

HIV/AIDS

Data Visualization using Seaborn

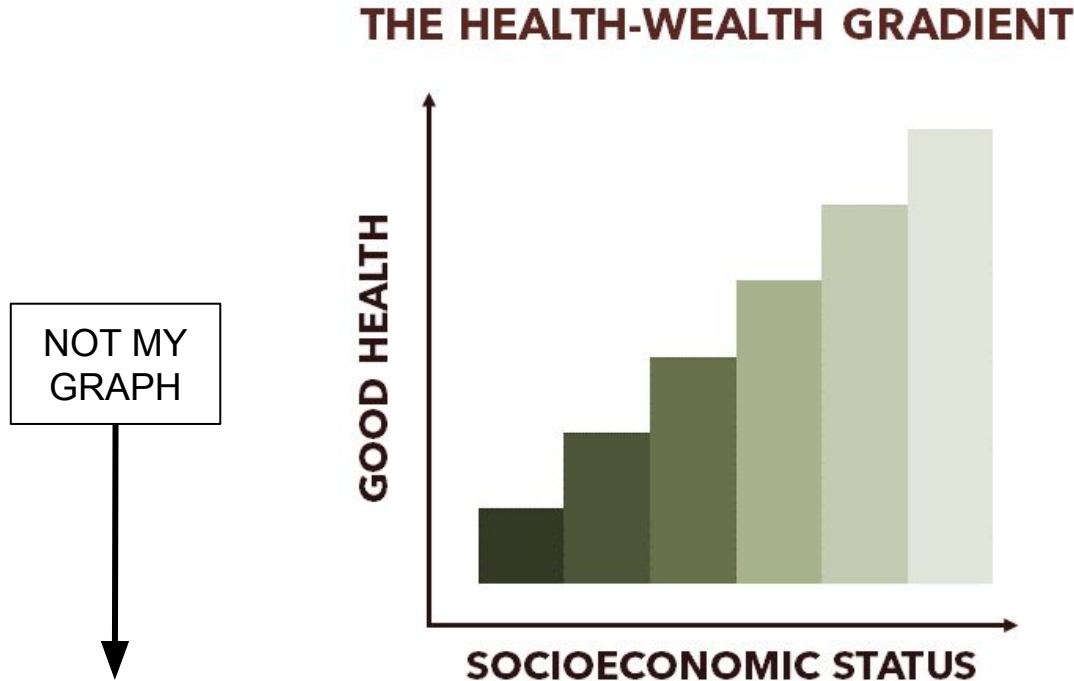
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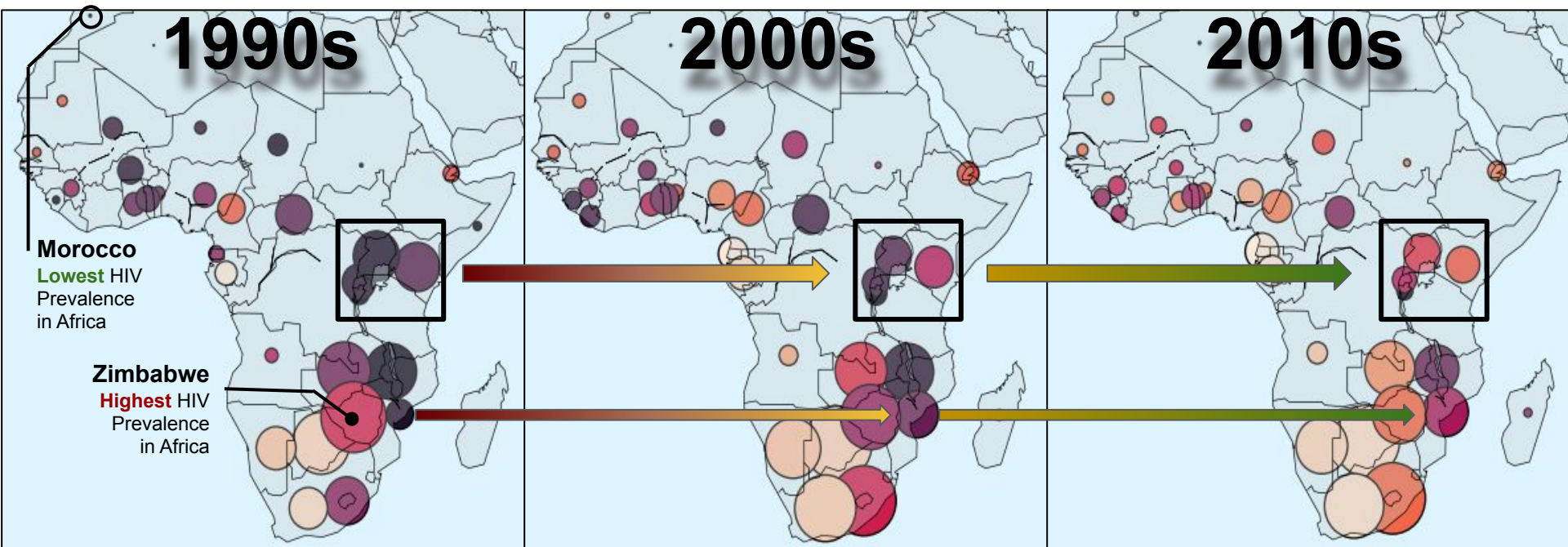
The purpose of this analysis is to understand the impacts and trends of the HIV/AIDS epidemic in the context of certain global measures aimed at ameliorating this epidemic.

