

Visualizations in Tableau

By

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Project Goals

- Visualization of trends in Tuberculosis Burden dataset [TD_Burden_Country.csv].
- Detecting regions and countries with high TB and HIV positive cases.
- Identifying years of high death rate caused by TB in HIV positive cases across all the regions.
- Developing insights into the trends of estimated Death rate from TB and HIV in various regions.
- Identify the first 6 countries with the highest death rate in TB cases who are HIV positive.
- Detecting regions and countries with estimated TB prevalence above 2,500,000
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Process

- Download and import the dataset.
- Connect the data into Tableau.
- Verify different data types in the dataset.
- Find patterns, trends and detect significant keypoints.
- Generate new relevant questions for data analysis.
- Analyse the data using trendlines, outliers, forecast. etc
- Dashboard creation.

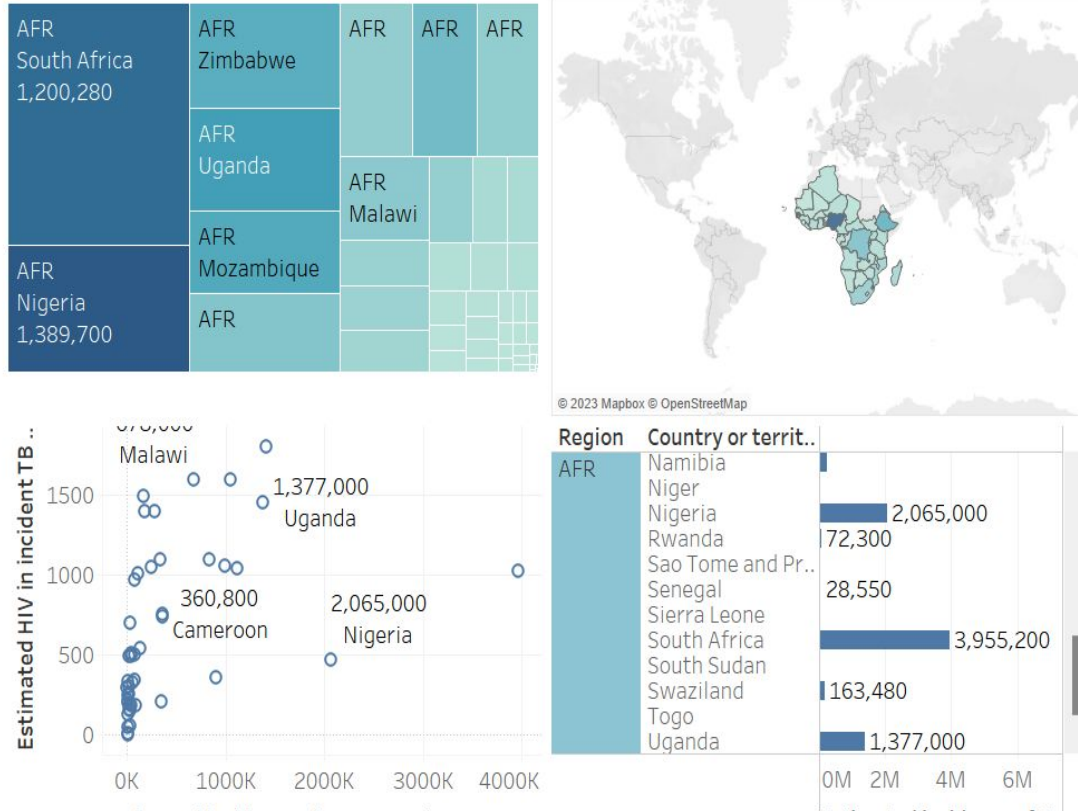


Option 2 Tuberculosis Burden dataset Questions answered

- -Detect regions and countries with high TB and HIV positive cases.
- -Identify years of high death rate caused by TB in HIV positive cases across all the regions.
- -Develop insights into the trends of estimated Death rate from TB and HIV in various regions.
- -Identify the first 6 countries with the highest death rate from TB cases who are HIV positive.
- -Make a prediction for the next 3 years about death rate caused by TB in HIV positive cases across all regions.
- -Detect regions and countries with estimated prevalence of TB with population above 2,500,000.



Results: Dashboard on outlier regions and countries with high incident TB and HIV cases and high death rate by TB and HIV positive cases.



The results show African region with the highest number of Estimated HIV in incident TB cases .

South Africa have the highest incident rate of TB and HIV positive cases (3,955,200) while Nigeria have the highest death in TB and HIV positive cases (1,289,700).

