



REDUCING CHILD AND INFANT MORTALITY IN AFRICA

A Data-Driven Approach to Address Critical Health Challenges



IMAGINE THIS.....

PICTURE A WORLD WHERE EVERY CHILD, REGARDLESS OF WHERE THEY ARE BORN, HAS A CHANCE TO THRIVE BEYOND THEIR FIFTH BIRTHDAY. THIS VISION FEELS CLOSER THAN EVER AS DATA SHOWS REMARKABLE PROGRESS IN REDUCING CHILD AND INFANT MORTALITY GLOBALLY.

IMAGINE THIS.....



TODAY, WE EXPLORE A NARRATIVE SHAPED BY HOPE AND TRANSFORMATION. USING DATA-DRIVEN INSIGHTS, WE UNCOVER PATTERNS AND POSSIBILITIES – STORIES OF COUNTRIES THAT HAVE EXCELLED AND LESSONS FROM THOSE STILL ON THE JOURNEY. THESE INSIGHTS WILL GUIDE US IN UNDERSTANDING HOW POLICIES, HEALTHCARE ACCESS, AND INNOVATION CAN CREATE LASTING CHANGE.

THE PROBLEM



Child and infant mortality remains a pressing issue in African countries, where preventable deaths are driven by factors such as prematurity, birth defects, and infectious diseases. Despite advancements in healthcare, disparities in access, vaccination coverage, and socioeconomic conditions continue to hinder progress. This analysis aims to uncover actionable insights, identify high-risk regions, and propose data-driven strategies to reduce mortality rates and support the achievement of Sustainable Development Goal 3: Good Health and Well-being.

DATASET OVERVIEW



Health and demographic data across countries, with emphasis on African

KEY COLUMNS :

- Year: Data collection year.
- Entity: Country or region.
- Youth Mortality: Mortality rate for ages 15-24.
- Under-five Mortality: Mortality rate for children under 5.
- Vaccination Coverage: Population percentage vaccinated (e.g., BCG, HepB3).

- Health Insurance: Percentage covered by health insurance.
 - Causes of Death: Leading causes (e.g., prematurity, birth defects).
 - Maternal & Infant Mortality: Mortality rates for mothers and infants.
- Summary:

This dataset provides critical insights into health trends, vaccination disparities, and mortality drivers. It is a foundation for identifying actionable strategies to reduce preventable child and infant deaths

