or any region (Asia, Europe, BRICS etc) using Tableau, Power BI or SAP**
- **Use animation, timeline and annotations to create attractive and interactive dashboards and story**
- **Identify interesting patterns and possible reasons helping Covid-19 spread with basic as well as advanced charts**

Dataset: https://bit.ly/30d2adi

Select all | 2020 | 2021 | 2022

Top 5 Covid-19 affected Countries



Total Cases

189.6M

Total Deaths

1.48M

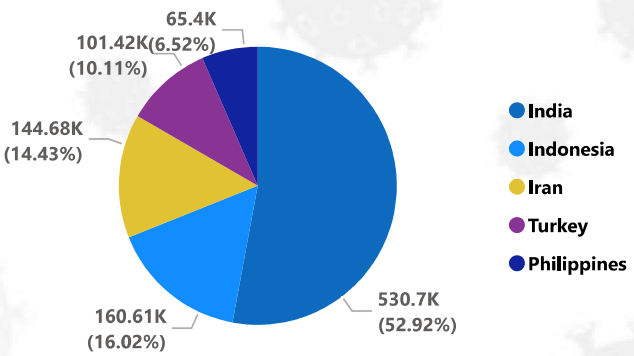
Total Discharged People

188.2M

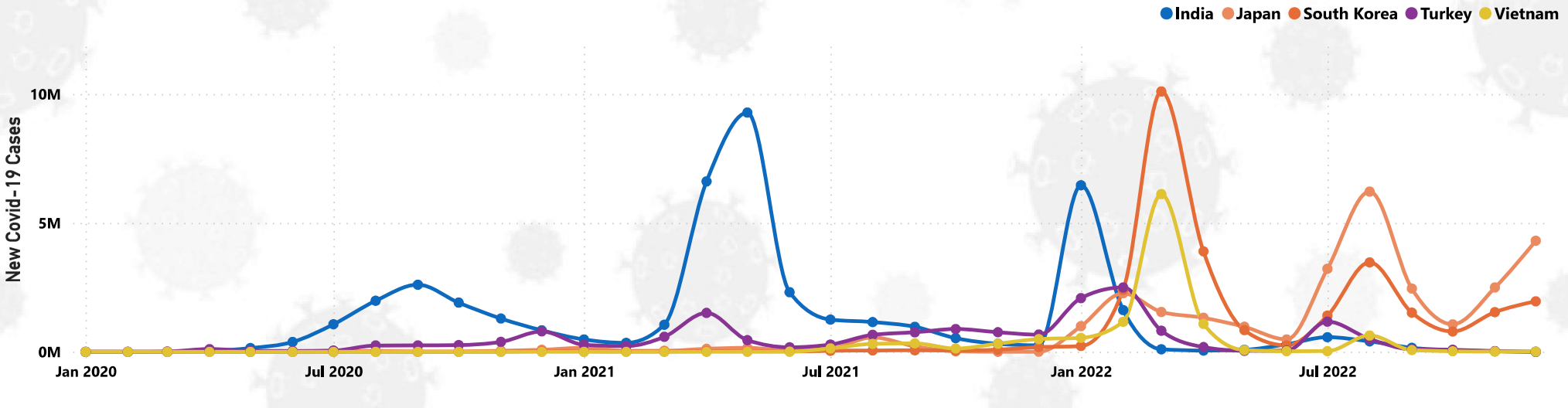
Total Fully Vaccinated People

627.8bn

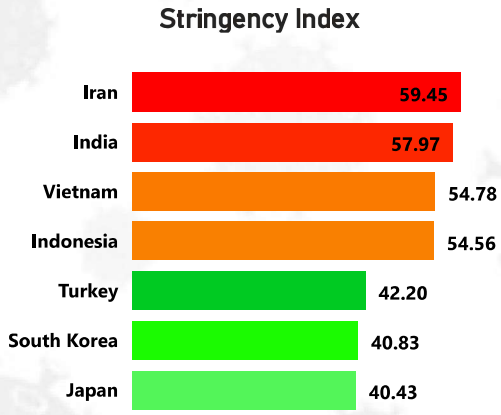
Death Count by Country

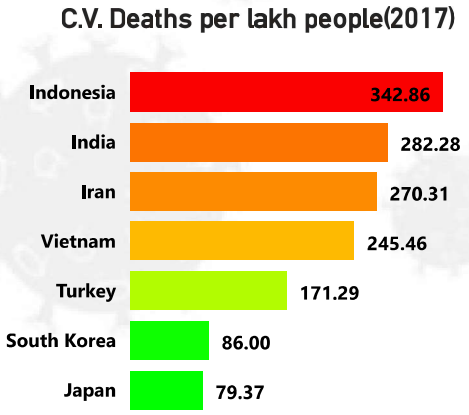


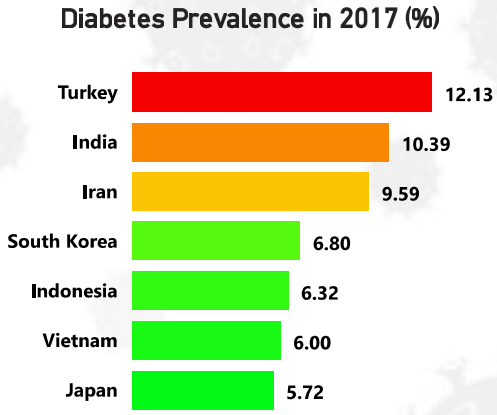
Top 5 most suffered country's trend of New Covid-19 Cases over the time period

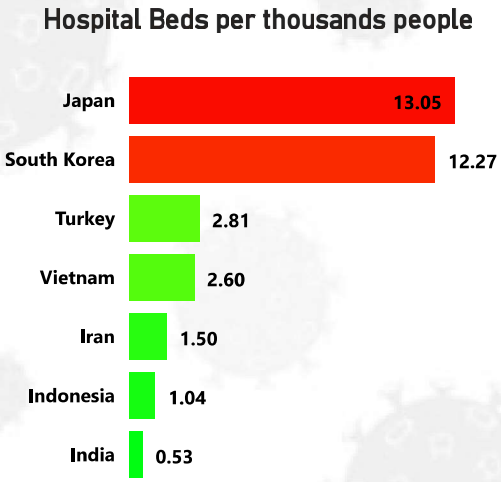


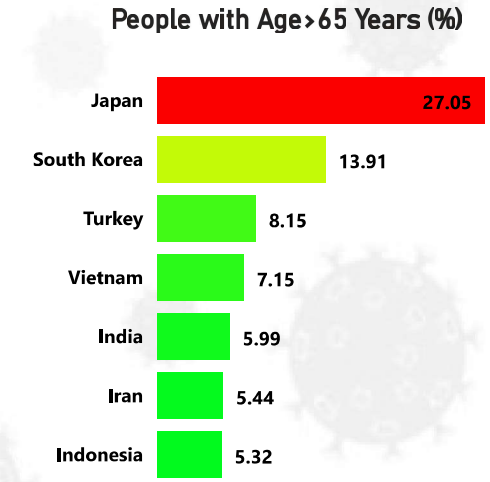
Top 7 Countries with highest cases and possible reasons of surge/deaths due to Covid-19

