Rethinking HIV Prevention in Generalized Epidemics

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Limited Success in Most Generalized Epidemics

The success of prevention efforts in the generalized heterosexual epidemics -- especially those devastating much of southern Africa -- remains relatively limited, and new approaches are urgently needed. This is in contrast to concentrated epidemics, where strategies like targeted condom promotion for sex workers and clean needles for drug injectors have helped slow the spread of HIV in at least some places.

Transmission Dynamics

In concentrated epidemics transmission occurs largely among vulnerable groups (i.e., sex workers, men having sex with men, infection drug users), and effective, well-targeted interventions can reduce the overall epidemic.
In generalized epidemics transmission occurs primarily outside these vulnerable populations and would continue despite effective vulnerable group interventions.

Weaker Evidence for Effectiveness

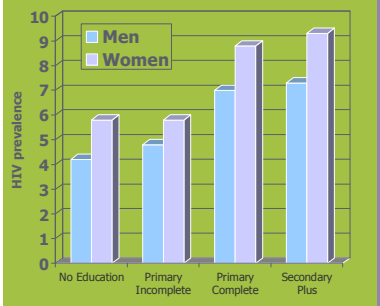
Most emphasis has been placed on the "established" prevention strategies of HIV testing, condoms, and treatment of other sexually transmitted infections (and more recently on abstinence for youth).

Based on a rigorous review and analysis of the available data (from randomized trials, meta-analyses, cohort studies and other observational data, etc.), these approaches appear to be having limited impact on the generalized, mainly heterosexual epidemics of sub-Saharan Africa.

Challenging Common Assumptions About HIV Risk

DHS data from countries with generalized epidemics like Tanzania demonstrates how the disease is not limited to economically vulnerable groups:

HIV Prevalence by Educational status, Tanzania

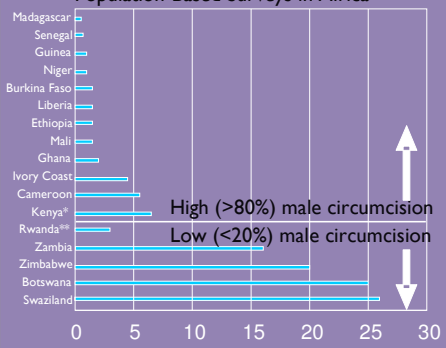


A study of serodiscordant couples found that, across 12 African nations, the woman was the HIV-infected partner in 34-62% of these couples, which suggests that many infections are not brought into the relationship by the man, as is commonly assumed.

What works?

Male circumcision

Male Circumcision & HIV Prevalence in Population-Based Surveys in Africa



*HIV prevalence in western Kenya, where most men are uncircumcised, is far higher than in rest of the country
**Very few men in Rwanda report multiple partners (5%), compared to most African countries. *Source: ORC/MACRO, DHS survey data*

WHO/UNAIDS Statement of 28 March, 2007:

"The efficacy of male circumcision in reducing female to male transmission of HIV has been proven beyond reasonable doubt. This is an important landmark in the history of HIV prevention… Male circumcision should now be recognized as an efficacious intervention for HIV prevention."

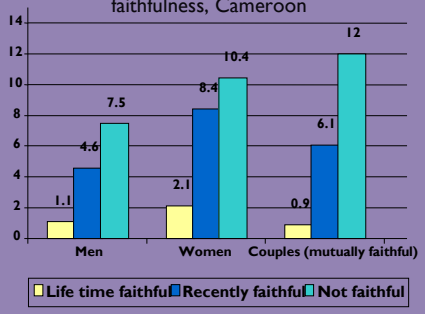
Reducing multiple sexual partnerships

Where HIV prevalence has declined (e.g. Uganda, Kenya, Zimbabwe, urban Malawi and Ethiopia) this appears to have resulted partly from "natural dynamics" (mortality, etc.) but also from behavior change -- particularly declines in multiple sexual partnerships.

The distinction between levels of risk in "casual" and more "regular" (particularly if concurrent) partnerships needs to be reconsidered.

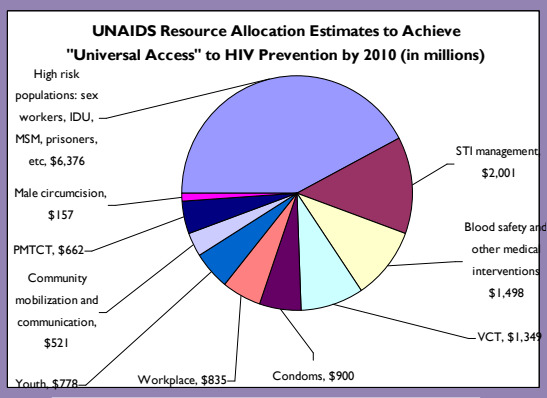
Particularly in Southern Africa, a society-wide discussion on the risks of multiple –especially concurrent – partnerships is urgently needed.

HIV Prevalence by reported partner faithfulness, Cameroon



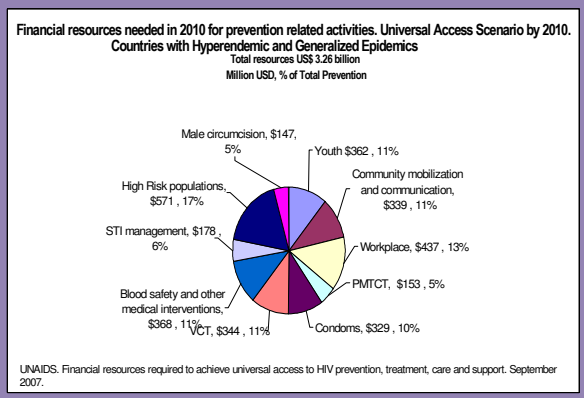
What can be done now?

- Promoting reductions in multiple (concurrent) partnerships– via political and traditional leaders, changes in community norms, etc.
- Increasing access to safe, voluntary, affordable male circumcision (and male reproductive health) services -- now proven by 3 RCTs!
- For PMTCT: increasing access to family planning services, and intensive promotion of *exclusive* breast-feeding practices



UNAIDS: Global resources requested

Note: Much of the funding for categories such as "high-risk populations" would in fact be for interventions like condom promotion and HIV testing..



Resources requested for generalized epidemics

Currently the largest donor investments in Africa are being made in interventions for which evidence of large-scale impact is increasingly weak. Although interventions for high-risk populations remain crucial, the requested resource allocation appears too small for those approaches likely to have major impact on the generalized, predominately heterosexually spread epidemics in parts of Africa.

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