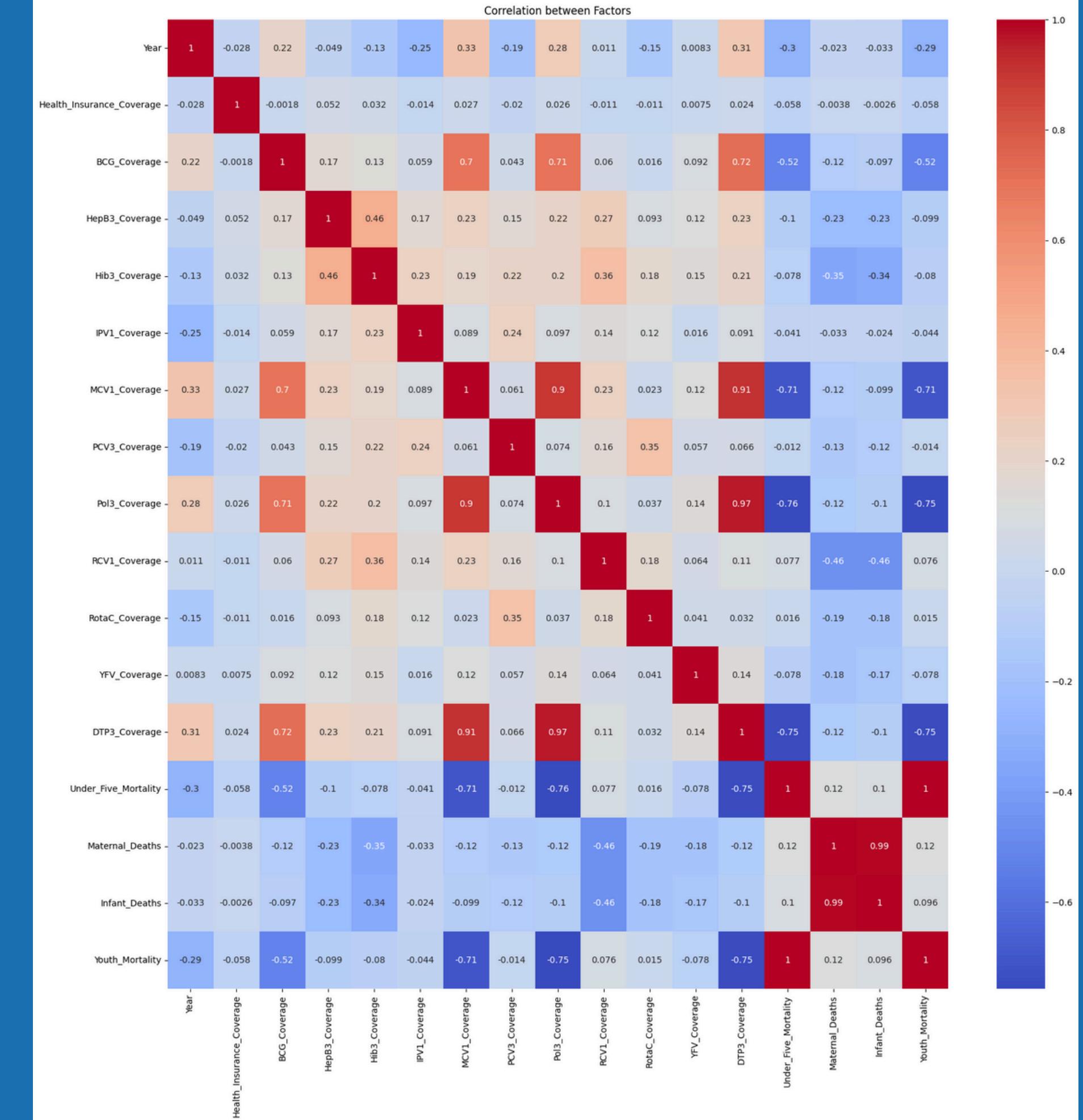
HEATMAP: TRENDS IN MORTALITY AND VACCINATION COVERAGE

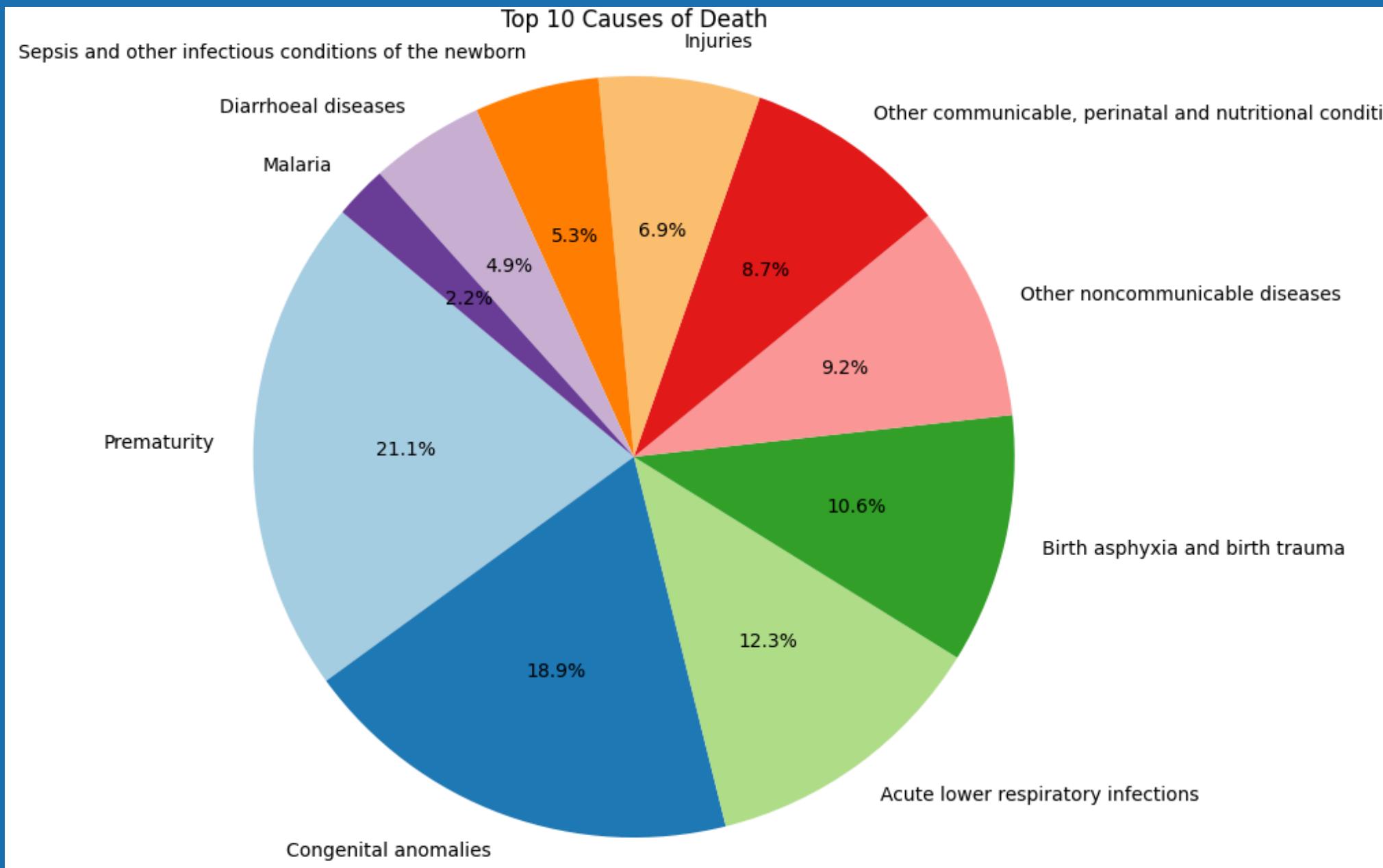
DESCRIPTION

This heatmap visualizes the relationship between vaccination rates, health insurance coverage, and youth mortality across African countries over time. Darker shades indicate higher values, helping identify patterns and regional disparities.

KEY TAKEAWAY

Countries with higher vaccination and insurance coverage often demonstrate significantly reduced mortality rates.





TOP 10 CAUSES OF DEATH

1.

Prematurity and congenital anomalies (birth defects) account for nearly 30% of child deaths, highlighting the need for improved maternal healthcare and early interventions."

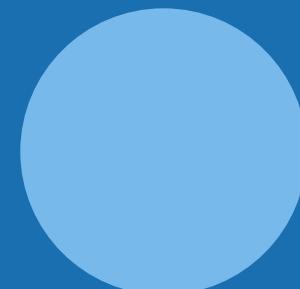
2.

Focusing on these top causes can guide healthcare initiatives and policy changes to effectively reduce mortality rates.

