Sexual Orientation and Behavior in HIV-infected Individuals in Southeast Asia

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ABSTRACT

The response of sexual behavior to HIV is an important input to predicting the path of the epidemic and to focusing prevention efforts. Existing estimates suggest limited behavioral response, but fail to take into account possible differences across individuals. Transmission through sexual contact is estimated to accounts for 75 to 85% of cumulative cases of HIV/AIDS to date. Mode of transmission is important predictors of risk. The statistical risk of infection through vaginal intercourse is notably low regardless of which partner is infected. Anal intercourse has higher infectivity due to the likelihood of damage to epithelial integrity. Generally, the environment for men who have sex with men (MSM), lesbians and transgender individuals is unsupportive and unsafe. They are usually victims of discrimination or more subtly as indifference. The stress on these individuals face as they cope with sexual orientation stigma may help to explain higher rates of risky sexual behaviors and injected drug use. Very little research has focused on Asian youth with altered sexual orientation. These individuals are at a higher risk of contracting the HIV virus than their heterosexual counterparts. Until we acknowledge these behaviors and work with people involved with these behaviors, we are not going to halt and reverse the HIV epidemic. Scaling up services adequately for key populations at higher risk for HIV infection globally, particularly in concentrated epidemics, is essential to halt and reverse epidemics at the population level. It is essential that the expansion of MSM HIV prevention and care services across Asia be driven by an agreed upon set of quality standards and guidelines.

Keywords: Sexual orientation, MSM, Human immunodeficiency virus, Prevention, Guidelines.

INTRODUCTION

During adolescence, when sexual orientation usually unfolds, research shows that society, education system in most countries have tended to be unsupportive leading to unsafe environments for gay, lesbian and bisexual (GLB) teens. This may be manifested as harassment or discrimination or more subtly as indifference. The stress on these individuals face as they cope with sexual orientation stigma may help to explain higher rates of risky sexual behaviors and injected drug use. Very little research has focused on Asian youth, especially GLB teens. These individuals are at a higher risk of contracting the human immunodeficiency virus (HIV) than their heterosexual counterparts. The United Nations urged India to decriminalize homosexuality by saying it would help to fight against HIV/AIDS by allowing intervention programs, much like the successful ones in China and Brazil. Jeffrey O'Malley, director of the United Nations Development Program on HIV/AIDS said, 'countries protecting homosexuals from discrimination had better records of protecting them from getting infected by the diseases'. But unfortunately in India, the rates of new infections among men who have sex with men continue to go up. Until we acknowledge these behaviors and work with people involved with these behaviors, we are not going to halt and reverse the HIV epidemic. Countries which protect men who have sex with men. have double the rate of coverage of HIV prevention services, as much as 60%.[1]

Transmission through sexual contact is estimated to accounts for 75 to 85% of cumulative cases of HIV/AIDS to date. Mode of transmission is important predictor of risk. The risk of transmission per contact event varies with the likelihood of exposure of virus-infected fluids with blood of the recipient. Vaginal intercourse represents the most common yet the least efficient mode of transmission per contact. Women generally appear to be more susceptible than men due to greater likelihood of trauma to the vaginal epithelium during intercourse and the longer exposure to HIV virus in ejaculate after intercourse. The statistical risk of infection through vaginal intercourse is notably low regardless of which partner is infected. In single episode of heterosexual sex when the male is infected, transmission rates may be as low as 0.1%. Female-to-male rates are lower still. Anal intercourse has higher infectivity due to the likelihood of damage to epithelial integrity. Accidental needle stick and needle sharing with infected partner fall within the same range of efficiency as anal intercourse at approximately 1% infected per contact.

SEXUAL BEHAVIOR AND HIV

The response of sexual behavior to HIV is an important input to predicting the path of the epidemic and to focusing prevention efforts. Existing estimates suggest limited behavioral response, but fail to take into account possible differences across individuals.

Men who have sex with men (MSM) is an inclusive public health construct used to define the sexual behavior of males who have sex with other males, regardless of the motivation for engaging in sex or identification with any or no particular 'community'.[2] The words 'man' and 'sex' are interpreted differently in diverse cultures and societies as well as by the individuals involved. It is important to differentiate between men who share a nonheterosexual identity (i.e. gay, homosexual, bisexual) and men who view themselves as heterosexual but who engage in sex with other males for other reasons, like forced cohabitation, economic, isolation, etc. Places which forced cohabitation, like prisons or military establishments, are important contexts for male-to-male sexual activity not linked to homosexual identity. Given the conditions of imprisonment, including human rights violations and lack of access to condoms, the risk of HIV transmission in prisons is very high. Transgender is an umbrella term for persons whose gender identity and expression does not conform to the norms and expectations traditionally associated with the sex assigned to them at birth. Transgender people may self-identify as transgender, female, male, transwoman or transman, transsexual, or one of many other transgender identities, and may express their genders in a variety of masculine, feminine and/or androgynous ways.[3] Until recently, in the context of HIV prevention, transgender people were included as MSM. However, there is a clear trend to stop, including transgender people as part of the MSM population. This is in response to the higher vulnerability and specific health needs of transgender people, and to their justified demand for an independent constituency status in the global HIV response.

