Exploring Global Mortality Trends: A Story of Health and Change

Why Mortality Data Analysis matters ??

(1990 ~ 2019)

1.5bn
Total death

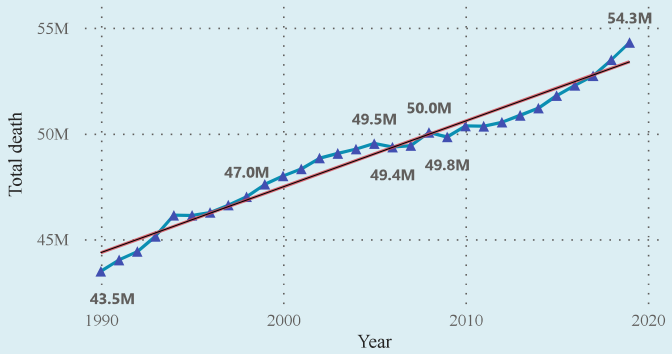
In the world of public health, data can be a powerful storyteller. It reveals the evolution of global health over time, highlighting successes, challenges, and areas in need of attention.
This report delves into **30** **years** of worldwide mortality data, encompassing **120** **countries**, to uncover trends, identify key challenges, and highlight opportunities for improving public health.

Filter any year/country from here 👇

Select year: All

Select Country: All

What is the trend in yearly global death over the years 1990 to 2019 ??



Between 1990 and 2019, there is a notable ~**25%** **rise** in global annual mortality rates.
This increase suggests a concerning trend in global health, which may warrant further investigation and interventions to address the underlying causes.

Low Mortality rate — High Mortality rate

Note : *Hover over any country to see the **mortality % of that country***

How the mortality has evolved over time for specific disease ??

Select Disease & Show trend of: All

High to Low

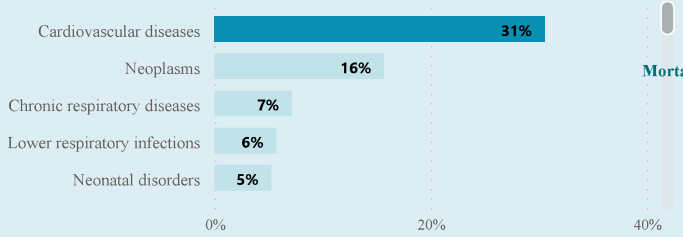
Disease	Mortality change rate
Alzheimer's disease and other dementias	189.4%
HIV/AIDS	156.7%
Parkinson's disease	146.5%
Chronic kidney disease	137.4%
Diabetes mellitus	134.4%
Drug use disorders	128.1%
Neoplasms	75.1%
Cardiovascular diseases	53.8%
Cirrhosis and other chronic liver diseases	45.3%
Alcohol use disorders	44.3%
Digestive diseases	37.8%
Chronic respiratory diseases	28.4%
Total	24.9%

Note : *Scroll down to the bottom of this table to see Significant Decrease in mortality*

- The mortality rates for **Alzheimer's, HIV, Parkinson's, Kidney disease, Drug-related issues, Diabetes** have increased significantly. This trend may be attributed to factors such as an aging population, lifestyle changes, and improved disease diagnosis, prompting the need for targeted public health strategies and research.
- Mortality rates for **drowning, malaria, tuberculosis, exposure to forces of nature, protein malfunction, and terrorism have notably decreased** from 1990 to 2019. This decline may be attributed to improved public health initiatives, advancements in medical treatments, and enhanced safety measures.

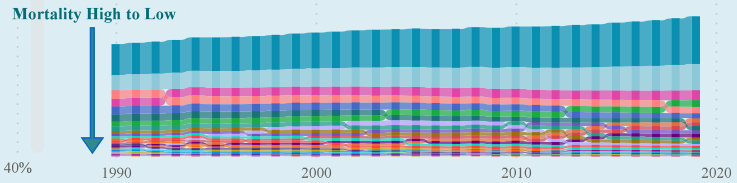
What is the leading cause of death ??

Cardiovascular disease has the most significant impact over years .



Over the years **Cardiovascular disease, Neoplasms, Chronic respiratory disease, Lower respiratory infections, Neonatal** disorders have consistently held the top positions in the annual mortality statistics. Only these 4 diseases cause **60%** of total death during 1990-2019.

Rank of diseases yearly



***Note** : Hover over ribbon(disease) to see mortality count and rank . Also notice how the ribbon position(disease rank) changes with time.*

Disease Analysis | Country level Analysis

FP20 Analytics Challenge

- presented by Madhupa Samanta, Data Analyst

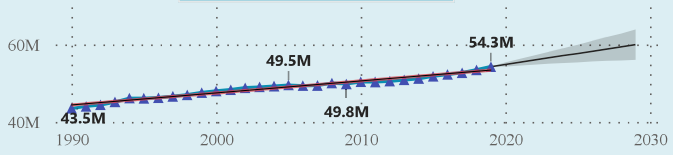
Countries In Spotlight

Are there any significant variations in mortality rate among countries ??

