

HIV and Income Inequality: If There Is a Link, What Does It Tell Us?

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The global HIV prevalence map reveals striking contrasts between high- and low-prevalence countries. Africa is the most affected continent, but within Africa there is a distinct geographical pattern. A handful of Southern African countries have prevalence indicators in the range of 15–35 per cent, while rates in West African countries are in the range of 1–5 per cent and those in East African countries are somewhere in between. What explains this variation in HIV prevalence rates? The answer could offer some clues about the HIV epidemic and how to counteract it. More generally, it may also teach us something about why certain societies are more vulnerable than others to an infectious disease such as HIV.

The question has been addressed by a number of studies that apply some form of regression technique using indicators available at cross-country level. As always, cross-country regression results should be interpreted with care. There are several caveats, such as measurement problems, omission of relevant variables and uncertain directions of causality. With indicators of sexual behaviour, such issues are particularly acute. Statistical relations are not always causal and causal relations do not necessarily indicate what the most relevant intervention should be.

Cross-country studies reveal a significant link between income inequality, normally measured by the Gini coefficient, and HIV prevalence (other significant variables being the percentage of the population that is Muslim, male circumcision and regional dummies). The link between income inequality and HIV prevalence persists when one controls for various other indicators of poverty, economic development, gender inequality and urbanisation (Tsafack Temah, 2008). The same result is yielded by a global sample, one for Sub-Saharan Africa alone, and a global sample excluding Sub-Saharan Africa. The same link has also been revealed in national studies based on states/provinces in the United States and China; for an overview of regression results, see Holmqvist (2009). While HIV/AIDS is often termed a disease of poverty, these results indicate that it could more justifiably be described as a disease of inequality.

While this connection between income inequality and HIV has relatively strong empirical support, its interpretation is an open issue. Why should there be such a link between the distribution of incomes in a society and the spread of HIV? The link echoes the more general discussion on the relation between income inequality and public health, wherein the same statistical association has been established for a number of diseases.

One possible interpretation would be grounded in a theory of the economics of sexual behaviour. Essentially, the adverse future life chances of people living in poverty are likely to increase their readiness to take risks today. On the other hand, high income levels make it more affordable to engage in multiple partnerships. High income inequality would stimulate both these behaviours. This theory could easily be combined with the now influential view that the phenomenon of multiple and concurrent partnerships is a key factor behind the spread of HIV. Another interpretation of the income inequality-HIV link would take a sociological perspective, emphasising the role of social capital and social cohesion. Income inequality is assumed to undermine social cohesion, thereby making it difficult to establish norms, communicate with trust and mobilise collective resources in the pursuit of joint goals or to control risk. A third interpretation could be that the link is spurious—purely statistical and driven by a third factor related to both income inequality and HIV.

What does this imply for policy? First, the empirical support for a link between income inequality and HIV prevalence is another illustration of how unequal societies with large social divides pay a price in terms of public health. HIV and AIDS are far from being the only diseases to fall into this category. A key issue is to establish a clearer understanding, based on empirical evidence, of the pathways that lead from income inequality to HIV. It is an area in which more research efforts are needed.

References:

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- Tsafack Temah, C. (2008). 'The Role of Income and Gender Inequalities in the Spread of the HIV/AIDS Epidemic: Evidence from Sub-Saharan Africa'. Doctoral dissertation, University d'Auvergne.