

Future Burden - Cancer Mortality in India

Prelims: Current events of national and international importance

Why in news?

A recent disease-forecasting study projects deaths due to pancreatic, colorectal and breast cancers to rise by 2030 in India.

- **Objectives** - To project the future burden of **cancer mortality** in India for **23 major cancer types** up to the year 2030.
- It provides the first comprehensive, long-range forecast of age-standardized mortality rates (ASMR).

***Standardized Mortality Rate** is a measure used to compare the death rates of a population to a reference population, adjusted for factors like age and sex.*

- **Method** - Autoregressive Integrated Moving Average (**ARIMA**) model has a greater ability for prediction and applicability for cancer forecasting in the country.
- **Data source** - Aggregated, national-level cancer mortality data for the population of India from 2000 to 2019 were used from Global Cancer Observatory (GCO)'s '**Cancer Over Time**' database.

*India was found to see a **jump of 26.4 % in cancer rates** between 1990-2023 - among the highest in the world.*

Findings of the study

- **Associated factors** - The study found that there is a clear shift towards cancers associated with lifestyle and economic development.
- Found that a rise in cancers linked to lifestyle and metabolic factors and a decline in infection-related and tobacco-related cancers in India.

- **Increasing trend in Mortality rates -**
 - **Among males - Colorectal cancer & pancreatic cancer** increased by 29.49% and 67.81% respectively, between 2000 and 2025, and expected to increase by 6.55% and 9.59% respectively, from 2025 to 2030.
 - **Among females - Breast cancer** is expected to have the highest increase from 2025 to 2030, followed by lung, colorectal cancer, pancreas, ovary, kidney, and lymphomas.
- **Dipping projections -** Among both genders - **Mouth & oropharynx cancers, urinary bladder cancer** mortality is projected to decrease between 2000 and 2030.
- It attributed to the reduction in tobacco use and household air pollution.
- **Prevention -**
 - Improving early detection through expanded screening programmes (such as mammography and colonoscopy);
 - Improving diagnostic infrastructure in rural and underserved regions are essential;
 - Increased public awareness; and
 - Improved lifestyle interventions like healthier diets, physical activity, and reduce tobacco and alcohol consumption.

References

1. [The Hindu | Future burden of 23 major cancer types](#)
2. [BMJ Journal | Burden of cancer mortality in India](#)