

Determinants of HIV

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Outline

- Motivation
- Research Question
- Methodology
- Literature Review
- Descriptive Statistics
- Findings
- Conclusion and Limitations

Motivation and Research Question

- 1 Understand why some countries failed to achieve MDG 6A
 - *MDG 6: Combat HIV/AIDS, malaria and other diseases*
 - *Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS*

Source: <http://www.mdgmonitor.org/goal6.cfm>

- 2 Explore disease-specific determinants of health

Research Question: Are community level factors significant determinants of HIV/AIDS incidence rates?

Methodology and Dataset

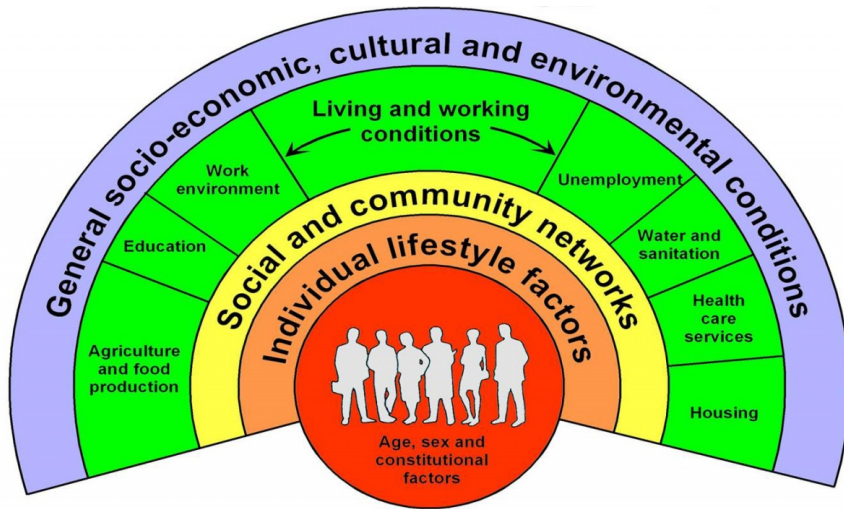
Methodology

- We will. . .

Datasets

- We will use the World Development Indicators (WDI) for the independent variables and a dataset from UNAIDS for the HIV/AIDS prevalence rate.