EPIDEMIOLOGY

Current statistics likely describe only a fraction of MSM at risk for HIV. There are many more MSM than those who identify as gay or transgender. In Asia, as in many other places in the world, there are men who have sex with both men and women but do not identify as gay or do not associate any particular identity with their sexual behavior. The Asian epidemic model estimates that there are 10 million MSM in Asia, some of whom have sex with women or are married.[4] It also predicts that, if HIV prevention does not improve from 2007 levels, MSM will soon account for the largest proportion of people living with HIV in Asia. Despite these alarming estimates, rates of HIV infection among MSM in Asia and the Pacific have largely been hidden.

Since the beginning of the epidemic in the early 1980s, MSM and transgender people have been disproportionately affected by the HIV. The risk for infection remains high among them; and there has been a resurgence of HIV infection among MSM, particularly in industrialized countries. Data are emerging of new or newly identified HIV epidemics among MSM in Africa, Asia, the Caribbean and Latin America.[5]

A meta-analysis of surveillance data in low- and middle-income countries found that MSM are 19.3 times more likely to be HIV-infected than the general population.[3] Reported HIV prevalence among MSM ranges from 0 to 32.9% with rates surpassing 20% in countries as diverse as Bolivia, Jamaica, Mexico, Myanmar, Thailand, Trinidad and Zambia.[3,5] HIV incidence among MSM ranges from 1.2 to 14.4 per 100 person-years.[5]

Recent studies from sub-Saharan Africa reported that HIV prevalence among MSM ranges from 6 to 31%, and an HIV incidence of 21.7 per 100 person-years among MSM in a small cohort from Coastal Kenya (n = 156).[6] In Asia, the odds of MSM being infected with HIV are 18.7 times higher than in the general population and the HIV prevalence ranges from 0 to 40%.[3] In Latin America, it is estimated that half of all HIV infections in the region have resulted from unprotected anal intercourse between men.[7]

The few existing epidemiological studies among transgender people have shown disproportionately high HIV prevalence ranging from 8 to 68%,[8] and HIV incidence from 3.4 to 7.8 per 100 person-years.[9] There are now alarming HIV prevalence rates among MSM in Asia and the Pacific. A quick scan of the available evidence shows just how serious the situation really is. Cross-sectional surveys in a number of cities in China have demonstrated that MSM may be up to 45 times more likely to have HIV than the general population.[3] In Thailand, MSM are 20 times more likely. A recent study in Lao PDR suggests that MSM could account for up to 75% of all new infections.[10] Overall, MSM are as much as 25 times more likely to be living with HIV than the general population of Asia and the Pacific.[19] Data from 2008 show that MSM in urban areas of Thailand, Cambodia and Myanmar are experiencing severe HIV epidemics with prevalence greater than 10%. MSM in cities in Vietnam, Lao PDR, Indonesia, China, Nepal and India face intermediate-level epidemics with prevalence of 2 to 10%. Emerging MSM epidemics are now evident in Pakistan, Bangladesh, East Timor and the Philippines.[11]

HIV epidemic in India is concentrated in nature with high prevalence among high-risk groups. Heterosexual mode of transmission is still the predominant mode of HIV transmission in India. Though HIV trends among high-risk groups have mixed patterns, there are pockets of high HIV prevalence among high-risk groups in many parts of the country.

The overall HIV prevalence among different population groups in 2007, continues to portray the concentrated epidemic in India, with a very high prevalence among high-risk groups – IDU (7.2%), MSM (7.4%), FSW (5.1%) and STD clinic attendees (3.6%) and low prevalence among ANC clinic attendees.[12]

SEXUALITY AND SEXUAL RISK

When planning to scale up services for MSM and transgender people, a key problem is that they are often presumed to be a homogeneous community, whereas in reality they represent a range of diverse identities and forms of social and sexual associations. These differences are important in terms of the implications for HIV risk and vulnerability ensuring that those with the highest need are addressed first. Sexual risks as well as risk reduction options are different for those subgroups, i.e. risks associated with receptive anal intercourse are higher than those associated with insertive anal intercourse.[13] Likewise,

condom use is more often controlled by the insertive partner, particularly if gender or power dynamics impede the negotiation of condom use by the receptive partner.[14]

Programing for MSM and transgender people therefore implies recognizing and understanding their diversity, and identifying the needs of specific subgroups. It is important to prioritize those groups most in need without neglecting others.

