Determinants of HIV

December 4th, 2014

Outline

- Motivation
- Research Question
- Methodology and Datasets
- Literature Review
- Findings
- Conclusion and Limitations

Motivation and Research Question

- 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

Explore disease-specific determinants of health

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

Literature Review

The Model

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

$$I_{it} = \beta_0 + \beta_1 S E_{it} + \beta_2 W L C_{it} + \beta_3 S C N_{it} + \beta_4 I L F_{it} + \epsilon_{it}$$

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.

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.

Findings

```
##
## Attaching package: 'dplyr'
##
## The following object is masked from 'package:stats':
##
##
       filter
##
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
##
## You have loaded plyr after dplyr - this is likely to cause
## If you need functions from both plyr and dplyr, please load
```

library(plyr); library(dplyr)

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Imputed missing values

Figure 2

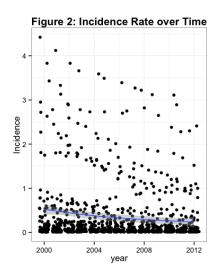
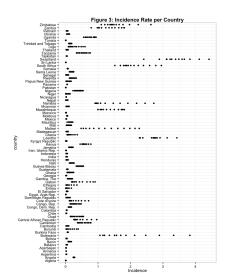


Figure 3



Conclusions and Limitation