Original dataset downloaded from: <https://corgis-edu.github.io/corgis/csv/aids/>

The Socioeconomics issue



HIV Prevalence by GDP_(per capita)



Low GDP High GDP

LOW HIV
Prevalence
Rate

HIGH HIV
Prevalence
Rate

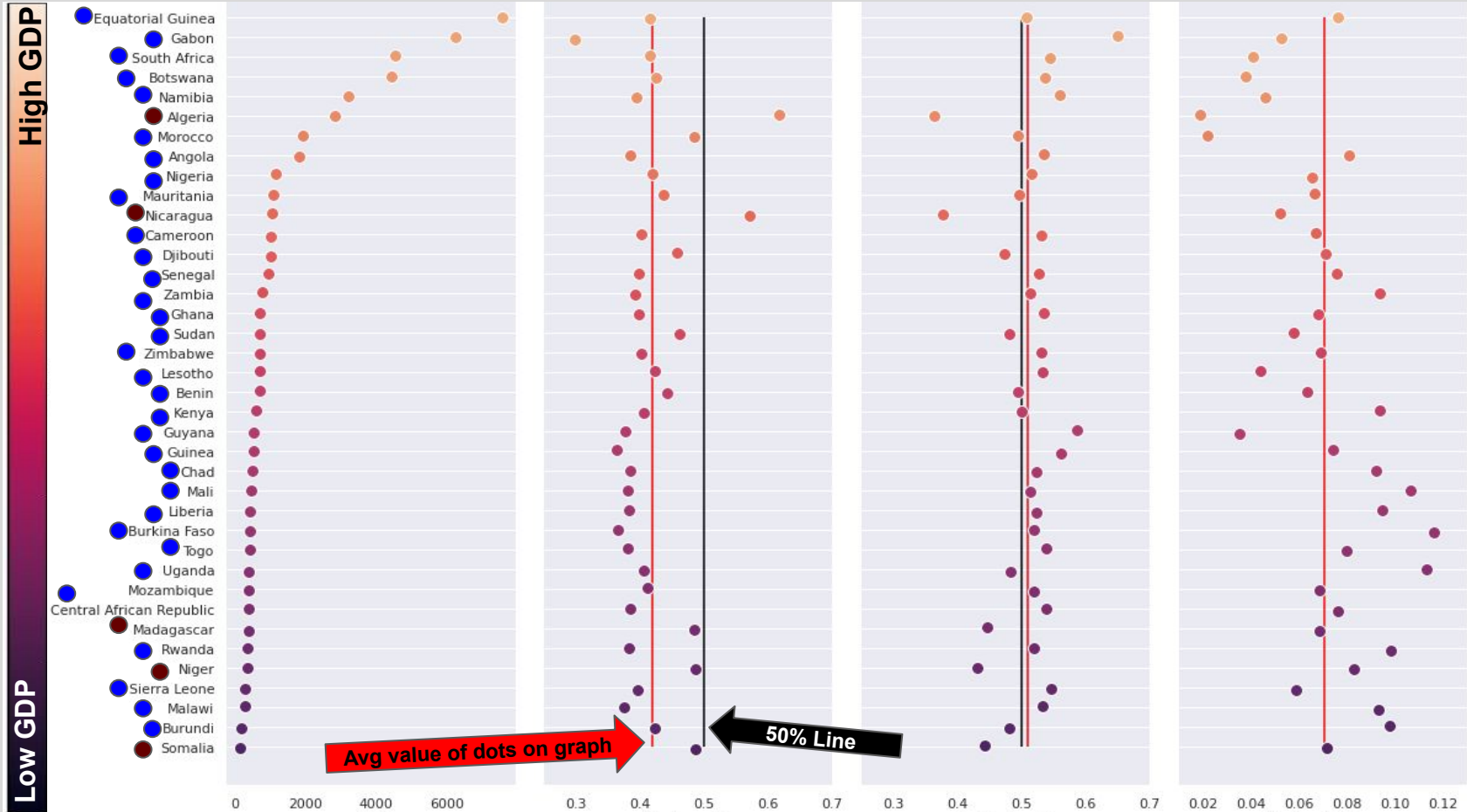
Population Living with HIV (avg. from 1990 - 2013)

