

# Hidden yet happening: the epidemics of sexually transmitted infections and HIV among men who have sex with men in developing countries

Chris Beyrer

Evidence from a range of studies, reports and surveillance systems suggests that epidemics of sexually transmitted infections (STI), most prominently HIV infection, are underway in 2008 among men who have sex with men (MSM) in a wide range of developing countries. Although a lack of surveillance and research data limit our understanding of too many of these diverse epidemics, what data are available among MSM in south and central America, the Caribbean, Asia, the former Soviet Union and Africa are remarkably consistent in finding MSM at substantial risk.<sup>1-6</sup> In a recent systematic review of the literature from 2000 to 2006 on HIV among MSM in low and middle income countries, our group found an overall adjusted odds ratio (OR) of 19.3 (95% CI 18.8 to 19.8) for MSM compared with general population reproductive age adults.<sup>1</sup> HIV risks were markedly elevated for MSM in the Americas (OR 33.3, 95% CI 32.3 to 34.2), Asia (OR 18.7, 95% CI 17.7 to 19.7) and for Africa (OR 3.8, 95% CI 3.3 to 4.3).<sup>1</sup> The high rates of prevalent and incident STI and HIV reported among gay, bisexual and MSM from the USA, western Europe and Australia have been described as resurgent epidemics—and in some settings, these incidence densities rival or exceed those seen among gay men in the 1980s.<sup>7-9</sup> For much of the developing world, however, little work was done among MSM in the 1980–90s and indeed the data remain sparse in 2008. Whether the epidemics we are now seeing among developing country MSM are due to resurgent spread, ongoing spread that has long gone undocumented, or represent newly emerging epidemic patterns is

thus difficult to ascertain. Nevertheless, there is enough evidence to assert that epidemic spread of HIV and other STI is occurring in previously little studied populations of MSM, and that a great deal more needs to be done in surveillance, prevention, treatment, care and policy reform to engage these men and address their health needs.

What features have characterised these epidemics? First, these have been largely hidden outbreaks among understudied men. The first study to measure STI and HIV among African MSM was reported as recently as 2005—well into the third decade of the AIDS epidemic on the continent.<sup>2</sup> Our systematic review identified data with biological measures of HIV infection and sample sizes of at least 50 men from only 38 developing countries worldwide and found only four such reports from Africa.<sup>1</sup> A second feature is the consistently high HIV prevalence among MSM when compared with rates among heterosexual men in the same countries, or when compared with other at-risk groups (except, in several regions, injecting drug users). The Senegal data are illustrative. Senegal has long been something of an exception in West Africa—a country with less than 2% prevalence in reproductive age adults and a decriminalised sex industry with empowered (female) workers with encouragingly low rates of HIV and STI. Yet the study by Wade *et al*<sup>2</sup> found an HIV prevalence of 21.5% among 463 MSM in Senegal (95% CI 17.8 to 25.6) and 4.8% prevalence of active syphilis, 22.3% herpes simplex virus type 2 (HSV-2) seropositivity, and 4.1 and 5.4% urine PCR detection of chlamydia and gonorrhoea infection, respectively. A recent second-generation surveillance effort among MSM and female sex workers in five central American states (El Salvador, Guatemala, Honduras,

Nicaragua and Panama) found MSM to be consistently the highest prevalence population for HIV infection, ranging from 7.6% in Nicaragua to 15.3% in El Salvador.<sup>3</sup> Third, there has been substantially less work done on STI aside from HIV among MSM in developing countries than the data suggests is warranted. A number of studies and surveillance systems has included syphilis serology when HIV serological specimens have been collected, but precious few have investigated the STI issues specific to these men, including anorectal and pharyngeal STI. Finally, MSM in many developing countries face intense family, social and cultural stigma and discrimination—and in much of the world this stigma is enforced by the criminalisation of same-sex behaviour between consenting adults.<sup>2-4</sup> Those of us living in settings of relative freedom for sexual minorities think of Oscar Wilde's imprisonment for sodomy as a wrong of the distant past—men languishing in the jails of Africa, Asia and the Middle East for these same "crimes" know that the price of sexual expression in much of the world is still unacceptably high.

## CHALLENGES TO UNDERSTANDING AND RESPONSE

A number of challenges face us in understanding and responding to these epidemics. The category MSM (or indeed, the current terms gay, bisexual, homosexual, heterosexual and the like) is difficult to apply in many populations. This is especially true in settings such as India and her south Asian neighbours, where a rich and varied array of terms, categories, genders and behaviours can only be fitted under an umbrella term such as MSM if we accept a great deal of reductionism.<sup>4,5</sup> Many traditional Asian transgender categories include biological men who are strongly identified as female and are traditionally seen as such by their communities; these individuals do not accept MSM categorisation and are unlikely to be reached by programmes targeted at MSM or other male groups.<sup>9</sup> A further complexity is that in some settings, Thailand, Peru and Russia are examples, communities of gay-identified men have emerged in the era of AIDS and these men may best respond to health efforts that are affirming of gay identities, even if the social and political mainstream around them is unwilling or unable to provide such services. These identities are not simply niceties—they often track important behavioural and sexual factors

**Correspondence to:** Dr Chris Beyrer, Center for Public Health and Human Rights, Johns Hopkins Bloomberg SPH, 615 N Wolfe Street E 7152, Baltimore, MD 21205, USA; [cbeyrer@jhsph.edu](mailto:cbeyrer@jhsph.edu); [www.jhsph.edu/HumanRights](http://www.jhsph.edu/HumanRights)

that can affect disease risk and prevalence. In a study of sexual behaviour among MSM in Lima, Sanchez *et al*<sup>6</sup> found that HSV-2 prevalence overall was 51.0%, but was 22.4% in MSM who asserted heterosexual identities, 57.3% in self-identified gay men and 79.6% in transvestites ( $p < 0.001$ ).

