Determinants of HIV

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Outline

- Motivation
- Research Question
- Methodology
- Literature Review
- Descriptive Statistics
- 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?

Methodology and Dataset

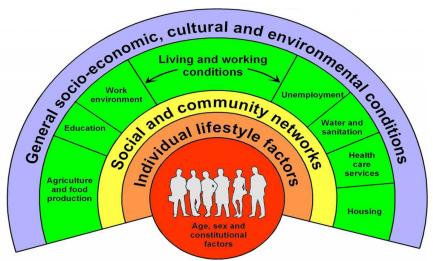
Methodology

We will...

Datasets

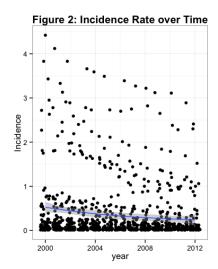
 We will use the World Development Indicators (WDI) for the independent variables and a dataset from UNAIDS for the HIV/AIDS prevalence rate.

Literature Review



Source: Dahlgren and Whitehead, 1991

Descriptive Statistics



The Model

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

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

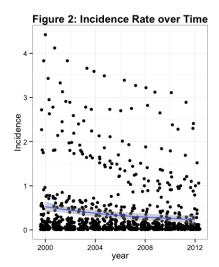
Where I stands for HIV/AIDS incidence, SE stands for socioeconomic factors, WLC stands for working and living conditions, SCN stands for social and community networks and ILF stands for individual lifestyle factors.

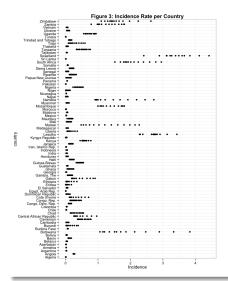
Findings

```
##
## 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)

Imputed missing values





Conclusions and Limitation