Country ordered by GDP

41.9% Male

51% Female

7% Children



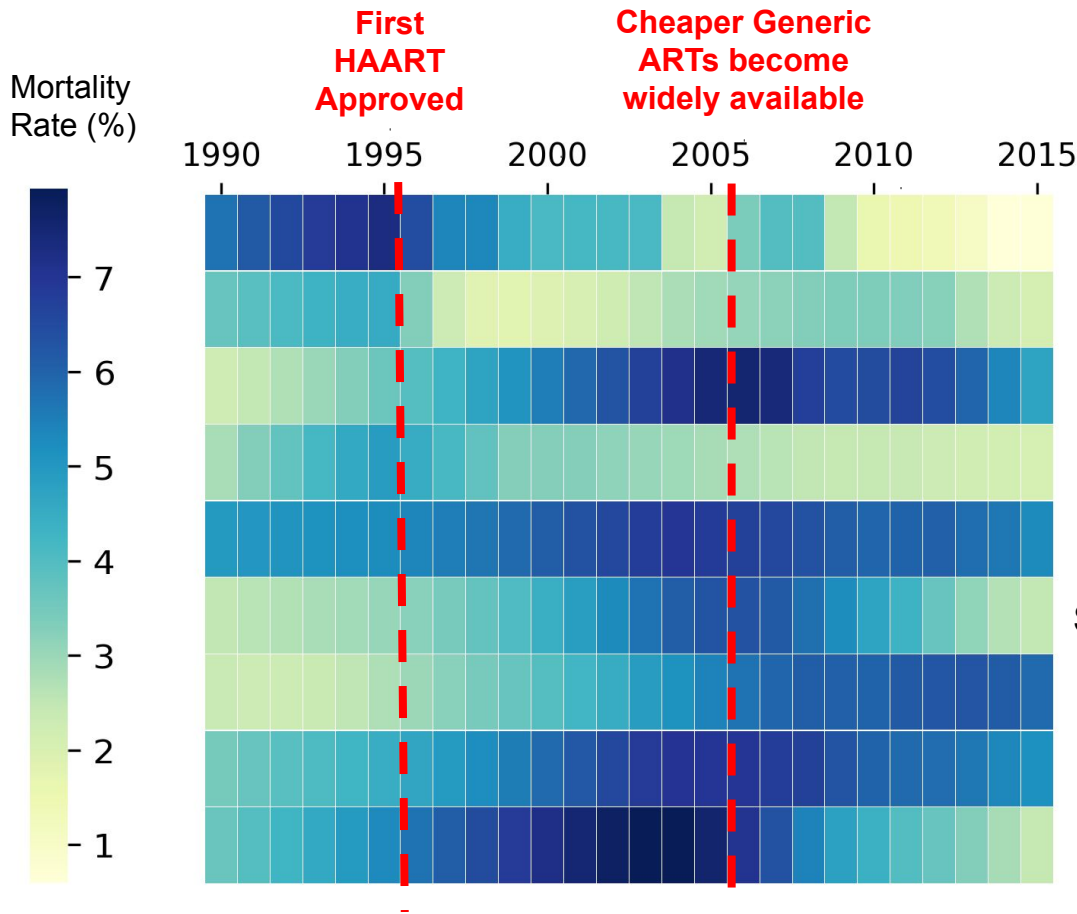
of
Countries
with highest
group of
people with
HIV