The lack of STI services appropriate for MSM remains a major barrier. Men seeking STI care in settings where their behaviours are stigmatised or criminalised may be unwilling to disclose their same-sex activities to providers. Providers may not attempt to elicit these behaviours and to test men who disclose them for oral or anal infections. A recent report from New York City suggests that this is true among non-gay identified MSM even in a developed country setting; that study found that whereas 78% of gay-identified MSM discussed their sexuality with providers, no MSM who described themselves as behaviourally bisexual did so.<sup>10</sup> These limitations are likely to be compounded by the lack of MSM-friendly clinic services for STI in most developing countries. Indeed, Senegal has recently begun the first MSM-friendly services for STI in Africa (outside South Africa). Such clinics in the developed world, of course, long preceded the HIV epidemic and served as key contact venues for communities and providers.

### THE PREVENTION AND TREATMENT RESEARCH AGENDA

Is there an emerging research agenda for HIV and STI prevention and services for developing country MSM? It is a painful reality that although novel strategies are being investigated, UNAIDS estimates that only some 20% of developing country MSM have access to the basics of HIV prevention, including appropriate sexual health information, condoms, water-based lubricants and HIV voluntary counselling and testing (VCT) and STI care targeting their needs.<sup>11</sup> There is clear and compelling need for a great deal of culture and context-specific research into the risks and behaviours driving HIV and STI among the many communities of MSM at risk in developing countries. Local adaptation of basic preventive interventions, including peer outreach and education, condom and lubricant promotion and distribution, provision of HIV VCT in settings where MSM feel empowered to disclose their sexual risk-taking behaviours and to seek individualised risk reduction counselling, as well as community level empowerment for MSM to advocate for their rights, are all likely to be critical to achieving control of HIV and

STI spread, whatever new prevention technologies and advances show efficacy.

We should note that when prevention or treatment studies have been initiated, MSM in developing countries have proved as willing to enroll as research participants as have gay men in the developed world. MSM in Peru contributed substantially to the HSV-2 acyclovir trial as HIV prevention, which unfortunately failed to demonstrate efficacy.<sup>12</sup> Other prevention trials are already underway in MSM populations, including the use of Truvada as pre-exposure prophylaxis for HIV prevention (the iPrEx Phase III trial), a multicountry study enrolling MSM cohorts in Peru, Ecuador, South Africa, Brazil, Thailand and the USA.<sup>13</sup>

Research is called for across an array of disciplines for HIV and STI prevention, treatment and care. A primary research agenda is in epidemiology and surveillance, with a focus on the development and optimisation of sampling and recruitment approaches for hard-to-reach MSM, and for challenging subsets such as married MSM in societies (south Asia, the Middle East and most of Africa included) where marriage is all but mandated for adult men whatever their sexual orientation or desires. This agenda will need to include investigation and optimisation of the internet as a surveillance and prevention tool, because it is now clear that the internet is being used in multiple developing country settings by MSM seeking community, sexual partners and health information.

In the biomedical prevention arena there are several research domains that require expansion and support. Pre-exposure prophylaxis trials among MSM are already underway.<sup>13</sup> The development and testing of rectal microbicides is a priority for both MSM and heterosexuals who practice this behaviour. The potential HIV prevention impact of adult male circumcision, already shown to have efficacy in reducing male HIV acquisition risk in three trials among heterosexually active African men, needs to be evaluated among MSM. A challenge for MSM circumcision trials will be the ascertainment of risks associated with insertive anal sex, in which circumcision could presumably offer protection, and receptive sex, in which the receptive partner's circumcision status would clearly be irrelevant—and where the risks of unprotected receptive sex are clearly much higher. Nevertheless, some have argued that there is an equipoise argument for MSM circumcision trials, given the consistency of the trial findings among

heterosexual men (J Sanchez, personal communication, 2 August 2008).

There is a clear need for social science research among developing country MSM. The roles identity, sexual and gender orientation, stigma, depression and substance use play in the multiple cultural and social settings where MSM are at risk of HIV and STI will require not only epidemiology, but ethnography, cultural studies and policy research. It should also be added that the impact of human rights protection or abrogation and the role such rights contexts play in risk, and in access to health services, will also require an innovative research agenda. In STI treatment and services there is a marked need for research aimed at optimising services for MSM, particularly where they are most hidden and stigmatised and where homophobia in health services may limit MSM access to appropriate care. This effort will include operational research, or what has been called implementation science, and will need to include not only STI and sexual health services research, but also antiretroviral access and treatment, and the integration of positive prevention for MSM into HIV/AIDS treatment and care.

