

Trapped in the prison of the proximate: structural HIV/AIDS prevention in southern Africa

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Conventional modelling of HIV/AIDS Morbidity and Mortality

Distal (social, political, economic) determinants



Indirect Influence on morbidity
and mortality (pathways)

Proximate (bio-medical) determinants of:
exposure to HIV
probability of infection by HIV (co-infections, ART)



Direct Influence on morbidity
and mortality

HIV/AIDS morbidity and mortality

How do we know a pathway when we see it?

Statistically

Finally, and critically, to influence HIV risk, any distal factor must do so by changing one or more direct proximal factors – migration must affect a factor that is related to the number of potential exposures (number of partners, number of sex acts, partners from a higher prevalence community, etc.) or affect factors that mediate risk for any given sex act (condom use, presence of other infections, etc.) – all of which may change over the course of an HIV epidemic.

Source: Deane *et al* 2010, 1459

Prevention interventions in southern Africa

Intervention	Structural Pathway	Target population	Measurable change
Micro-finance with gender-training (LSHTM & Wits)	Gender-based violence	Rural women Limpopo, South Africa	RCT Incidence of domestic violence & unprotected sex
Conditional cash-transfer for girls of school age (Baird et al, World Bank funded)	Girls' school attendance	Rural, urban & peri-urban (not affluent) girls Domba, Malawi	RCT, school attendance, added HIV prev
Gender conscious training for sex-workers (Wechsberg et al, USNIDA funded)	Gender-based violence	Women urban sex-workers Pretoria, South Africa	RCT, drug-use & physical abuse

McMichael's prison of the proximate:

'We have thus evolved a modern epidemiology that is adept at determining which individuals are at increased risk, but not at understanding disease distribution within and between populations'.

- Atheoretical in questions about social processes, identification of pathways, choice of subjects of intervention and interventions
- Fallacy of composition: reduces the whole equal to the sum of its individual parts
- Subordinates external contextual validity to internal universal validity

How would you break down the walls of this prison?

Distal (social, political, economic) determinants



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Direct Influence on morbidity and mortality

HIV/AIDS morbidity and mortality

Beyond the distinction between biomedical and social dimensions of HIV/AIDS prevention

‘Although analytically distinct, effective prevention requires that biomedical technologies, behavioral strategies, and social structures are not treated as separate entities’ (Kippax and Stephenson).

i.e. the best way to escape from the prison of the proximate is to break down the walls of the prison, effacing the distinction between proximate and distal, explicitly theorising questions to determine the relevance of evidence and thus navigating our way through a broad space that is both biological and social.

Alternative approaches to structural prevention of HIV/AIDS

Mainstream	Alternative
Atheoretical in questions about social processes, identification of pathways, choice of subjects of intervention and interventions	Theoretically specified questions drive investigation in a unified biological and social field
Makes the dynamics of the whole equal to the sum of its individual parts	Structure is holistic and relational
Subordinates external contextual validity to internal invariant validity	Structure is historically specific

Rose's distinction

- 'Aetiology confronts two distinct issues: the determinants of individual cases and the determinants of the rate of incidence'.
- If we focus on the first issue, sick individuals, we will try to protect high-risk individuals against infections, whereas if we focus on the second issue and follow a population approach we will seek to control the causes of incidence.

Source: Rose, G. 2001, 'Sick individuals and sick populations', *International journal of epidemiology*, 30 (3): 427.

Different strategies of HIV/AIDS prevention

The social drivers approach

Strives to find a set of globally applicable discrete set of social interventions that can be tailored to particular contexts and plugged into intervention packages designed by epidemiological experts.

Political economy approach

Strives to identify the structural relations that affect the incidence of the disease, to look for possible points of intervention and to ally with and learn from those who can be involved in long-term struggles to challenge the structural causes of the disease.

What is or could be counter-structural intervention in Southern Africa?

- What was done: The treatment action campaign in South Africa
- What wasn't done: wages and living conditions for stable workers on sugar plantations in southern Mozambique
- What was done with uncertain outcome: Health INGOs integrating their HIV/AIDS special treatment clinics in Public Health posts in Mozambique