Data Visualization of Cancer Trends in India

Project Objective:

- Analyze cancer trends in India using data from 2015–2021.
- Reveal insights on time patterns, demographic variations, and regional disparities.

Data Source:

- Institute for Health Metrics and Evaluation (IHME).

Key Features:

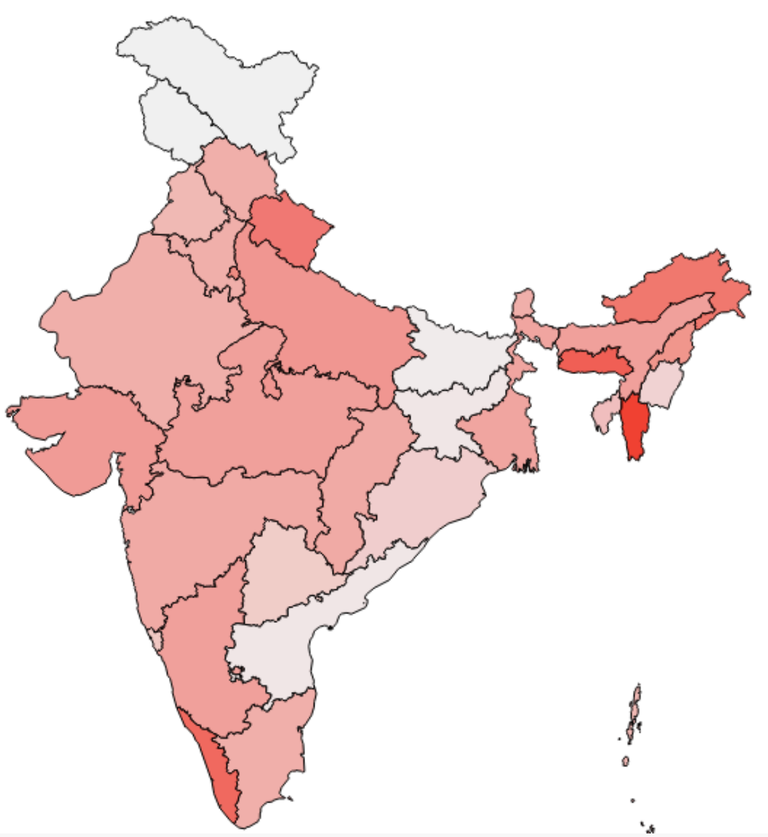
- Year-wise trends by cancer type among different ages, by location, and geographical mapping.
- Interactive dashboards with filters (location, year, gender, cause, metric, measure).

Tools Used:

- Tableau – Primary tool for interactive visualizations.
- Python – Used for data aggregation, and pre-processing.

Visual Icons:

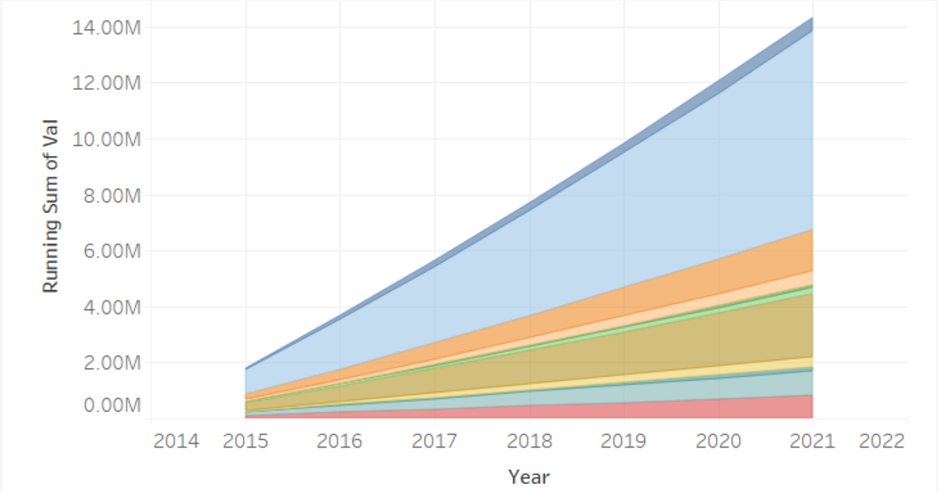
- Bar/line charts
- Geographical mapping
- Regional heatmaps
- Tree map
- Box & Pie plots



Key Insights & Outcome

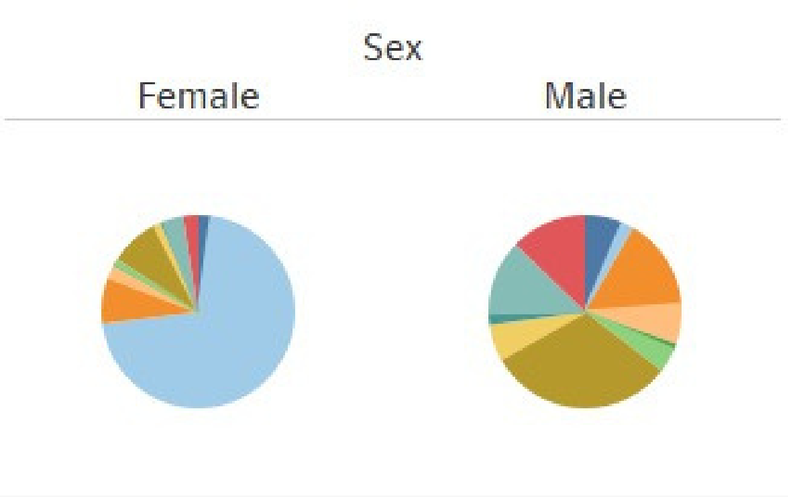
📈 Trend Insights:

- Rise in cancer cases from 2015 to 2021.
- Oral and Breast cancers most reported among male & female respectively.
- Make future prediction for next 4 years via line graph.



🧍‍♂️🧍‍♀️ Demographic Patterns:

- Higher prevalence in women (esp. breast cancer).
- Age group 30–50 most affected.
- Oral cancer between age group 30-60 is highest in male.
- Breast cancer between age group 40-60 is highest in female.



🌍 Geographical Insights:

- Meghayalaya & Assam shows highest oral cancer.
- Uttar Pradesh shows highest number of cases registered.

🧠 Policy Implications:

- Emphasize early detection and awareness.
- Use data to guide government for resource allocation.

✅ Outcome:

- Delivered interactive dashboards to help public health officials identify patterns and plan targeted interventions.