### ONGOING REALITIES: STIGMA AND CRIMINALISATION

Social stigma against those at risk of HIV and STI is not unique to MSM, but the reality that negative social attitudes towards these men are so widely institutionalised in the law makes this form of stigma one of the few enforced by police and security forces. Same-sex behaviour between consenting adults of the same gender is criminalised in some 89 countries, including more than half of all African nations.<sup>14</sup> Nine countries have the death penalty for same-sex behaviour, including Saudi Arabia, Sudan and Iran, where men have been executed for homosexuality as recently as this year.<sup>14</sup> These laws not only limit the personal and social freedoms of these men—they can serve as active barriers to HIV prevention. Indeed, the National AIDS Control Organisation of India is currently mounting a court challenge to India's British era sodomy law on the basis that the law is hindering India's HIV prevention efforts.<sup>15</sup> Although few have been charged with sodomy, the law has allowed the police to harass and beat MSM and transgender outreach workers for engaging in supporting "illegal behaviour", such as providing peer education and condoms.

These kinds of abuses may be legal in many states, but they are no longer

acceptable in human rights law. One of the most widely ratified conventions globally is the International Covenant on Civil and Political Rights (ICCPR) of 1976, to which all African and most Asian nations are signatories. The ICCPR guarantees its relevant civil and political rights "... without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status".<sup>16</sup> In a landmark ruling in 1994 the United Nations (UN) Human Rights Committee held that sexual orientation was a status protected under the ICCPR from discrimination, with reference to "sex" including "sexual orientation".<sup>16</sup> Countries signatory to this convention are thus now bound to respect, protect and fulfill the rights of MSM to non-discrimination in healthcare. As the STI and HIV epidemics continue to challenge the health and wellbeing of MSM in developing countries, the human rights arguments (and laws) that protect them may well come to play an increasing role in the demand for services for these men.

Decriminalisation of same-sex behaviour between consenting adults would also help bring these men out of the shadows and assist all concerned with meeting their health needs.

### GLOBAL ADVOCACY AND LOCAL ACTION

What is being done to address these epidemics? The past few years have seen an encouraging number of new initiatives and efforts to respond to HIV and STI among MSM in developing countries. At the June 2008 UN high level meeting on AIDS a landmark advance session was held on HIV among MSM in developing countries supported by amfAR, the UN Development Programme, UNAIDS, AIDS 2031 and the Global Forum on MSM and HIV. At this session it was announced that the UN Development Programme would serve as the lead UN agency for future foci on MSM and sexual minorities—a major step in advancing these issues within the UN system.<sup>117</sup> amfAR has played a key role in providing funding for local level organisations in developing countries to work on MSM and HIV/STI through its global MSM initiative. This programme seeks to support the kinds of gay and MSM

community efforts that have proved so essential to the fight against HIV and STI in the developed world. First-round funding through this programme included support for MSM service groups working in Cameroon, Côte d'Ivoire, Curaçao, Ghana, Haiti, Jamaica, Malaysia, Mali, Mauritius, Myanmar, Nigeria, Thailand and Zimbabwe.<sup>17</sup> As the adage goes—we are everywhere. The Global Fund to Fight AIDS, Malaria, and Tuberculosis has also taken on the issue of MSM programming in its initiatives: a consultancy was held on the issue in Kathmandu, Nepal, in July 2008, and will probably call for MSM indicators to be included in country programmes and funding requests. This is likely to be critical to encourage MSM inclusion in country coordinating mechanisms, a past challenge in many settings. Perhaps most encouraging is the reality that in so many developing countries, MSM and lesbian/gay/bisexual/transgender groups are organising, emerging and taking on the challenges of HIV and STI programmes for MSM. These groups are emerging in the era of HIV/AIDS and many, indeed, have been organised around HIV programmes, but they will probably be key partners in the linked struggles for healthcare services and for the dignity and rights all of us deserve.

### CONCLUSIONS

Epidemic spread of HIV and STI is underway among MSM communities in many developing countries. These diverse men remain understudied and underserved, hidden in many settings, and criminalised in all too many. But there is reason for optimism in both the increasing recognition of these epidemics in the public health community and in the emerging strength of community-based activities. In the first decade of HIV/AIDS in the western world, communities of gay men were heavily affected, but were also instrumental in rolling out prevention, in the drive for research, in fund-raising and in consciousness-raising. In the third decade of AIDS the bad news is that emerging gay and MSM communities in developing countries are now being disproportionately affected by HIV and STI—but there is good news too, as these men organise, push for inclusion in national HIV prevention efforts in the countries and advocate for the prevention, treatment and care services called for by this next phase of the pandemic. The HIV/AIDS epidemic is certainly not over—and for many communities of MSM in

developing countries, the struggle for services is just beginning.

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<sup>1</sup> On a less encouraging note, the original title for the session included the term "men who have sex with men", which one of the member state missions objected to on the grounds that the term itself was pornographic. The session title was changed to avoid use of the term MSM.