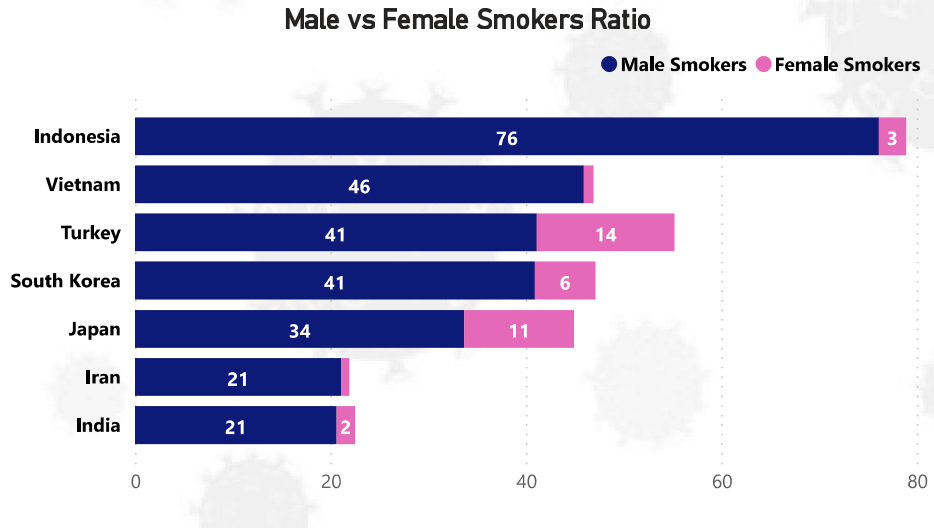












From the analysis of covid-19 data in the ASIA region(excluding China) in the span of 2020-22, I have found :

- *Top 5 affected countries with most number of covid-19 cases are India, Japan, South Korea, Turkey and Vietnam where India was having the most number of cases(44.6 M).*
- *India is bearing more than half of the deaths due to covid-19 in Asia region.*
- *The KPI's are showing the number of total cases(189.6 Million), total death toll(1.48 Million), total discharged people(188.2 Million) and total fully vaccinated people(627.8 Billion) all in ASIA region.*
- *For India the first wave came in the 3rd quarter of 2020 with highest surge in September, second wave in the 2nd quarter of 2021 with highest surge in May and the third wave came in 1st quarter of 2022 with highest surge in January. For Vietnam Covid-19 cases reached its peak around March 2022.*
- *It is also noted that the rise in Covid-19 cases are captured at the same time i.e. 1st Quarter(March) in South Korea & Vietnam and by the end of 3rd Quarter(Aug) 2022 the cases are rising in the Japan and South Korea. And lastly, at the end of the 4th Quarter(Dec) 2022 the cases in Japan and South Korea are rising.*

The possible reasons for the surge I can suggest based on the data available are :

1. Stringency Index: While Japan and South Korea had low Stringency Index values (<50%) and saw a surge in cases, India and Vietnam, with better Stringency Index scores, also experienced a high number of COVID-19 cases, suggesting that the Stringency Index may not be the sole reason for the surge.

2. Cardiovascular Deaths: High Cardiovascular Deaths per lakh in 2017 in countries like India, Indonesia, and Iran could have contributed to COVID-19 deaths, as many COVID-19 patients had cardiovascular conditions.

3. Handwashing Facilities: Despite good Handwashing Facilities in Japan, Vietnam, and South Korea, they experienced surges. Conversely, India and Turkey, with poor facilities, also saw surges, indicating this factor may not be a sole contributor.

4. Diabetes Prevalence: While Turkey, India, and Iran had high Diabetes Prevalence, South Korea, Turkey, and Vietnam with lower prevalence also saw surges, suggesting it's not the sole cause.

5. Hospital Beds: Japan and South Korea's higher Hospital Beds/1000 people helped them manage cases better, while India, Iran, and Indonesia's lack of beds contributed to more casualties.

6. Older Population: Japan and South Korea, with more older people, saw surges, but India, Iran, and Indonesia with fewer elderly still experienced surges, indicating it's not the sole factor.

7. Male and Female Smokers: Indonesia had more smokers and high casualties, but India and Iran, despite fewer smokers, had high casualties, suggesting smoking isn't the sole reason for surges/deaths.


Thank You
Morris Charts
Easy Pie Charts
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