Male
5/38

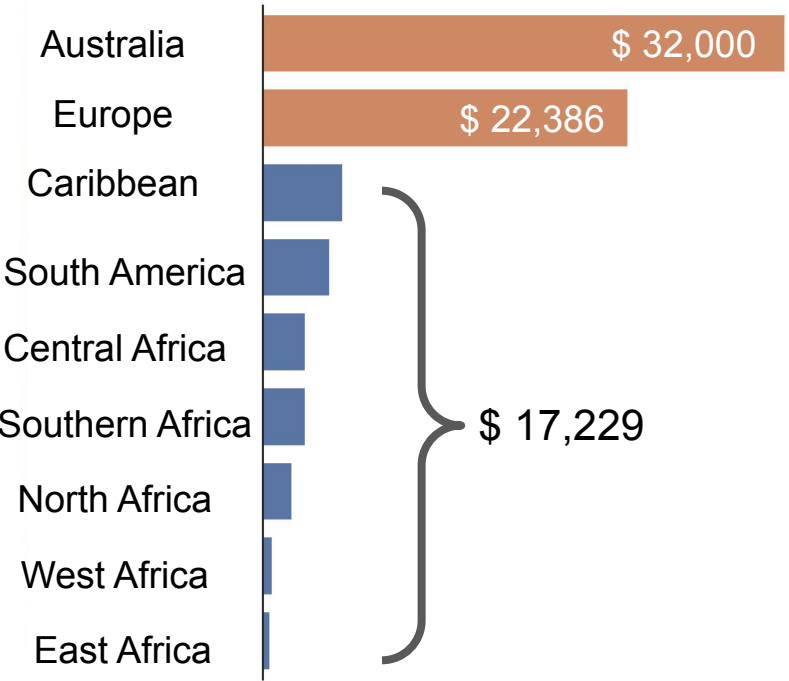
Female
33/38

Children
0/38

HIV/AIDs Disproportionately Affects Developing Countries due to Prohibitively High Drug Costs