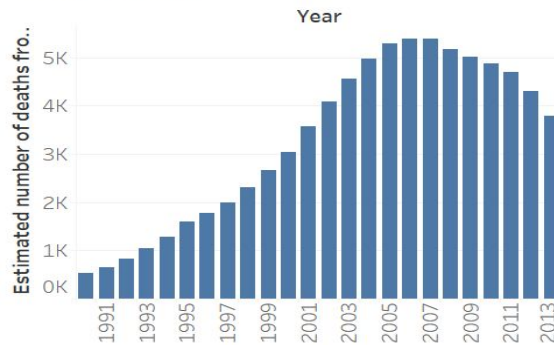
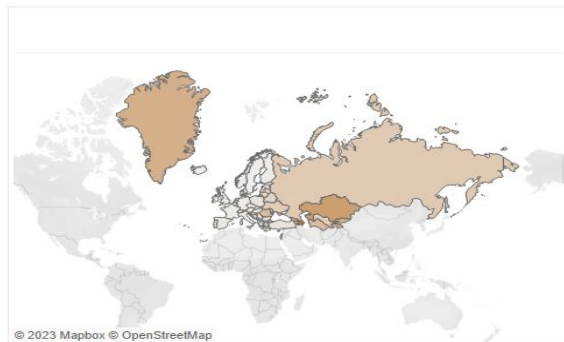
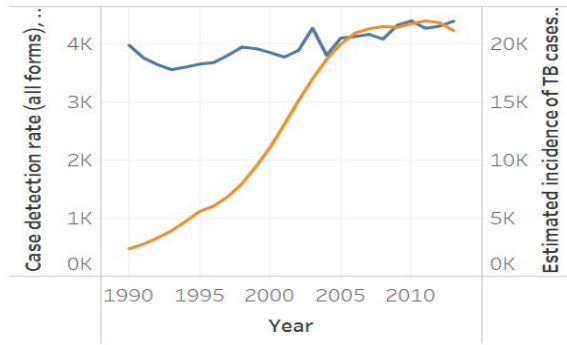
These countries are also outliers in their regions

- America(Brazil),
- Emirates(Pakistan),
- Europe(Russian Federation),
- South East Asia(Bangladesh, India,Indonesia,Myanmar),
- Western Pacific Region (Cambodia, China,Philippinees,Viet Nam)

Dashboard showing years of high death rate caused by TB in HIV positive cases across all the regions.

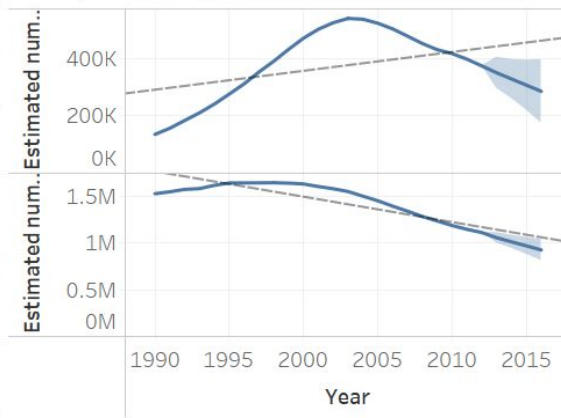
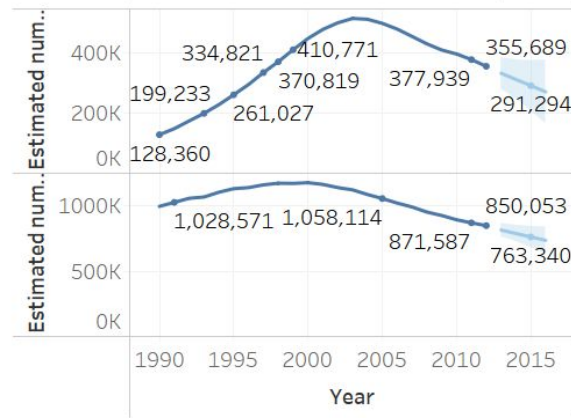
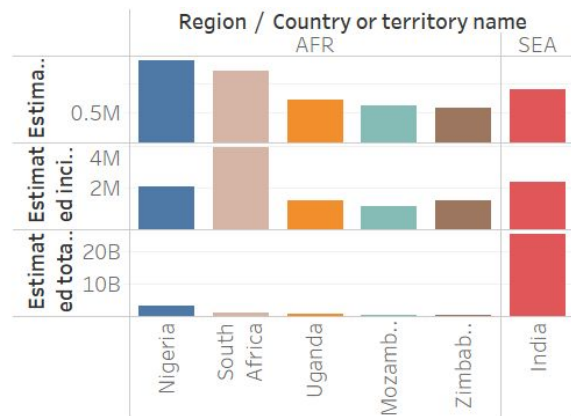
Region	Country or territ..
EUR	Portugal
	Republic of Mold..
	Romania
	Russian Federati..
	San Marino
	Serbia
	Serbia & Monten..
	Slovakia
	Slovenia
	Spain
	Sweden
	Switzerland
	Tajikistan

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Estimated nu..