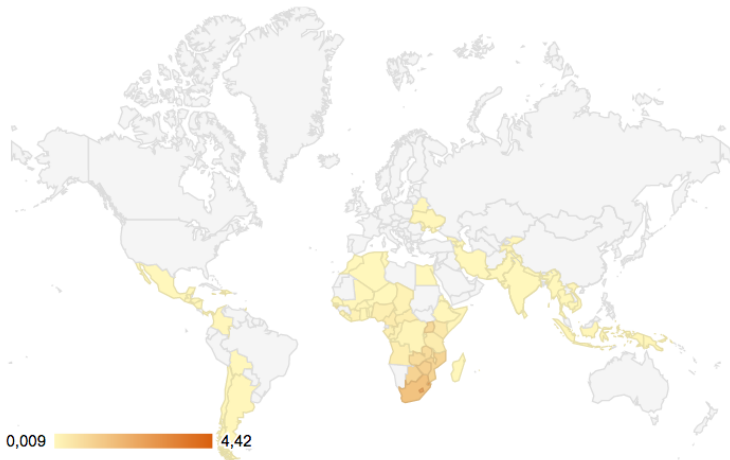
Literature Review



Source: Dahlgren and Whitehead, 1991

Descriptive Statistics

Incidence



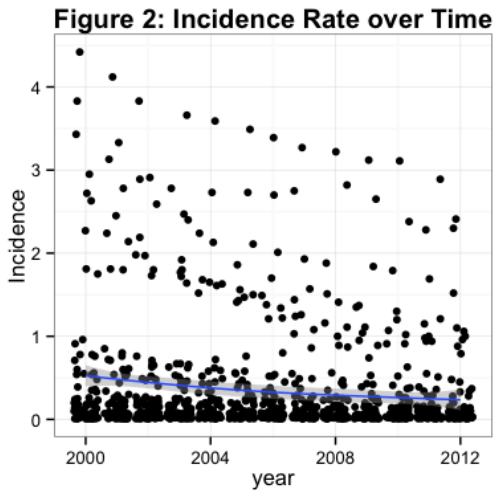


Figure 6: Interesting Cases for HIV Incidence Rates

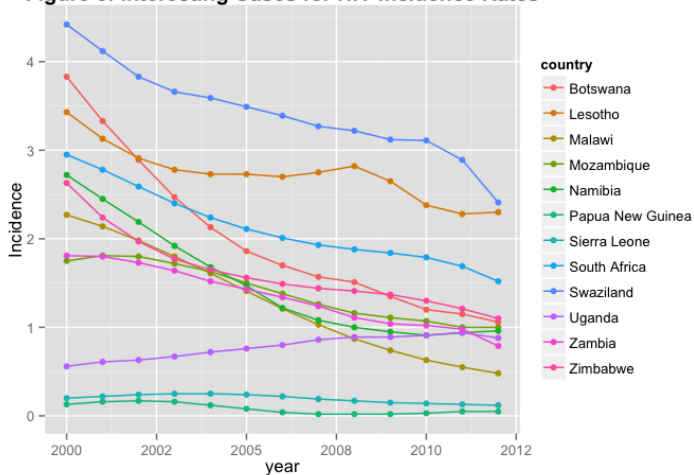


Figure 9: GDP per capita in Selected Countries

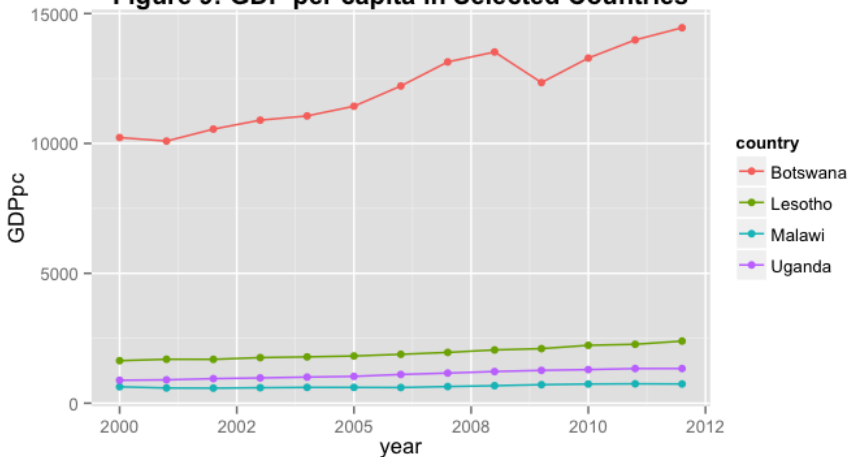


Figure 7: Access to Water in Selected Countries

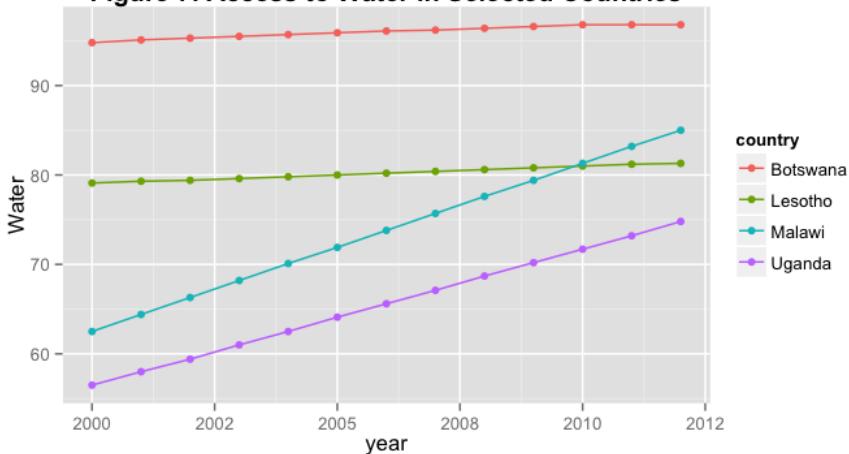


Figure 12: Health Care Expenditure (%GDP) in Selected Countries

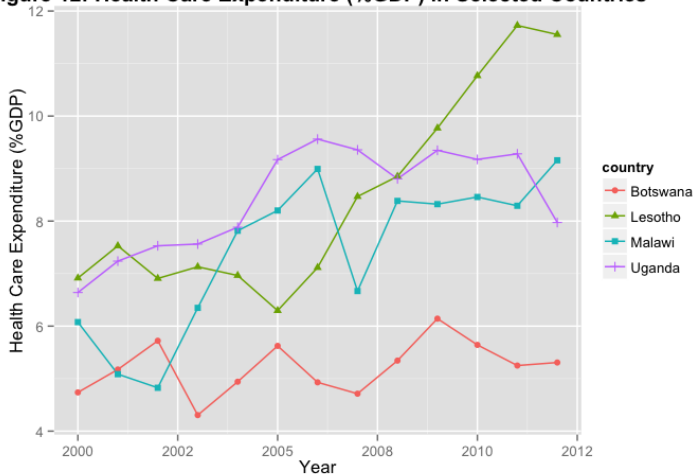


Figure 10: Level of Female Schooling in Selected Countries