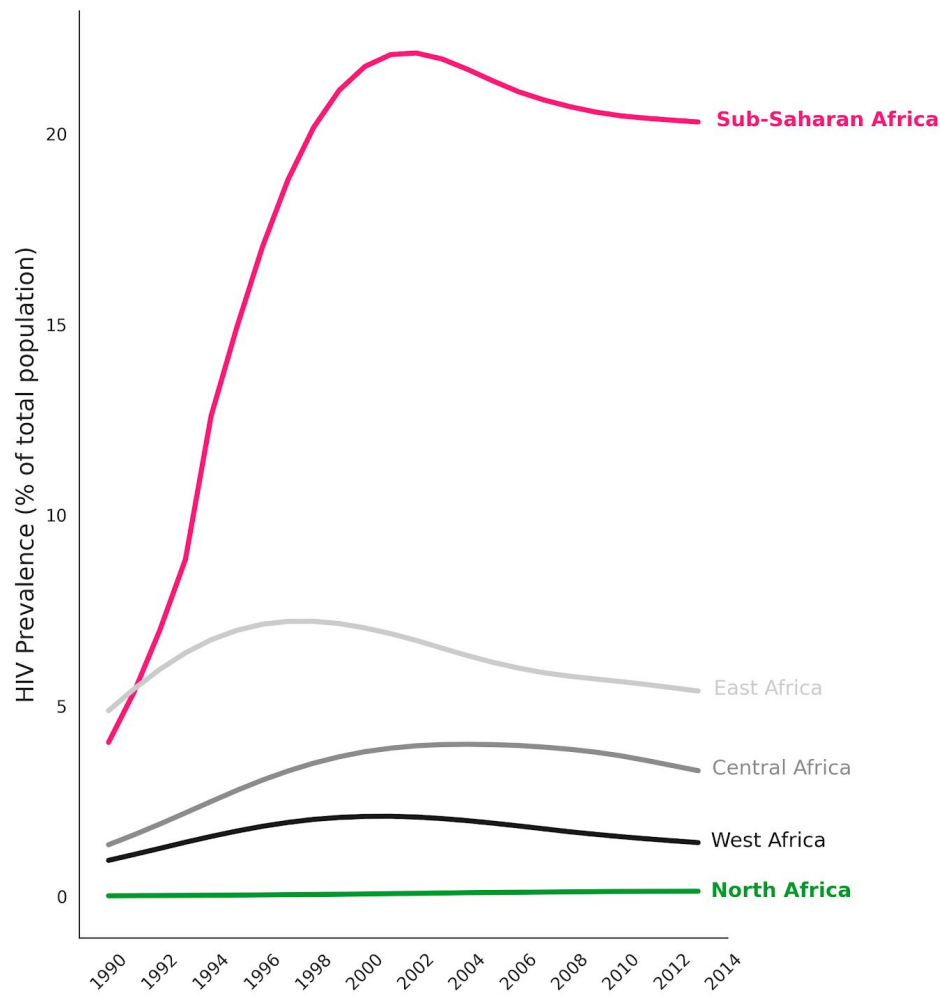
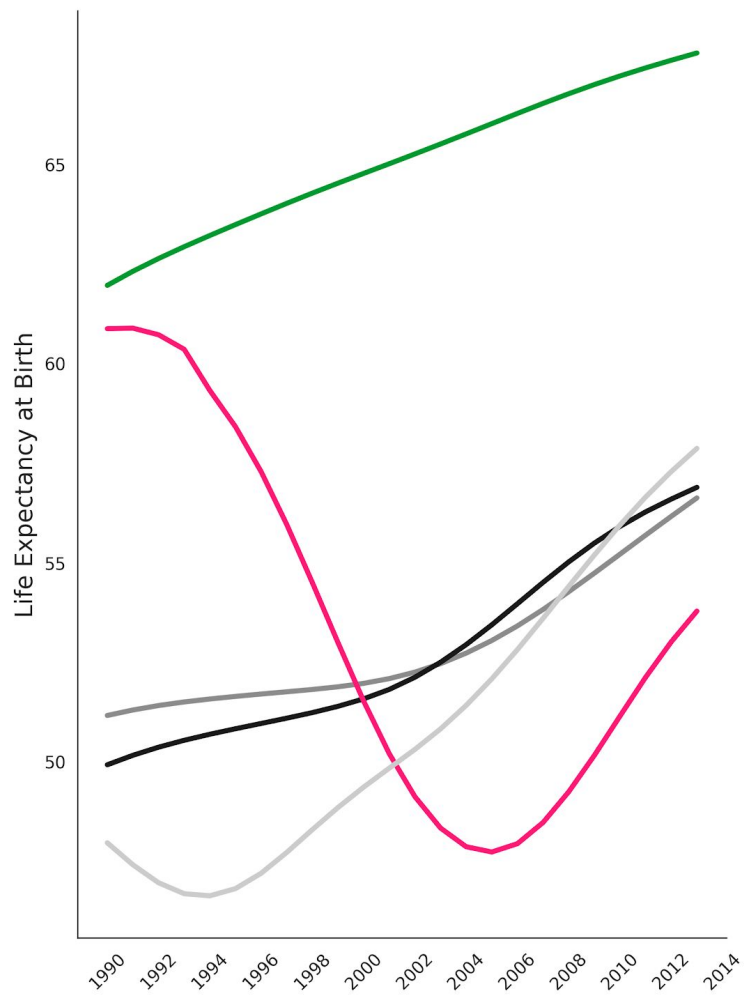