40%

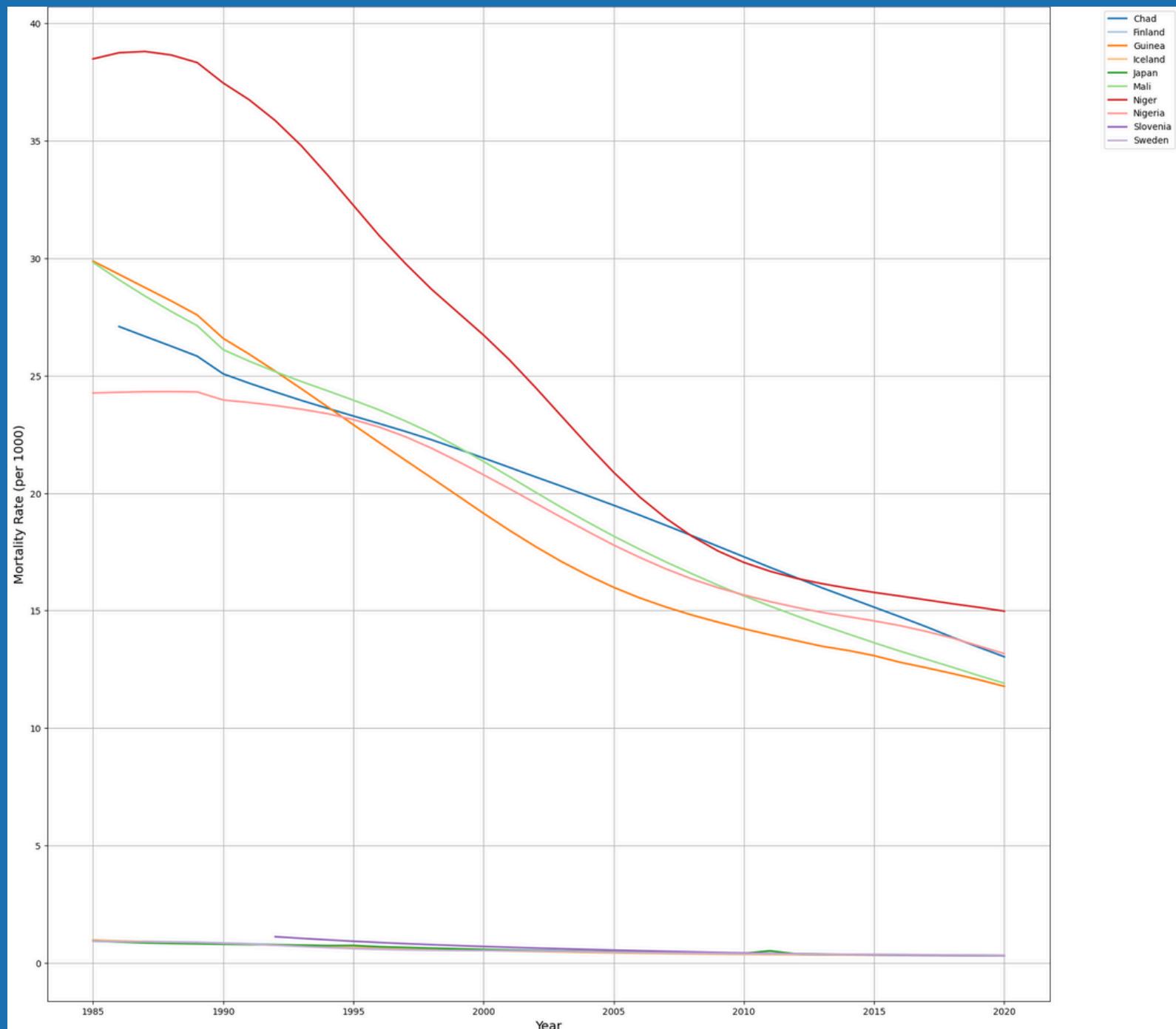


REPORT FROM 1985-2020



FUN FACT

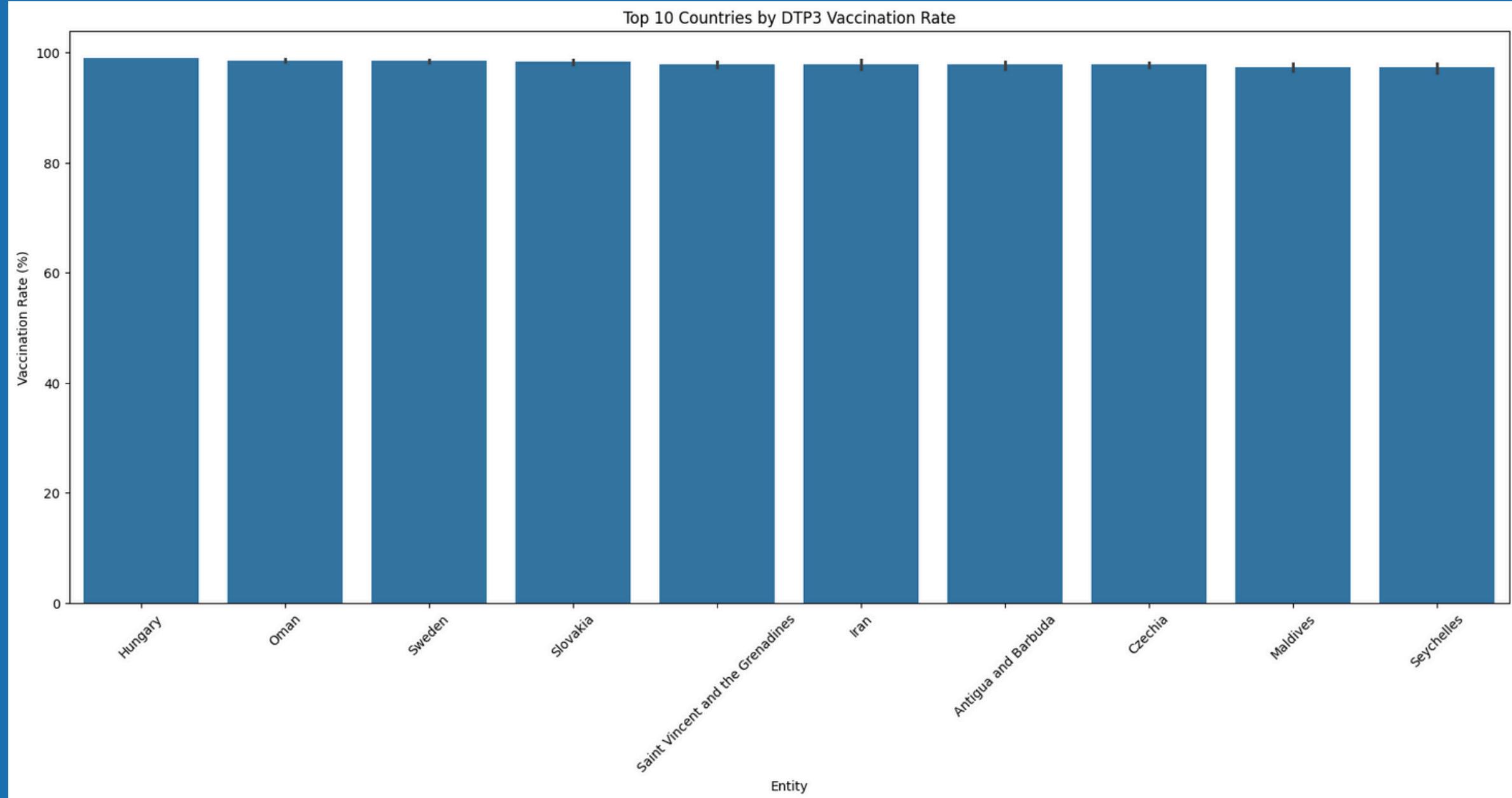
Majority of the leading countries in mortality rate have always been in Africa



DESCRIPTION

Over the years, there has been a significant decline in mortality rates globally, likely driven by advancements in healthcare technology, vaccines, and improved access to medical care, resulting in better child survival rates.