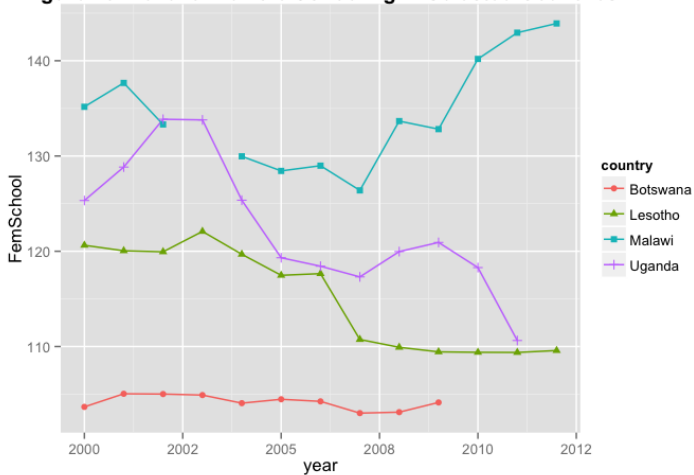
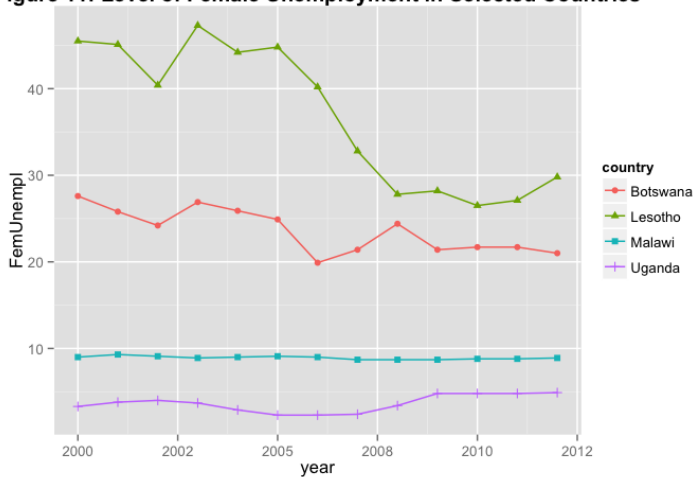


Figure 11: Level of Female Unemployment in Selected Countries



The Model

To answer our research question we will estimate the following equation:

$$I_{it} = \beta_0 + \beta_1 SE_{it} + \beta_2 WLC_{it} + \beta_3 SCN_{it} + \beta_4 ILF_{it} + \epsilon_{it}$$

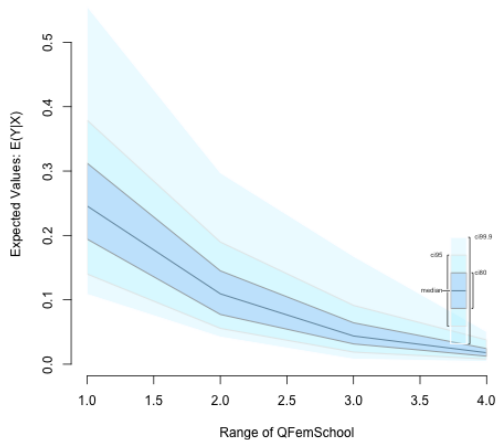
Where I stands for HIV/AIDS incidence, SE stands for socioeconomic factors, WLC stands for working and living conditions, SCN stands for social and community networks and ILF stands for individual lifestyle factors.

