

MOTIVATION

Approximately 830 women die from preventable causes related to pregnancy and childbirth.

The Sustainable Development Goals number 3 is to reduce the number to < 70 per 100,000 births.

HYPOTHESIS

- Maternal mortality mostly occurs in the <u>developing</u> countries.
- Maternal mortality is higher in women living in rural areas and lower communities.
- Most cases are due to lack of sophisticated <u>hospitals</u> <u>and facilities.</u>
- Risk of maternal mortality is highest for adolescent girls under 15 years old due to <u>lack of awareness</u>.

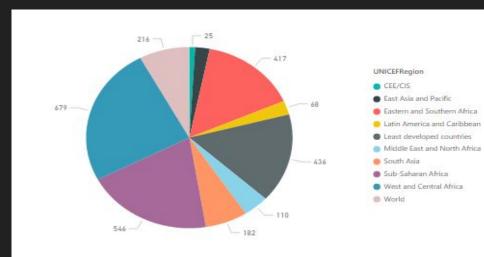
Data Analysis process of MMR (Maternal Mortality Ratio)

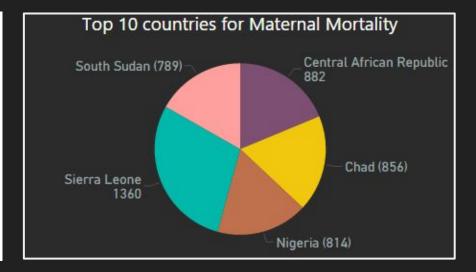
Problem statement Exploratory Data Data Analysis Conclusions and hypothesis Analysis and using Python and Reference formation inferences Country with Used Python Tableau Improvising education highest MMR. pandas to system leads to Matplotlib MMR progress in understand the decrease in Maternal PowerBl these countries. distribution and mortality rate. Excel Reason for for plotting increased rate of MMR.

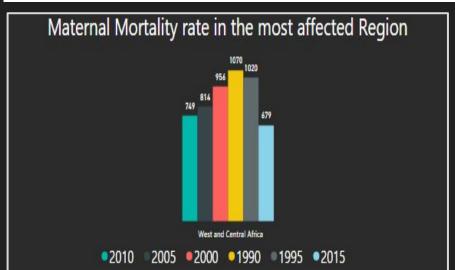
Geographic distribution of Maternal Mortality

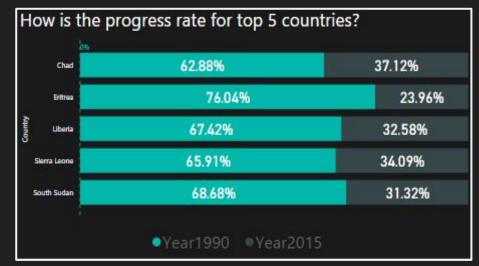


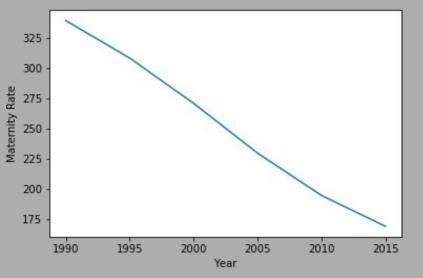
Map based on Longitude (generated) and Latitude (generated). Size shows 2015. Details are shown for Countries/Regions.





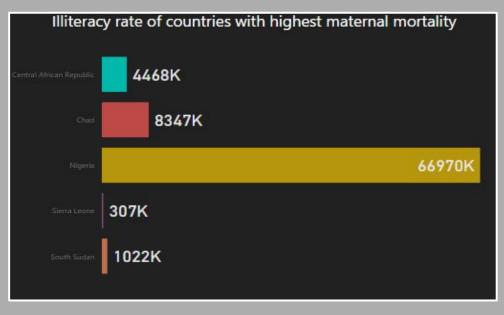






- With increasing levels of poverty and illiteracy, MMR in Nigeria has increased from 57000 to 58000 deaths per 100,000 live births from 1990 to 2015.
- Due to the skilled care in hospitals, and poor education system, Nigeria has increased Maternal mortality rates.

- According to the graph of global MMR average across the world we see a huge decrease from 339 to 168 deaths per 100,000 live birth which is a drastic decreased by 50.3%.
- The main goal is to decrease to less than 70 deaths by 2030.



Conclusion

- Africa has the highest Maternal Mortality rate with Sierra Leone contributing to 44% of the world.
- Sierra Leone is the poorest country ranking 180 out of 187 countries in the world.
- Eritrea has the best progress rate in decrease of MMR from 1990 to 2015 due to the literacy rate being 74%.
- Nigeria has increased MMR rates of 1.75% from 1990 to 2015 due to setback in education.
- The global percentage decrease of MMR from 1990 to 2015 is 50.33 and the goal set by Sustainable Development is 70%.
- It can be observed that literacy rate and poverty plays an important role in eradication of MMR.

References

- http://www.who.int/news-room/fact-sheets/detail /maternal-mortality
- https://ourworldindata.org/primary-and-seconda ry-education
- https://matplotlib.org/users/pyplot_tutorial.html
- https://github.com/anusky95/MaternalMortality
- https://data.worldbank.org/indicator/SH.MMR.D THS?year_low_desc=false

Udacity

- Python
- Descriptive Statistics