CHART SLIDE REPORT

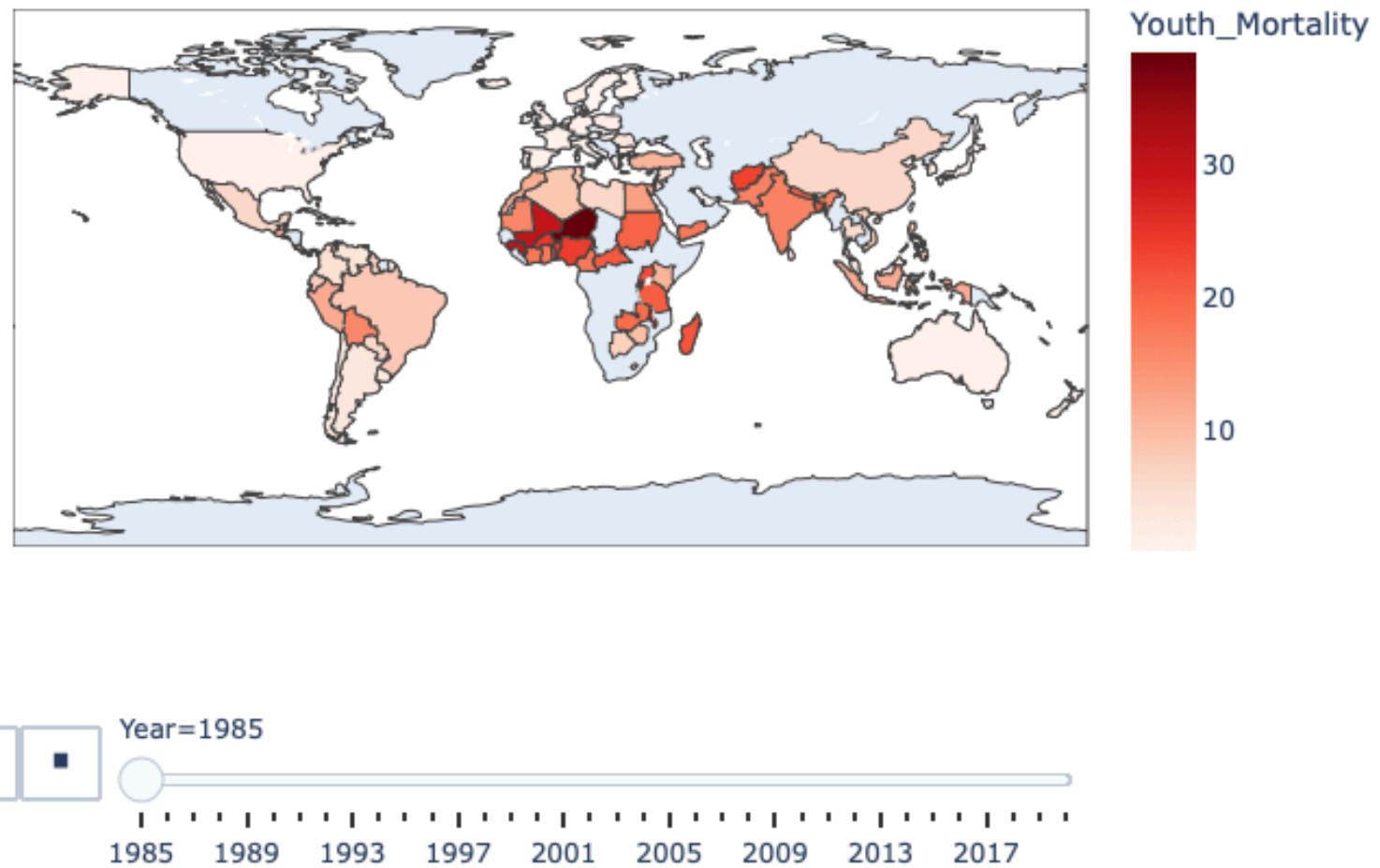


INSIGHT

Sweden, Hungary, and Oman are leading the world in vaccination coverage, with nearly 100% of their populations