European region experienced the highest number of case detection and highest estimated death in TB and HIV positive cases in 2007. African region highest was in 2003. American region highest was in 2000 . Emirates region highest was in 2013. South East Asia region highest was in 2003. Western Pacific Region highest was in 2003.

A dashboard showing the first 6 countries with the highest number of death from TB in HIV positive cases, their map, 3 years forecast and trendline.



Overall results show that 5 countries in Africa and 1 in South Eastern Asia have the highest number of death caused by TB in HIV positive cases.

The forecast indicates that Nigeria will have her estimated death rate caused by TB in HIV positive cases increased from 82,000 to 89,056 in the year 2016 ,

Whereas other countries will have a reduction in death rate caused by TB in HIV cases.

South Africa death rate will be reduced from 67000 to 49,341.

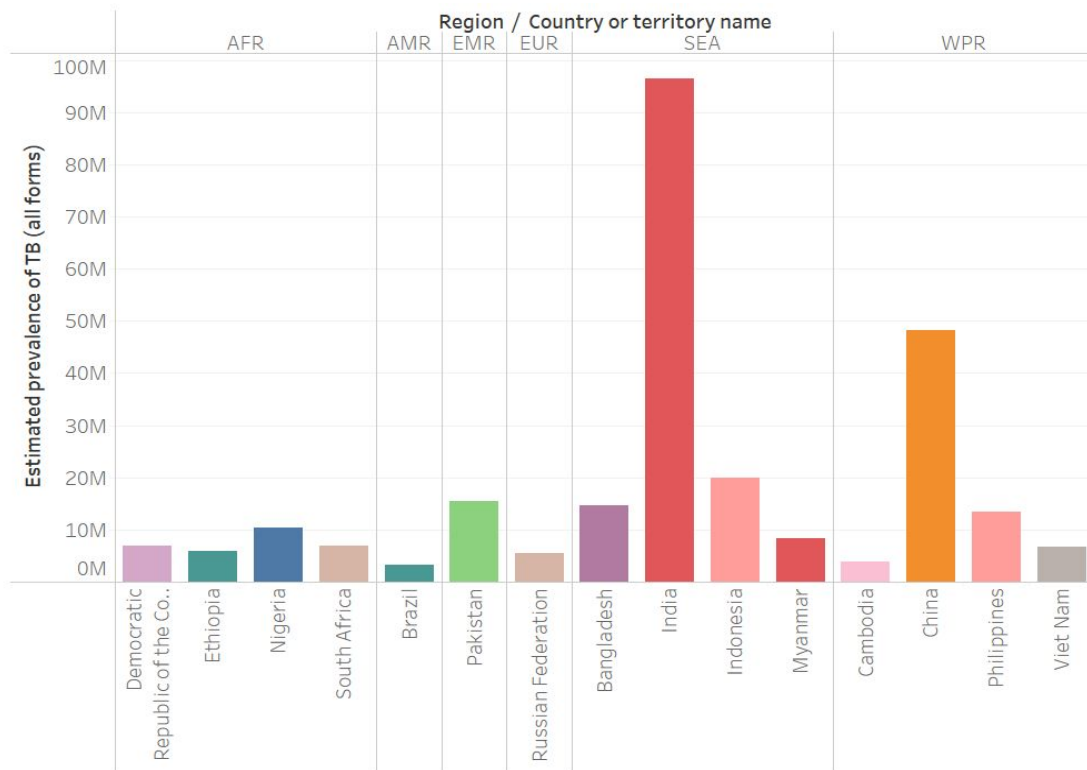
Uganda from 9200 to 6,733.

Mozambique from 17,000 to 16,000.

Zimbabwe from 22,000 to 13,937.

India from 39,000 to 19,639.

Regions and countries with estimated prevalence of TB with population above 2,500,000.



The estimated prevalence of TB with population above 2,500,000 indicate that Brazil which is in America region have the least estimated prevalence of TB with 3,250,000 population compared to other regions; the forecast earlier showed that by 2016, the death rate will be reduced to 4.

Whereas India in South East Asia have the highest population (9,650,000) with estimated TB prevalence . This could be as a result of India's dense population.

Challenges

- Time constraints to explore available data.



Future goals

- I will conduct more in-depth statistical analysis to extract valuable insights in the data.
- I will explore other datasets that are relevant to the prevalence of TB and HIV positive cases in affected regions, compare the forecast and proffer solution to help reduce the death rate in those prevailing countries.



THANK YOU

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