Is Poverty or Wealth Driving the HIV Epidemic?

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Conventional wisdom

- “Men, money, mobility” fuelled early epidemics
- Increasingly, epidemics driven by poverty (via riskier livelihoods, migration, transactional sex)
HIV and GDP per capita in Africa

HIV Prevalence

GDP per capita ($PPP)

Countries:
- Swaziland
- Botswana
- S. Africa
- Namibia
- Mozambique
- Malawi
- Uganda
- Rwanda
- Zimbabwe
- Lesotho
- Zambia
- Ethiopia

UNAIDS
HIV and Poverty in Africa

HIV Prevalence

Percent below $1 per day

E&W Africa
S Africa
HIV and Child Nutrition in Africa

Percent Children under weight for age vs. HIV Prevalence in E&W Africa and S Africa.
HIV and Income Inequality in Africa

The image shows a scatter plot with the GINI Coefficient on the x-axis and HIV Prevalence on the y-axis. Each country is marked with a triangle, including Swaziland, Botswana, Lesotho, Zimbabwe, South Africa, Zambia, Mozambique, Malawi, Uganda, Rwanda, and Ethiopia. The plot illustrates the relationship between income inequality and HIV prevalence across these African countries.
New evidence

- Detailed multivariate analysis of multi-country DHS datasets (Mishra et al 2006) and other single-country cross-sectional studies.
- Longitudinal national panels (Zambia)
- Longitudinal studies of seroconversion (KwaZulu Natal)
- Studies linking other interacting factors (mobility, gender, malnutrition) with risk and vulnerability
- Evidence mainly from Africa
HIV and Wealth Index

- Lowest, Men: 4.8
- Second, Men: 5.1
- Middle, Men: 6.9
- Fourth, Men: 7.3
- Highest, Men: 7.6

- Lowest, Women: 5.9
- Second, Women: 8.2
- Middle, Women: 9.1
- Fourth, Women: 10.5
- Highest, Women: 11.9

HIV Prevalence by Wealth Index and Gender
SOCIAL CONTEXT
Social attitudes & practices, level of economic development, stage of AIDS epidemic, HIV prevalence, availability & access to prevention & treatment methods

BACKGROUND FACTORS
- Wealth
- Age
- Sex/gender
- Marital status
- Duration in union
- Education
- Occupation
- Exposure to media
- Mobility
- Ethnicity
- Religion
- Urban/rural residence
- Geographical region

MEDIATING FACTORS

Sexual behavior
- Abstinence
- Sexual debut
- Multiple sexual partners
- Concurrent partners
- Non-regular partners
- Commercial sex
- Partner faithfulness
- Type of sexual activity
- (MSM, anal, oral, etc.)

Transmission cofactors
- Other STIs
- Male circumcision
- Nutritional status

Treatment & care
- Access to treatment & care
- Access to ARVs

Knowledge, prevention, & other risk factors
- Knowledge of prevention methods
- Knowledge of HIV status
- Condom use
- Alcohol use
- IV drug use
- Medical injection safety
- Blood safety
- Skin cutting/tattooing

OUTCOME
- HIV status
Factors predisposing wealthier groups to greater risk

- More money
- Greater mobility
- More leisure time
- Earlier sexual debut
- More lifetime concurrent partners
- More likely to be urban-resident
- Greater alcohol consumption
- Better nourished
- Better access to health care and ARV drugs
Factors predisposing wealthier groups to less risk

- Better communications
- Better education
- Better access to health care
- Better nourished
- Men more likely to be circumcised
Conclusions

- Poverty is not the predominant driver of transmission in most contexts (in Africa)
- Wealthier groups appear to be most at risk, in most contexts
- Pathways and interactions are complex
- Extremely poor women may also be particularly vulnerable to HIV
Caveats and qualifications

- We are examining *relative*, not absolute wealth
- The way “poverty” is defined, and by whom, is important
- Patterns are not uniform across countries
- The relationship is dynamic and may change over time
- Social capital, social cohesion and community-level structural factors are under-researched but potentially very important
- More research is needed from outside Africa
- The relationship between poverty and the post-infection impacts of HIV and AIDS is likely to be quite different (not addressed in this paper)