

FEASIBILITY AND ACCEPTABILITY OF SEXUAL ABSTINENCE FOR INTERRUPTION OF HIV TRANSMISSION AMONG INDIVIDUALS WITH ACUTE HIV INFECTION – FORMATIVE DATA FROM CHAVI 011

To the Editor: We refer to the article by Parkhurst and Whiteside in the April 2010 issue of the *Southern African Journal of HIV Medicine*.¹ The authors suggest that a limited period of population-wide sexual abstinence might be an effective and low-cost method of interrupting the transmission of HIV, particularly among individuals with acute HIV infection (AHI).

Evidence is mounting that a large proportion of HIV transmission may be attributed to individuals who are in the acute phase of HIV infection, best described as the time period during which HIV can be detected in blood serum and plasma but before the formation of antibodies, as measured by standard assays.² The viral burden in blood and genital secretions is particularly high during this brief period, resulting in individuals with AHI being highly infectious.^{3,4} They are often unaware of their status or believe themselves to be HIV negative.

We conducted formative research with individuals with AHI from October 2007 to June 2008 in Lilongwe, Malawi, and Johannesburg, South Africa. Under the auspices of CHAVI (the Center for HIV/AIDS Vaccine Immunology) the research aimed to gain a better understanding of the sexual risk behaviours of individuals with AHI at the time of infection and immediately thereafter to assist with recruitment of such individuals into a formative cohort (CHAVI 001) and begin investigation into potential interventions for this period of high infectivity.

Our sample included 37 individuals identified with AHI during this time period. During in-depth interviews participants were asked to comment on topics to include in a potential intervention for individuals with AHI and intervention delivery strategies. We explicitly asked about the feasibility and acceptability of two potential interventions to interrupt HIV transmission during the acute period: 100% condom use or abstinence for 3 months.

More detailed information from this study on sexual behaviour at the time of infection and responses to proposed intervention activities is available elsewhere.⁵ In general, however, there was limited support for a period of enforced abstinence, given partner reluctance, the need to disclose to partners and, in South Africa, a strongly expressed desire for children. Individuals with AHI in Malawi had more positive attitudes to abstinence than those in South Africa, but believed that intensive counselling and support would be required.

An intervention to reduce risk behaviours during AHI is currently being developed in Lilongwe, Malawi. The HPTN 062 study is evaluating the acceptability and feasibility of an enhanced, individual-level counselling intervention for individuals in the acute and early phase of HIV infection. Data collected will provide further understanding of the feasibility of abstaining during the acute period. Results are expected in 2012.

While a limited period of abstinence might theoretically be effective for limiting HIV transmission, the realities of implementation are likely to be challenging. Support for such a strategy was limited in this population of individuals with known HIV infection, despite their ongoing participation and support in an observational study. There is likely to be even less support from individuals who do not know their status or who do not perceive themselves to be at risk of infection.

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REFERENCES

1. Parkhurst JO, Whiteside A. Innovative responses for preventing HIV transmission: The protective value of population-wide interruptions of risk activity. *Southern African Journal of HIV Infection* 2010;11(1):19-21.
2. Pilcher CD, Eron JJ Jr, Galvin S, Gay C, Cohen MS. Acute HIV revisited: new opportunities for treatment and prevention. *J Clin Invest* 2004;113(7):937-945.
3. Pilcher CD, Tien HC, Eron JJ, Jr., Vernazza PL, Leu SY, Stewart PW, et al. Brief but efficient: acute HIV infection and the sexual transmission of HIV. *J Infect Dis* 2004;189(10):1785-1792.
4. Pilcher C, Shugars D, Fiscus S, Miller W, Menezes P, Giner J, et al. HIV in body fluids during primary HIV infection: implications for pathogenesis, treatment and public health. *AIDS Annals Africa* 2001;15(7):837-845.
5. Pettifor A, MacPhail C, Corneli A, et al. Continued high risk sexual behavior following diagnosis with acute HIV Infection in South Africa and Malawi: implications for prevention. *AIDS Behav* 2010; Oct 27, Epub ahead of print.