Heatmap of Mortality Rate for HIV Infected Individuals By Region Over Time

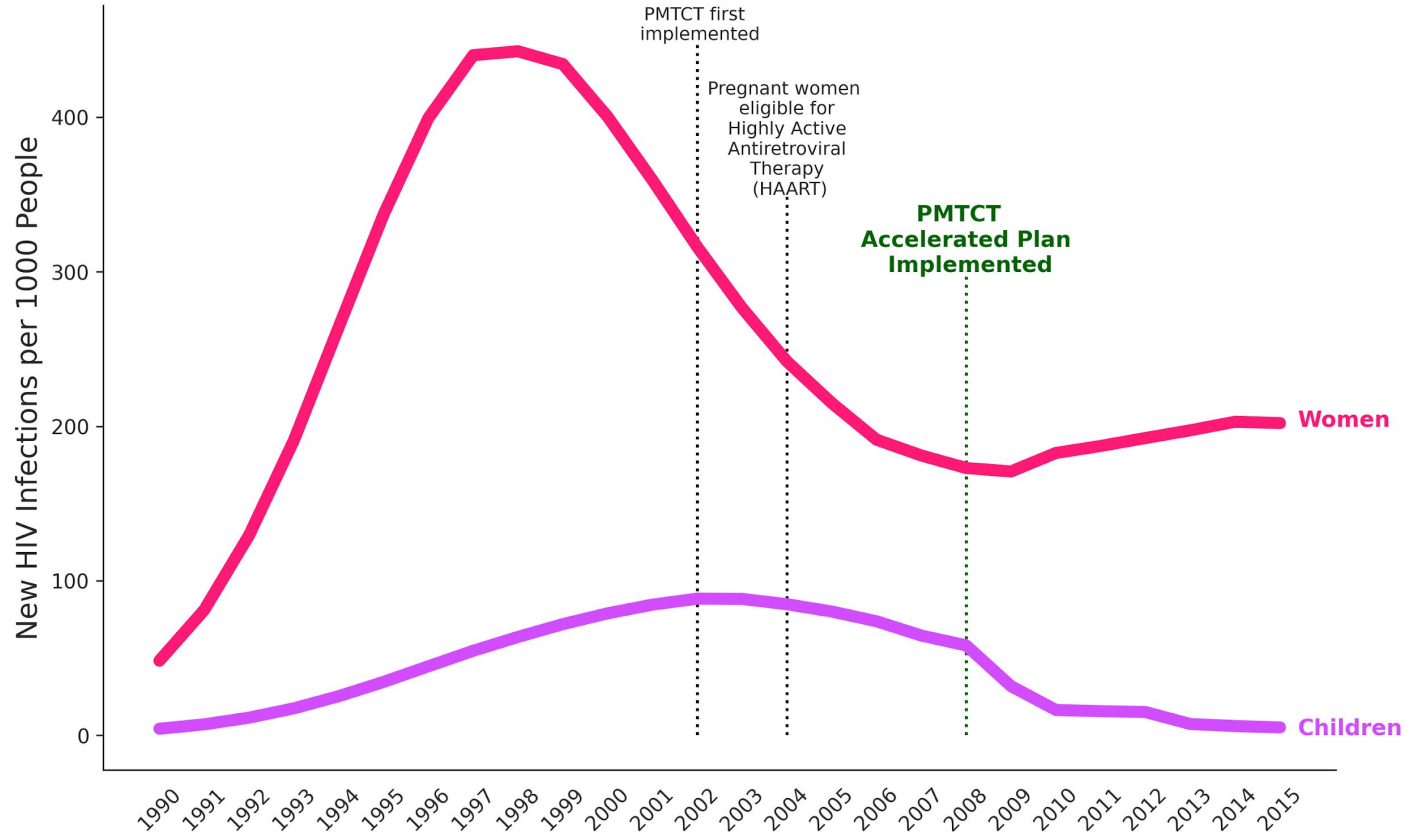


Average GDP of Countries in Region

Life Expectancy in Sub-Saharan Africa Decreases Significantly in Response to Rising HIV Prevalence

