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Concurrency driving the African HIV epidemics: where is the evidence?

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James Shelton's "Why multiple sexual partners?" Comment (Aug 1, p 367) 1 begins with the statement that "multiple sexual partnerships—particularly overlapping or concurrent partnerships—lie at the root of the generalised HIV epidemic in southern and eastern Africa." Yet an objective reading of the available data suggests that the evidence is far from conclusive. 2 Defining and measuring concurrency is difficult and studies that measure sexual behaviour and individual or community levels of HIV suffer from the temporal problem that concurrency is generally measured over the previous year (or shorter time period), whereas HIV infection might have occurred several years earlier. To support the concurrency hypothesis, we need a precise definition of concurrency, a way of measuring it, and a significant association between the measured concurrency and the prevalence or incidence of HIV, controlling for potential confounders. A four-city African study actually found lower rates of concurrency in places with larger HIV epidemics, 3 and a study using nationally representative surveys in 22 countries 4 (all but one of which was in Africa) concluded that "the prevalence of concurrency does not seem correlated with HIV prevalence at the community level or at the country level, neither among women nor among men." Additionally, Wellings and colleagues 5 reviewed global sexual behaviour and could not find sufficient data to assess whether rates of concurrency differ across the world. Adequate empirical evidence is urgently needed to assess the extent to which concurrency might or might not be driving the sub-Saharan African epidemics.

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