Findings

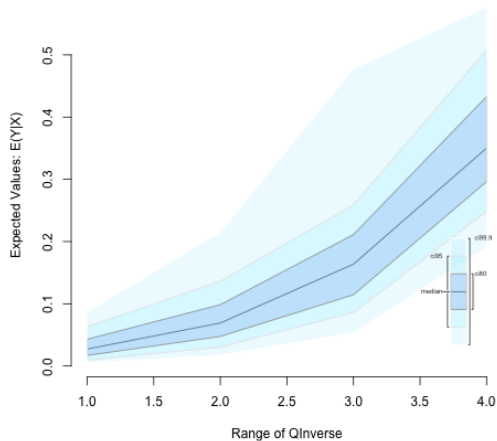
Imputed missing values

Predicted Probabilities

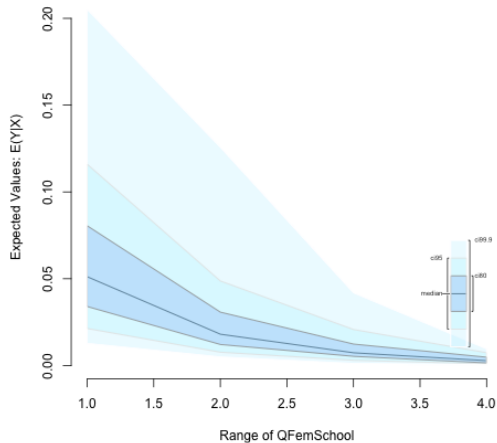
Malawi



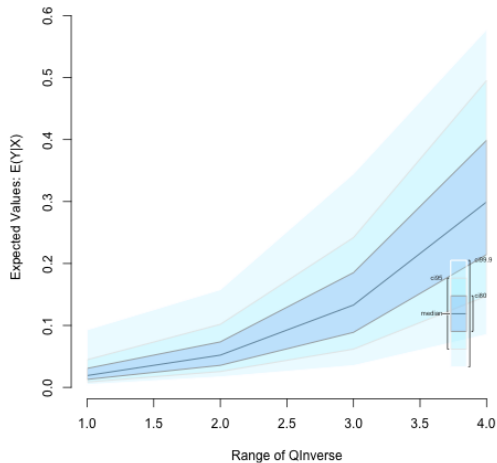
Malawi 2



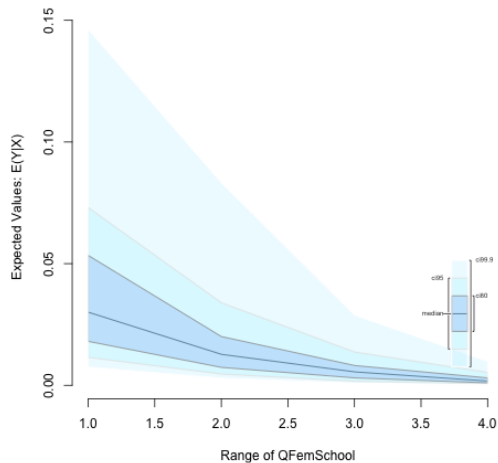
Botswana



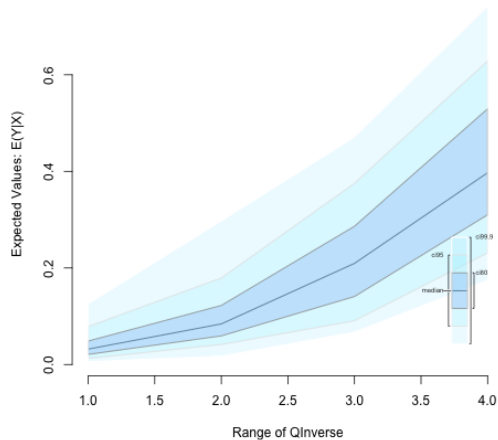
Botswana 2



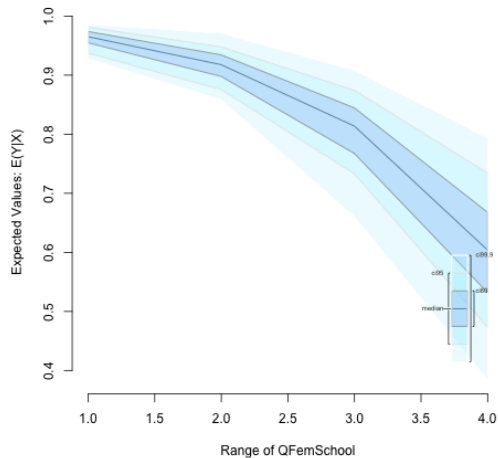
Lesotho



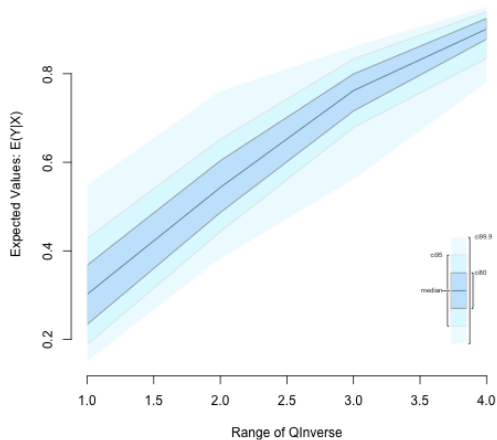
Lesotho 2



Uganda



Uganda 2



Conclusions and Limitation