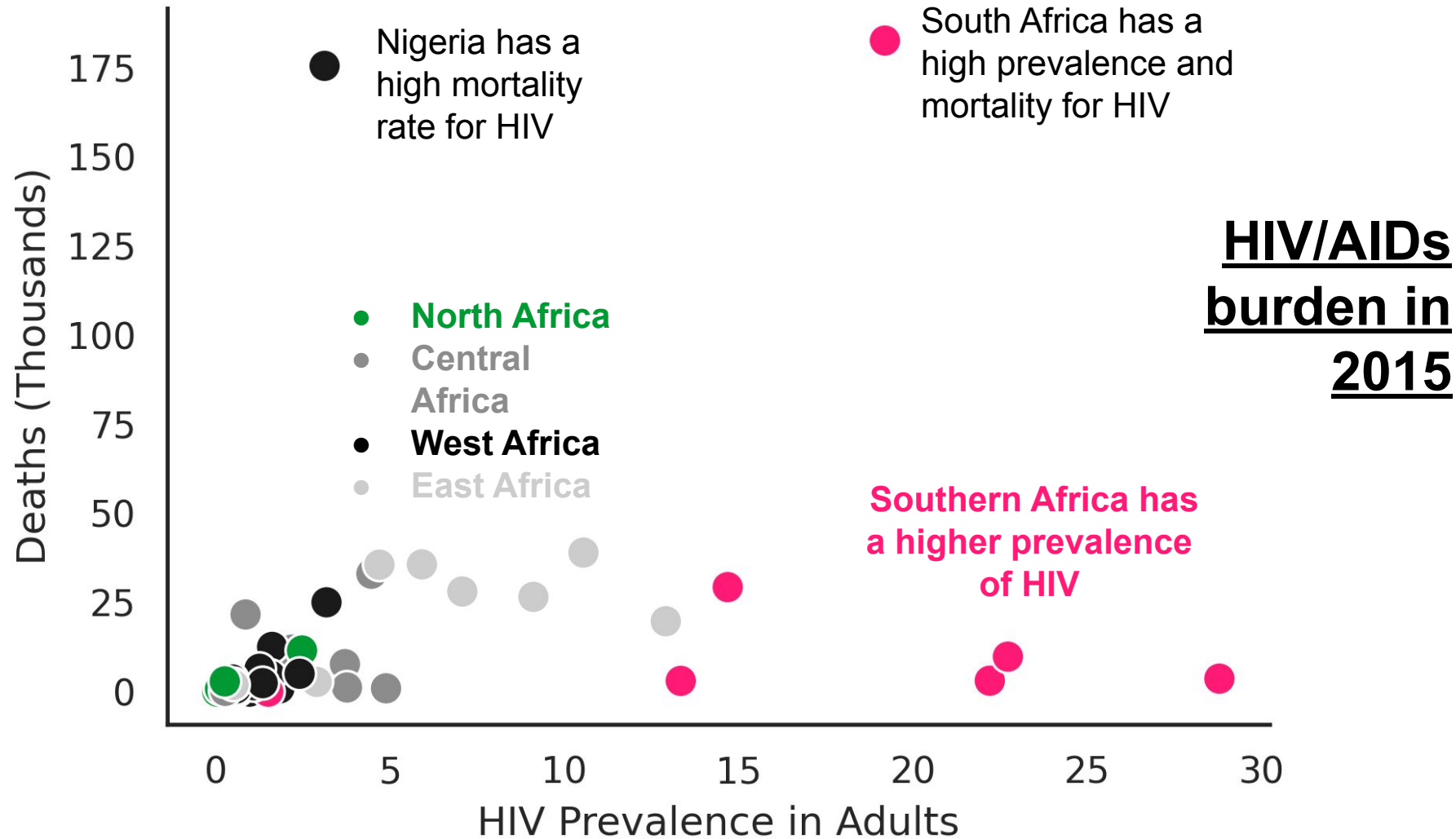


New HIV Infections in Children Fall After Prevention of Mother to Child Transmission (PMTCT) Accelerated Plan is Implemented in South Africa



Number of Children Living with HIV Decreases in South Africa After Providing Precautionary Prevention of Mother to Child Transmission Measures





Conclusions

- Accessibility to care for AIDS is heavily impacted by the country's wealth
- Rising HIV prevalence correlates with decreasing life expectancy
 - Sub-Saharan Africa is hit hardest by this trend
- Interventions in South Africa have decreased HIV transmission from mother to child
 - Prevention of Mother to Child Transmission (PMTCT) Programme
 - Decrease antiretroviral drug prices in developing countries
- Latest Status in dataset (2015)
 - Southern African countries have a high prevalence of HIV
 - South Africa and Nigeria have high mortalities

Bibliography

<https://corgis-edu.github.io/corgis/csv/aids/>

https://corgis-edu.github.io/corgis/csv/global_development/

<https://www.hiv.gov/sites/default/files/aidsgov-timeline.pdf>

<https://www.avert.org/professionals/history-hiv-aids/overview>

<https://www.cdc.gov/mmwr/preview/mmwrhtml/su6004a11.htm>

<https://www.who.int/bulletin/volumes/91/1/12-106807/en/>