SEROSORTING

Serosorting is defined as a behavior in which ‘a person chooses a sexual partner known to be of the same HIV serostatus, often to engage in unprotected sex, in order to reduce the risk of acquiring or transmitting HIV’.[15] The prevalence of serosorting ranges from 21 to 62% for HIV-positive and HIV-negative MSM, respectively; however, most studies on serosorting are based on research in developed countries.[16] The benefits of serosorting for HIV-positive individuals may include reduced secondary HIV transmission and the ability to forgot condom use. However, serosorting does not protect against other sexually transmitted infections (STIs) and potential risks, such as HIV superinfection and drug resistance.

PREVENTION CHALLENGES

The high prevalence of HIV infection among MSM means they face a greater risk of being exposed to infection with each sexual encounter, especially as they get older.

Sexual risk accounts for most HIV infections in MSM. These risks include unprotected sex and sexually transmitted diseases (STDs). The practice of not using a condom during anal sex with someone other than primary, HIV-negative partner continues to pose a significant threat to the health of MSM. Alcohol and illicit drug use contribute to increased risk for HIV infection and other STDs among MSM. The use of substances, such as alcohol and other drugs, can increase the likelihood of risky sexual behavior.

Many MSM with HIV are unaware of their HIV infection. Low awareness of HIV status among young MSM likely reflects several factors: They may have been infected more recently, may underestimate their personal risk, may have had fewer opportunities to get tested, or may believe that HIV treatment minimize the threat of HIV. CDC recommends that all MSM get tested for HIV once a year, and more often if they are at higher risk. MSM at higher risk includes those who have multiple or anonymous sex partners or use drugs during sex. Stigma and homophobia may have a profound impact on the lives of MSM, especially mental and sexual health. Internalized homophobia may impact ability to make healthy choices, including decisions around sex and substance use. Stigma and homophobia may limit the willingness of MSM to access HIV prevention and care, isolate them from family and community support and create cultural barriers that inhibit integration into social networks.

Racism, poverty and lack of access to health care are barriers to HIV prevention services, particularly for MSM from racial or ethnic minority communities. A recent CDC study found a strong link between socioeconomic status and HIV among MSM: Prevalence increased as education and income decreased, and awareness of HIV status was higher among MSM with greater education and income.

Complacency about HIV may play a key role in HIV risk, particularly among young MSM. Since young MSM did not experience the severity of the early HIV epidemic, some may falsely believe that HIV is no longer a serious health threat because of treatment advances and decreased mortality. Additional challenges for many MSM include maintaining safe behaviors over time and underestimating personal risk.

MSM have not been a focus of sentinel surveillance programs; indeed a recent UNAIDS study of 20 countries in Asia reported that 60% of national surveillance mechanisms did not include MSM in their data collection and 15% did not collect behavioral and HIV infection data among MSM.[17]

If HIV prevention does not improve, MSM will soon account for the largest proportion of people living with HIV in Asia. The challenge is to reach MSM with proper information, support and care, through sources they find trustworthy, safe, credible, and that they will return to again and again. Despite the vulnerability of MSM to HIV/AIDS, until recently little attention has been focused on these communities in Asia. Stigma and discrimination have marginalized MSM and rendered them invisible, and the result is that the unique prevention and treatment needs of these populations have largely been ignored.[18]

The rising rates of HIV among MSM in Asia and the Pacific remained hidden for many years as governments, international NGOs and multilateral agencies focused on preventing and responding to HIV among the general population and in other most-at-risk populations. Behavioral and other studies demonstrate the damaging results of this focus—MSM may have interpreted the fact that organizations focused on the general population (and remained relatively silent on MSM risk) to mean that sex between men presents a low risk for HIV. In some cases, men have been choosing sex (including unprotected sex) with other men because they believe sex with women, including female sex workers, poses the real risk for HIV transmission.[19]

WHAT CAN BE DONE?

Most countries in Asia spend less than 1% of their HIV budgets on MSM, despite 5 to 20% of new infections occurring among them.

Scaling up services to MSM in Asia and the Pacific will not be possible through clinic and hospital settings alone. MSM community-based and community-led groups are essential, if programs are to reach all of the MSM requiring information and services.

