



Tackling the Health Crises in Africa

People dying from lack of medical resources

10Alytics
Data Analytics Hackathon

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The lack of access to adequate medical resources and facilities have led to the significant number of deaths. Some of these deaths could have been avoided by timely access to a medical professional or close proximity of hospitals.

Health systems across Africa are underfunded and understaffed. Less than half of African citizens (52%) – about 615 million people – have access to the health care they need, the quality of health services across the continent is generally poor, and family planning needs of half the continent's women and girls are unmet.

Let's focus on Africa in this dataset

You are required to provide solutions to the health challenges, especially in Africa. Ensure that you allow all your creative self to shine through and remember, Africa looks up to you for a solution.



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There are six datasets for this project. The data dictionary containing the features of the data can be found in Slides 4, 5 and 6

1

Causes of Deaths

The number of deaths and the causes across different countries from 1990 to 2019

4

ISO 3166_country- and-continent- codes-list-csv

The list of sovereign states and dependent territories by continent describing the list of countries by continent

2

Number of Deaths by Age Group

The number of deaths by age groups across different countries from 1990 to 2019

5

World Population

Data from the UN Population Division provides consistent and comparable estimates (and projections) within and across countries over the last century

3

Medical Doctors Per 10,000 population

Number of medical doctors per 10,000 medical practitioners in Africa

6

Health Expenditure (% of GDP)

Countries expenditure on health as a percentage of GDP

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Causes of Deaths

Fields	Description
Entity	Countries
Code	ISO-3166 Codes
Year	Year
Number of executions (Amnesty International)	People that die due to executions
Meningitis	People that died due to Meningitis
Alzheimer's disease and other dementias	People that died due to Alzheimer's disease and other dementias
Parkinson's disease	People that died due to Parkinson's disease
Nutritional deficiencies	People that died due to Nutritional deficiencies
Malaria	People that died due to Malaria
Drowning	People that died due to Drowning
Interpersonal violence	People that died due to Interpersonal violence
Maternal disorders	People that died due to Maternal disorders
HIV/AIDS	People that died due to HIV/AIDS
Drug use disorders	People that died due to Drug use disorders
Tuberculosis	People that died due to Tuberculosis
Cardiovascular diseases	People that died due to Cardiovascular diseases

Fields	Description
Lower respiratory infections	People that died due to Lower respiratory infections
Neonatal disorders	People that died due to Neonatal disorders
Alcohol use disorders	People that died due to Alcohol use disorders
Self	People that died due to Self
Exposure to forces of nature	People that died due to Exposure to forces of nature
Diarrheal diseases	People that died due to Diarrheal diseases
Environmental heat and cold exposure	People that died due to Environmental heat and cold exposure
Neoplasms	People that died due to Neoplasms
Conflict and terrorism	People that died due to Conflict and terrorism
Diabetes mellitus	People that died due to Diabetes mellitus
Chronic kidney disease	People that died due to Chronic kidney disease
Poisonings	People that died due to Poisonings
Protein	People that died due to Protein
Terrorism (deaths)	People that died due to Terrorism (deaths)
Road injuries	People that died due to Road injuries
Chronic respiratory diseases	People that died due to Chronic respiratory diseases
Cirrhosis and other chronic liver diseases	People that died due to Cirrhosis and other chronic liver diseases
Digestive diseases	People that died due to Digestive diseases
Fire, heat, and hot substances	People that died due to Fire, heat, and hot substances
Acute hepatitis	People that died due to Acute hepatitis

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2 *Number of Deaths by Age Group*

Fields	Description
Entity	Countries
Code	ISO-3166 Codes
Year	Year
Deaths 70+ years	Population above 70 years old
Deaths 50 - 69 years	Population between 50 - 69 years old
Deaths 15 - 49	Population between 15 - 49 years old
Deaths 5 - 14 years	Population between 5 - 14 years old
Deaths Under 5	Population under 5 years old

3 *Medical Doctors Per 10,000 population*

Fields	Description
IndicatorCode	Unique Codes for Indicators
Indicator	Medical Practitioners Indicators
ParentLocationCode	Codes for the Regions
ParentLocation	Regions
ThreeLocCode	ISO-3166 Codes
Location	Countries
Period	Year
FactValueNumeric	Number of Doctors
Value	Number of Doctors

4 *ISO 3166_country-and-continent-codes-list-csv*

Fields	Description
Continent_Name	Name of Countries
Continent_Code	ISO-3166 Continent Code
Country_Name	ISO-3166 Country Code
Two_Letter_Country_Code	ISO-3166 2-letter Country Code
Three_Letter_Country_Code	ISO-3166 3-letter Country Code
Country_Number	ISO-3166 number Country Code

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5

World Population

Fields	Description
Entity	Countries
Code	ISO-3166 Codes
Year	Year
Population (historical estimates)	Population Estimates

6

Health Expenditure (% of GDP)

Fields	Description
Country Name	Name of the country
Country Code	ISO-3166 Country Codes
Indicator Name	Name of the Indicator
2000	% of GDP in 2000
2001	% of GDP in 2001
2002	% of GDP in 2002
2003	% of GDP in 2003
2004	% of GDP in 2004
2005	% of GDP in 2005
2006	% of GDP in 2006
2007	% of GDP in 2007
2008	% of GDP in 2008
2009	% of GDP in 2009
2010	% of GDP in 2010
2011	% of GDP in 2011
2012	% of GDP in 2012
2013	% of GDP in 2013
2014	% of GDP in 2014
2015	% of GDP in 2015
2016	% of GDP in 2016
2017	% of GDP in 2017
2018	% of GDP in 2018
2019	% of GDP in 2019

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- Include the limitations with the dataset and how you think your analysis can be further enriched
- Be ready to discuss your insights and share what you learned working on the datasets

All the best!!