

not acceptable to state that “the effect of concurrent partnerships on HIV incidence has not been appropriately tested in a sub-Saharan African setting”.¹

The tone of the academic debate about the effect of concurrent partnerships on HIV risk is puzzling. Science and policy would be best served by moving beyond the long-standing partner reduction messages to test specific concurrency reduction interventions the old-fashioned way, with a multisite randomised controlled trial. Such studies are in development, and, contrary to Tanser and colleagues’ assertions, they are quite feasible.

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In their population-based cohort study, Frank Tanser and colleagues¹ conclude that they find “no evidence to suggest that concurrent partnerships are an important driver of HIV incidence in this typical high-prevalence rural African population”. We believe that this conclusion is unjustified since they have used an inappropriate method to assess this association.

Tanser and colleagues assessed whether each woman’s risk of HIV is higher if there is a higher proportion of men within a 3 km radius who have concurrent partners (with those living closer having a bigger effect on the Gaussian weighting of the average community score). However, this method explicitly discards information about sexual networks. Detection of network-level effects depends on measurement of networks. As an example, Cristakis and colleagues² showed, using a network approach, that weight gain in one person in the Framingham cohort was associated with substantial weight gain in his or her friends, siblings, spouse, and neighbours. If, instead of measuring the effect of weight gain in one’s actual contacts, they had substituted an average weight gain in all people in a weighted 3 km radius of each person, this effect would in all likelihood have been lost.

We agree that prevention efforts need to target both concurrency and

number of sexual partners.³ The most striking sexual behaviour in Tanser and colleagues’ study is, however, not the mean lifetime number of sexual partners. This number is not significantly different from that found in low-HIV-prevalence countries—a finding that has been documented before.⁴ Rather, and in common with other regions with generalised HIV epidemics,⁵ it is the extraordinarily high proportion of sexually active men who report having two or more ongoing sexual relationships at the time of the survey (29%).

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Frank Tanser and colleagues¹ argue that concurrent partnerships are not an important driver of HIV incidence in KwaZulu Natal, South Africa. They acknowledge that their results suffer from possible attenuation bias because they measure the effects of a community-level exposure (concurrency in men) on an individual disease outcome. However, they do not mention attenuation stemming from measurement error in their main exposure variables, instead assuming that, unlike women, men report their concurrent partnerships accurately.

This assumption is wrong. Even if UNAIDS-recommended survey