

# Men who have sex with men and their HIV epidemics in Africa

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In this issue of the Journal, Geibel *et al.* [1] report a capture–recapture study to estimate the number of men who have sex with men (MSM) who sell sex in Mombasa, Kenya. The authors surveyed 77 venues and estimated the number of MSM selling sex at these venues to be 739. Like almost any other capture–recapture study, this estimate is subject to a number of methodological limitations (captures may not have been totally random and independent, relatively high refusal rates, etc.), which affect its accuracy and precision. Be this as it may, the importance of this study does not so much pertain to the accuracy of the estimate, but more to the fact that the investigators were able to identify and enroll hundreds of MSM selling sex in the African country of Kenya. This number also indicates that there must be a fairly large population of male clients willing to pay for the sexual services of these MSM, as well as a larger community of other MSM, since most MSM do not sell sex. Indeed, an earlier snowball-survey conducted in Nairobi in 2004 enrolled 500 MSM in a needs-assessment within 2 months [2].

That the HIV prevalence among Kenyan MSM may be high can be derived from data from an ongoing cohort study among MSM in Kilifi, a town located on the northern coastline of Kenya between Mombasa and Malindi: 38% (23/60) of men were HIV-infected at baseline [3]. Additional evidence for an elevated HIV prevalence among MSM in Kenya comes from HIV

voluntary counseling and testing data from sites throughout the country, where of the 780 MSM tested between 2002 and 2005, 10.6% were HIV-infected [4]. High prevalences of HIV were also found among MSM in Dakar, Senegal, where 21.5% of 442 MSM in a cross-sectional survey were HIV-positive [5], and among MSM in Khartoum, Sudan, where the HIV prevalence among 713 MSM enrolled in a study was 9.3% [6]. The high HIV prevalences among MSM from Kenya, Senegal and Sudan are remarkable. The adult HIV prevalence in Kenya has recently declined to an estimated 6.1%, while the adult HIV prevalences in Senegal and Sudan are estimated to be 0.9 and 1.6%, respectively [7].

This information shows that even in the absence of a high HIV prevalence in the general population, the concurrent HIV prevalence among MSM may be substantial. The size of the MSM population and the percentage of adult men practicing male-to-male sex in African countries are unknown. However, if we tentatively assume that male-to-male sex occurs in 3% of adult males, a high HIV prevalence in MSM may contribute between 10 and 20% of all prevalent HIV infections in the general population. In Kenya for instance, if 3% of men engage in male-to-male sex (1.5% of the total population), with a 40% HIV prevalence, and an adult HIV prevalence of 6.1%, the percentage of current infections in males attributable to MSM is:

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$(0.015 * 40)/6.1 = 9.8\%$ . In Senegal, with 21% HIV prevalence in MSM and 1.6% in the general population, this figure is  $(0.015 * 21)/1.6 = 19.7\%$  (Tim Brown, personal communication). This does not include the transmission of HIV to female sexual partners of MSM, and subsequently, to their children and other low risk heterosexuals. Bisexuality is common in African MSM, with more than two-thirds of MSM reporting sex with both men and women [2,4,5].

MSM have long been overlooked in HIV research and prevention on the African continent. There are strong local convictions that MSM behavior is non-compatible with traditional African culture. The studies from Kenya, Senegal and Sudan show otherwise and indicate that male-to-male sex is an integral part of activities of at least some African men. These studies also show that when respectful and considerate approaches are used to ensure their safety, dignity and anonymity, MSM will come forward to work with public health authorities and others to help improve their sexual health. Additional research is needed to assess the prevalence of male-to-male sex behavior among African men.

Now that HIV epidemics in several African countries have shown encouraging signs of decline [7,8], the willingness of MSM populations to be engaged in HIV research and prevention provides a unique window of opportunity to research and stop the HIV epidemic as it diversifies into smaller populations at risk. If this opportunity is not taken, the proportional contribution of MSM to the HIV epidemic in Africa will continue to grow.

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## References

1. Geibel S, van der Elst EM, King'ola N, Luchters S, Davies A, Getambu EM, *et al.* 'Are you on the market?': a capture-recapture enumeration of men who sell sex to men in and around Mombasa, Kenya. *AIDS* 2007; **21**:1349-1354.
2. Onyango-Ouma W, Biringi H, Geibel S. *Understanding the HIV/STI risks and prevention needs of men who have sex with men in Nairobi, Kenya*. Washington: Population Council; 2005.
3. Sanders EJ, Graham S, van der Elst E, Mwangome M, Mumba T, Mutimba S, *et al.* Establishing a high risk HIV-negative cohort in Kilifi, Kenya. *AIDS Vaccine 2006 Conference*. Amsterdam, August 2006 [abstract 470.00].
4. Angala P, Parkinson A, Kilonzo N, Natecho A, Taegtmeyer M. Men who have sex with men (MSM) as presented in VCT data in Kenya. *XVI International AIDS Conference*, Toronto, Canada, August 2006 [abstract MOPE0581].
5. Wade AS, Kane CT, Diallo PAN, Diop AK, Gueye K, Mboup S, *et al.* HIV infection and sexually transmitted infections among men who have sex with men in Senegal. *AIDS* 2005; **19**:2133-2140.
6. Elrasheid S. Prevalence, knowledge and related sexual behaviors of HIV/AIDS among receptive men who have sex with men. *XVI International AIDS Conference*, Toronto, Canada, August 2006 [abstract TUPE0509].
7. UNAIDS. *2006 report on the global AIDS epidemic*. Geneva: UNAIDS; 2006. Available at: [http://www.unaids.org/en/HIV\\_data/2006GlobalReport/default.asp](http://www.unaids.org/en/HIV_data/2006GlobalReport/default.asp) Accessed 12 January 2007.
8. Hallett TB, Aberle-Grasse J, Bello G, Boulos LM, Cayemittes MP, Cheluguet B, *et al.* Declines in HIV prevalence can be associated with changing sexual behaviour in Uganda, urban Kenya, Zimbabwe and urban Haiti. *Sex Transm Infect* 2006; **82** (suppl 1):i1-i8.