Electronic Letters to:

Paper:
Marianne Louise Grijsen, Susan M Graham, Mary Mwangome, Peter Githua, Sarah Mutimba, Lorraine Wamuyu, Haile S Okuku, Matthew A Price, Scott R McClelland, Adrian D Smith, and Eduard J Sanders

Screening for genital and anorectal sexually transmitted infections in HIV prevention trials in Africa
Sex Transm Infect 2008; 0: sti.2007.028852v1 [Abstract]

Electronic letters published:

Assessing anal intercourse and blood exposures as routes of HIV transmission in Mombasa, Kenya

23 April 2008

John J Potterat, Independent consultant
Self,
Stuart Brody, Devon D. Brewer, Stephen Q. Muth

Send letter to journal:
Re: Assessing anal intercourse and blood exposures as routes of HIV transmission in Mombasa, Kenya

Email John J Potterat, et al.

Dear Editor,

The report by Grijsen and colleagues documenting the high frequency of unprotected receptive anal intercourse (RAI) in young Kenyans at high risk for HIV infection (1) is a welcome contribution to the small but growing number of studies investigating RAI as a specific risk for HIV in sub-Saharan Africa (2-7). Their study, however, presents us with yet another anomaly unlikely to be resolved by the assessment of sexual risk factors alone (8). Although the authors found that "RAI was strongly associated with HIV-1 in men (adjusted odds ratio = 3.8)", they also reported that among women, RAI was not associated with prevalent HIV infection, but that those practicing RAI were much more likely to have syphilis (adjusted odds ratio 12.9). Puzzled, the authors note: "It is not clear why this difference was found…" None of the possible reasons they propose for this anomaly includes nonsexual HIV transmission. That these women were 10 times more likely to have serological markers of HIV (a sexually transmissible infection) than of current or past syphilis (a sexually transmitted) infection should be viewed as a red flag, even considering their nonspecific diagnostic criteria for syphilis (classification based on qualitative rapid plasma reagin test and the Treponema pallidum haemagglutination assay, neither of which rules out nonsexually transmitted treponematoses). The magnitude of the difference between HIV and "syphilis" markers alone suggests that sexual factors may have played a lesser role in observed HIV prevalence than nonsexual ones.

Because the authors apparently did not also assess nonsexual (blood) exposures, this possibility cannot be explored with their data -- a frustratingly common shortcoming in epidemiologic studies conducted in Africa (9). In addition, a strong association between anal sex and prostitution might mask the association between anal sex and HIV in their women participants. Thus, given a strong association between RAI and prostitution, it is important to report the bivariate relationships among all predictors and their relationship with prevalent HIV infection. Lastly, Grijsen and colleagues stress the importance of prevention messages about the dangers of unprotected RAI to those high- risk persons reporting it. Yet because RAI is probably not confined to "high-risk" persons (2), broader community prevention messages might more usefully fit overall HIV prevention objectives. Anal intercourse is common in sub- Saharan Africa populations (2-7) and is often perceived as involving no risk for HIV transmission (4,7).

John J. Potterat, BA, Colorado Springs, CO, USA
Stuart Brody PhD, University of the West of Scotland, UK
Devon D. Brewer, PhD, Interdisciplinary Scientific Research, Seattle, WA, USA
Stephen Q. Muth, BA, Colorado Springs, CO, USA

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