covered, contributing to significantly lower mortality rates in these countries

27%

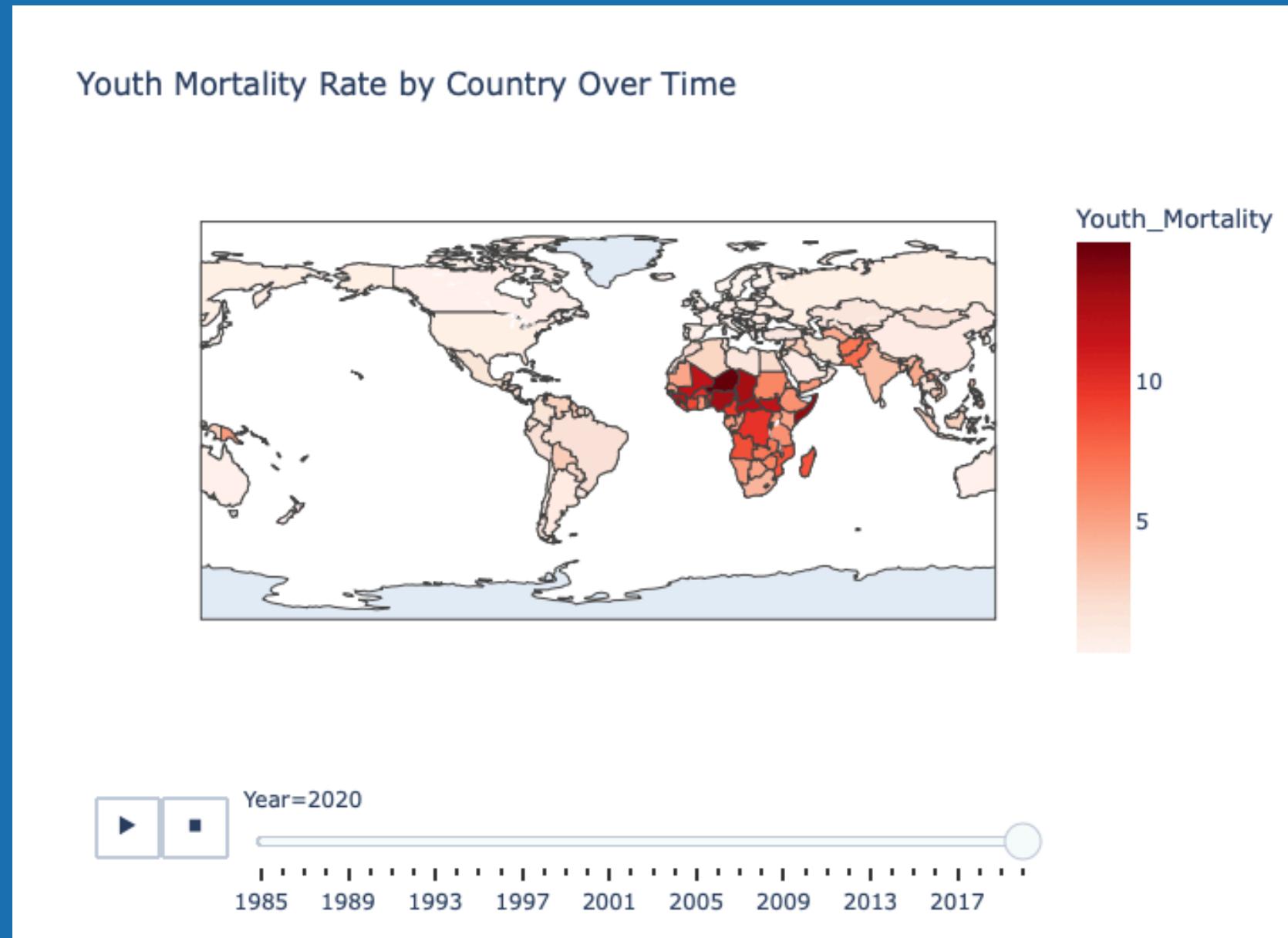
Youth Mortality Rate by Country Over Time