In September 2005, 191 UN member states endorsed the goal of universal access to HIV prevention, treatment and care for all who need it. This universal access agenda provides a useful framework for advocating and measuring progress in the response to HIV among MSM. This is a better framework for inspiring a response among most at-risk populations, for it places value on preventing HIV transmission and providing HIV treatment, care and support for people from marginalized

populations as a legitimate and worthy end in itself. This is more useful than previous 'bridging population' arguments, which sometimes suggested that HIV should be addressed among marginalized populations as a way to prevent the epidemic from reaching general populations, which must somehow be more deserving. Several tools and frameworks have been developed to help countries in putting the universal access agenda into practice. These have built on the model of a continuum of HIV prevention, treatment, care and support services. The WHO has developed a set of priority interventions for the health sector and these have been adapted for use with particular populations.[20]

The prevention-to-care continuum refers to a range of services and interventions that aim to keep people healthy by preventing disease, promoting health, and treating and managing illness. It incorporates approaches, including health promotion, behavior change communication, emotional and social support and clinical care. It aims to encompass the broad bio-psychosocial needs of individuals and populations. In fighting HIV, the prevention-to-care continuum is considered essential to reaching universal access to HIV prevention, treatment and care across the globe. For MSM, a conceptual model for the HIV prevention-to-care continuum has been formulated includes:

- Improving knowledge through community education, outreach services
- Promoting behavior change through community mobilization, health education workshops, seminars, support groups
- Providing STI diagnosis and treatment
- Enabling people to know their HIV status through effective VCT services
- HIV treatment, care and support that provides for the social and emotional needs of people with HIV
- Access to other health promoting services, such as drug and alcohol treatment services for alcohol and drug users; mental health services; tuberculosis (TB) diagnosis and treatment service; and
- Access to other social, legal and welfare services.

Adding to the above, the WHO very recently has published its guidelines for prevention and treatment of HIV and other STIs among men who have sex with men and transgender people.[21] This guideline will provide recommendations for regional and country partners on appropriate interventions designed to address needs of MSM and transgender people. It also provides an opportunity to highlight and emphasize the correlation between prevention and treatment in the response to the HIV epidemic among MSM and transgender people, particularly in light of increasing evidence about the preventive benefit of antiretroviral therapy (ART). This may lead to a substantial reduction in transmission at the population level. These guidelines focus on:

- Human rights and nondiscrimination in health care settings
- HIV prevention, care and treatment by promoting consistent use of condoms, offering testing and counseling services, implementing community and individual level behavioral interventions to prevent the spread of HIV and other STIs MSM and transgender people living with HIV should have the same access to ART as other populations
- Prevention and care of other STIs.

CONCLUSION

Scaling up services adequately for key populations at higher risk for HIV infection globally, particularly in concentrated epidemics, is essential to halt and reverse epidemics at the population level. An important challenge in reaching these populations is that they are often marginalized, stigmatized and criminalized. These population's needs are often ignored by society and remain unattended by health services, despite their higher vulnerability. It is essential that the expansion of MSM HIV prevention and care services across Asia be driven by an agreed-upon set of quality standards and guidelines. Most of the elements of these standards already exist or can be adapted from standards and guidelines being used in other places. Providing an interconnected spectrum of services will be the best approach to addressing the HIV prevention, treatment, care and support needs of MSM. But these services will need to differ across settings, varying according to the MSM population to be reached, the capacity and readiness of governmental and nongovernmental providers and the contributing factors of HIV vulnerability (Fig. 1) (such as poverty, drug or alcohol use, mobility and migration, incarceration, institutionalized criminalization, persecution and/or violence, social marginalization, etc.). In each setting, unique solutions will need to be found to address challenges in reaching more vulnerable networks of MSM. However, in all cases, the best approach to addressing the health and human rights needs of MSM will be an approach that addresses multiple needs from multiple providers and multiple access points, linking all of this with consistent messaging, accessibility and quality over time. In addition, MSM community-based and community led groups must receive expanded funding and substantial technical assistance to scale up HIV services among MSM.

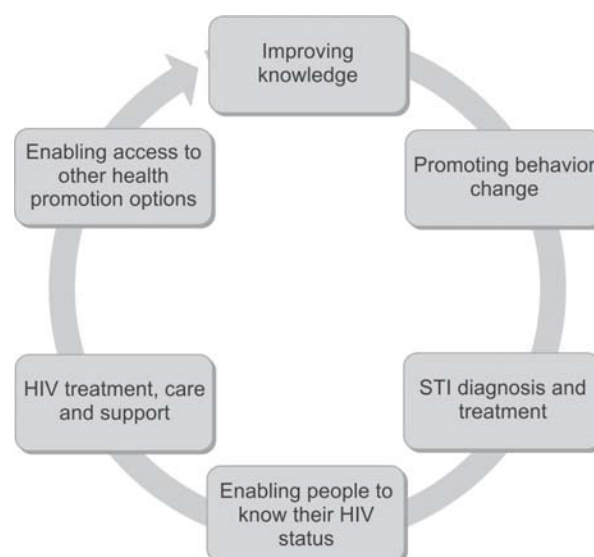

Fig. 1: Model for HIV prevention to care continuum

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