From high-income countries with robust healthcare systems to low-income nations grappling with resource limitations, each had a unique story to tell.

Select Country & Show the trend of: All

& Average death of: **7.81K**



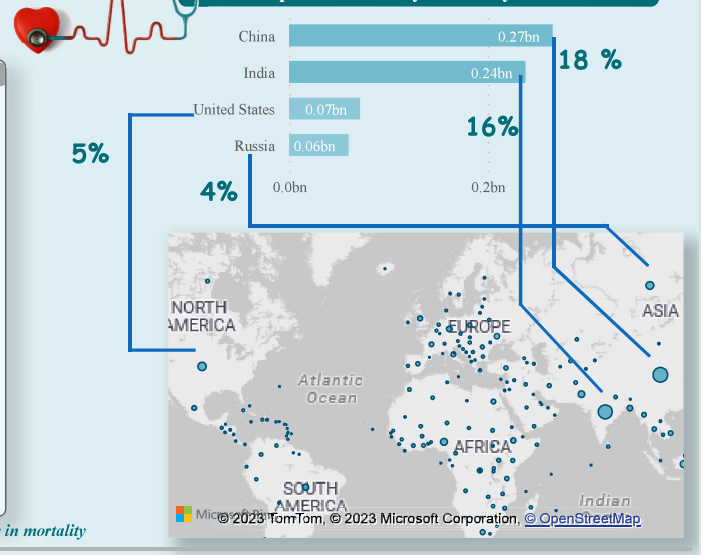
*Note : Hover over any data point to see the **top 5 reasons** to death*

High to Low

Country	Mortality change rate
United Arab Emirates	458.6%
Qatar	260.8%
Andorra	145.6%
Jordan	135.4%
Bahrain	129.5%
Papua New Guinea	124.3%
Belize	122.3%
Costa Rica	121.6%
Malaysia	120.4%
Venezuela	117.9%
Paraguay	111.6%
Botswana	110.6%
Total	**24.9%**

Note : *Scroll down to the bottom of this table to see Significant Decrease in mortality*

Top 4 countries by mortality ??



Which countries experienced the most increase in mortality rate ??

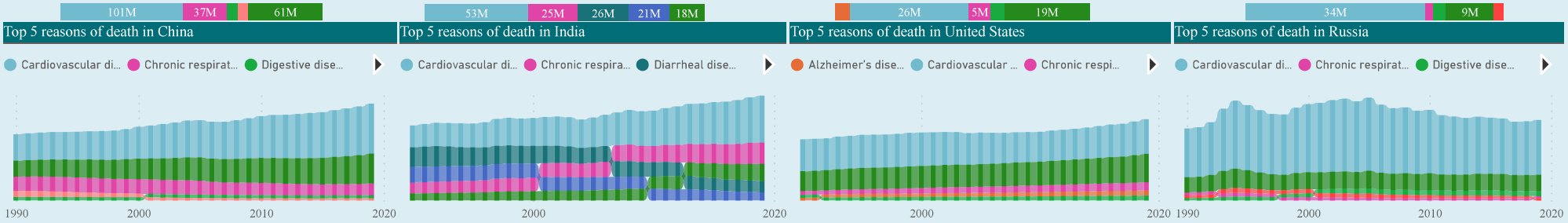
- Countries(**United Arab Emirates, India, United States,**..) facing political instability or economic crises showed concerning trends, highlighting the fragility of healthcare systems in turbulent times.
- Despite of having longest-lived population, mortality rate increased significantly(~**69%**) in **Japan**.

Which countries experienced the most substantial improvements in mortality rates ??

- **Rwanda, Ethiopia, Malawi, Bangladesh, Bhutan, Sweden, Austria,..** exhibited remarkable improvements in life expectancy, thanks to a combination of healthcare access and lifestyle choices

What are the top reasons of death in top 4 countries by mortality ??

- **Cardiovascular diseases, chronic respiratory, digestive disorders, and neoplasms (cancer)** are leading causes of death in India, China, the United States, and Russia due to a combination of lifestyle factors, aging populations, and varying levels of healthcare access and infrastructure.
- **Self harm has become one top reasons of death in Russia**. Russia has experienced significant social and economic upheaval in recent decades, including the dissolution of the Soviet Union, economic hardships, and political changes. These factors can contribute to increased stress and mental health challenges, which may lead to self-harm and suicide. Also **Alcohol consumption** has historically been high in Russia, this can also be the reason of self harm, suicide.



We have uncovered tales of progress, challenges, and resilience. Our journey through 30 years of mortality data has taught us that data is not just numbers; it is the collective story of humanity's struggle for better health.
As we move forward, let these narratives guide our efforts to ensure that every life is a story worth telling.
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