1995 GLOBAL MORTALITY RATE

2020 GLOBAL MORTALITY RATE

AFRICA'S MORTALITY RATE AS A
CONTINENT HAS WORSEON
OVER THE YEARS

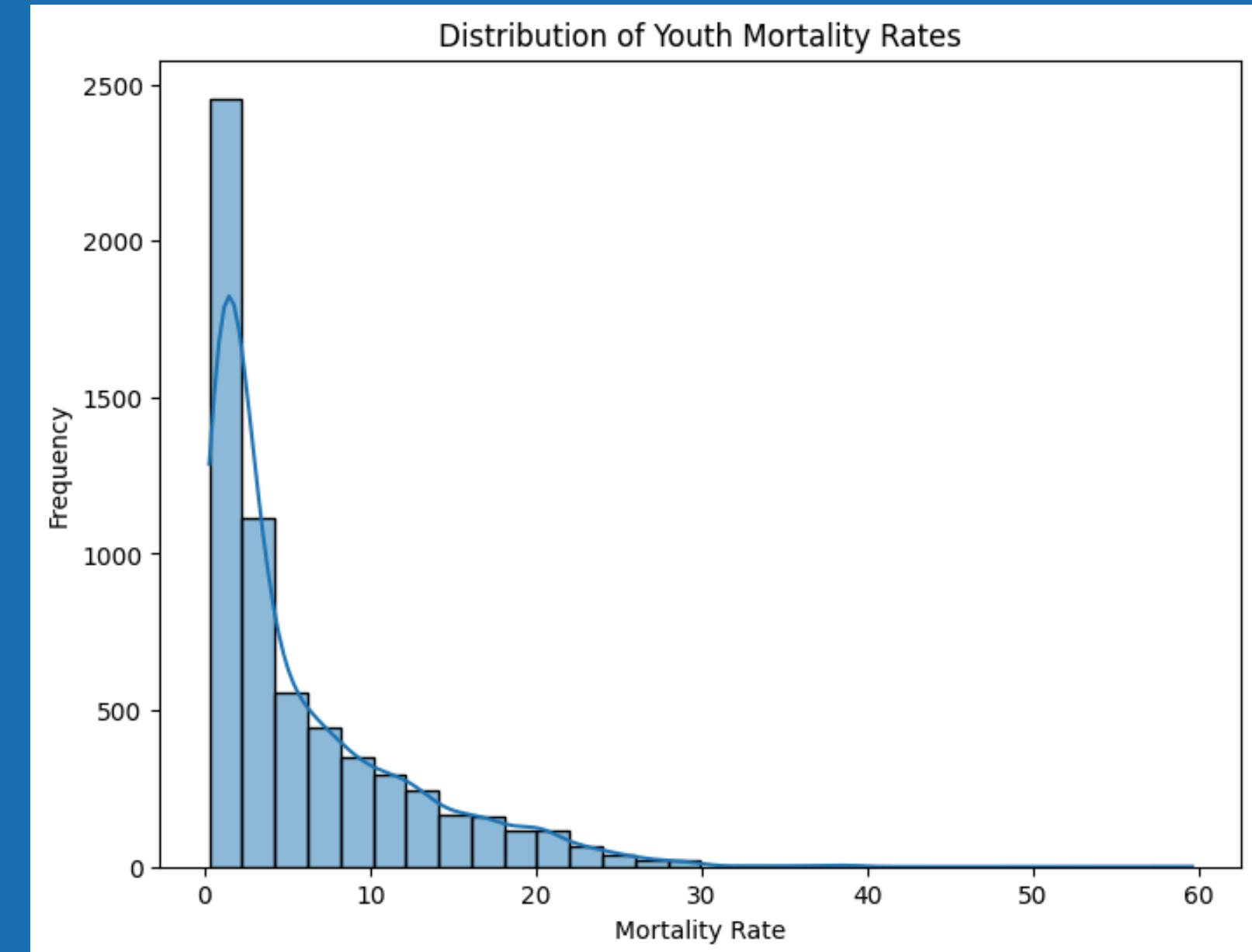


HISTOGRAM



INSIGHTS

The distribution of mortality rates is right-skewed, indicating that while most countries have relatively lower mortality rates, a few countries exhibit exceptionally high mortality rates.



KEY RECOMMENDATIONS TO REDUCE CHILD AND INFANT MORTALITY

- Enhance Vaccination Coverage
- Expand access in remote areas through mobile clinics and awareness campaigns.
- Improve Health Insurance & Access
- Increase universal health coverage.
- Subsidize plans for low-income families.
- Partner with the private sector for extended coverage.
- Focus on Maternal Health
- Enhance prenatal and postnatal care.
- Ensure availability of skilled birth attendants.
- Implement health programs for women of reproductive age.
- Address Socioeconomic Disparities
- Reduce poverty and improve nutrition.
- Provide education and employment opportunities for parents.
- Strengthen Data Collection & Monitoring
- Build robust health data systems for real-time monitoring and intervention.
- Leverage Technology in Healthcare
- Utilize telemedicine, mobile health apps, and AI for predictive healthcare.
- Target High-Risk Regions
- Direct resources to areas with high mortality rates.
- Focus on localized vaccination campaigns and infrastructure development.
- Foster Global Collaboration & Support
- Strengthen international partnerships and health initiatives.
- Advocate for foreign aid to improve healthcare infrastructure.

THANKS FOR WATCHING

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GOOGLE COLAB NOTEBOOK



A sample Curriculum Vitae (CV) for Samantha Black, Sales Director. The CV includes sections for EXPERIENCE, EDUCATION, HIGH SCHOOL UNIVERSITY, and SKILLS. It features multiple entries for Eliot Brown and includes placeholder text for professional statements and responsibilities.

EXPERIENCE

POSITION TITLE for company tld
Present Short description of the position and the responsibilities you had in this position.

POSITION TITLE for company tld
2013 - 2016 Short description of the position and the responsibilities you had in this position.
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POSITION TITLE for company tld
2003 - 2010 Short description of the position and the responsibilities you had in this position.
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POSITION TITLE for company tld
2008 - 2014 Short description of the school and the responsibilities you had in this position.
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EDUCATION

WEB ADVERTISING SEMINAR
2015 University of London, UK

GRAPHIC DESIGN CREW
2013 London Art College, UK
Leader of the group, lorem ipsum

HIGH SCHOOL UNIVERSITY
2008 - 2014 Short description of the school and the responsibilities you had in this position.
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SCHOOL TITLE LOREM
2004 - 2008 Short description of the position and the responsibilities you had in this position.

PROFESSIONAL STATEMENT
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REFERENCES

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SKILLS

PHOTOGRAPHY
PHOTOSHOP
INDESIGN
WORDPRESS
TIME KEEPING
ORGANISATION