

Selecting HIV infection prevention interventions in Malawi

In the April 2010 issue of the SACEMA Quarterly an article was published describing a simple mathematical model developed by the UNAIDS Reference Group for Estimates, Modelling and Projections to help countries estimate the proportion of new infections that occur through key transmission modes (1). Indicated was that this type of in-country analysis could be used to inform the planning of appropriately targeted intervention programmes. In BMC Health Services Research recently an article has been published on selecting HIV infection prevention interventions in Malawi using this mode of transmission model. The results indicated that the groups accounting for most new infections were the low-risk heterosexual group (37%) – the discordant couples (one partner infected with HIV, the other not) - and those who had casual sex and their partners (a further 16% and 27% respectively of new cases). Circumcision, condoms with casual sex and bar girls, and improved STI treatment had limited effect in reducing incident cases, while condom use with discordant couples,

abstinence and a zero-grazing campaign had major effects. The combination of a successful strategy to eliminate multiple concurrent partners (more partners at the same time) and a successful strategy to eliminate all infections between discordant couples would reduce incident cases by 99%. So the results highlight the importance for a revitalised HIV prevention strategy which needs to include interventions which tackle the two modes of transmission now found to be so important in Malawi: concurrency and discordancy.

References:

1. Gouws E. Estimating the distribution of new HIV infections by mode of transmission. [http://www.sacemaquarterly.com/magazines.php?page=detailview&p_id=14&d_id=43] Accessed 20 September, 2010
2. Maleta K, Bowie C. Selecting HIV infection prevention interventions in the mature HIV epidemic in Malawi using the mode of transmission model. BMC Health Services Research. 2010;10:243