

HIV/AIDS in Asia**HIV and Men Who Have Sex with Men in China :
the Potential for a Rapid Increase in Infection**Kyung-Hee CHOI, PhD, MPH¹ and Jenny X. LIU, MPP²¹ Center for AIDS Prevention Studies, University of California, San Francisco, California, USA² School of Public Health, University of California, Berkeley, California, USA**Introduction**

In June 2002, the United Nations (UN) warned that China, a country with one-fifth of the world's population (1.3 billion), could face a "catastrophe [involving] unimaginable human suffering" without swift action to control the spread of HIV.¹⁾ To date, 141,000 HIV/AIDS cases have been reported. However, the UN and the Chinese government estimate that 650,000 individuals had already been infected with HIV at the end of 2005.²⁾ Although 75% of current infections are attributable to injection drug use and transfusion of HIV-infected blood and blood products, sexual transmission is expected to drive the future course of the HIV epidemic as the virus spreads from high risk groups to low risk groups.²⁾ China's HIV sentinel surveillance and findings from molecular epidemiologic studies suggest that HIV has begun to spread from HIV-positive injection drug users and former plasma donors to their sex partners.²⁻⁴⁾ Some localities in provinces hit hardest by the epidemic, such as Yunnan, Henan, and Xinjiang, are already experiencing a generalized epidemic where HIV prevalence exceeds 1% among patients attending antenatal clinics.²⁾ Moreover, studies have identified a number of risk factors that could fuel a rapid rise in sexually transmitted HIV cases in China, such as high rates of sexually transmitted infections (STIs), commercial sex patronage, low condom use, and concurrent sexual partnerships.⁵⁾ To date, very few HIV cases among men who have sex with men (MSM) have been reported in China,⁶⁾ and the prevalence of HIV infection among Chinese MSM is only beginning to be understood.⁷⁾ This paper provides a brief overview of homosexuality and MSM communities in China and reviews available data to explore

the potential role of MSM in the expansion of the HIV epidemic in China.

Homosexuality

Historical records document the recognition and, at times, the acceptance of homosexuality as an integral part of ancient China.^{8,9)} In contemporary Chinese society, however, same-gender sex has been less tolerated; its existence has often been denied. Until recently, MSM could be arrested under vague laws against hooliganism; homosexual behavior was considered to be a psychiatric condition by the Chinese Psychiatric Association until 2001.¹⁰⁾ Though not illegal, homosexuality is not socially acceptable as it is often equated with rejecting China's fundamental cultural tradition that expects each person to fulfill certain filial duties.⁸⁾ Sons, in particular, are obligated to get married, have children, and carry on the family name. Because of potential ostracism by family and friends, as well as discrimination in employment, housing and school, most MSM hide their sexual orientation, engage in homosexual activities in secret, and often marry under social pressure.¹¹⁾

Emergence of MSM Communities

China's MSM communities began forming in the mid-1990s when same-gender sex became more publicly open.¹²⁾ MSM communities first emerged in major urban areas, but quickly developed in medium-size cities as well. According to one MSM venue survey, by the year 2000, Beijing had already had 14 distinct types of venues (e.g., bars, dance clubs, bathhouses, parks, public toilets, cafés, tea houses, gyms) and 48 specific locations where MSM congregated.¹³⁾ Another venue survey conducted in 2004 found that even Hefei, the rural provincial capital of Anhui with a population of 1 million, had bars and bathhouses catering to MSM, as well as parks and public toilets frequented by MSM, although smaller in number (seven locations in total).¹⁴⁾ Another type of venue that has gained enormous popularity among MSM in China is the Internet. By the

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year 2001, there were more than 500 local and national gay websites around the country.¹⁵⁾

MSM Population Size

There are several estimates of the number of MSM in China.¹²⁾ According to some Chinese scholars, the size of the MSM population could range from 10 million to 25 million.¹²⁾ The China Ministry of Health estimates that between 2% and 4% (5–10 million) of sexually active males are MSM.¹⁶⁾ In one large national survey of sexual behavior in China, 2% of male respondents aged 20–64 self-identified as gay.¹⁷⁾ If this 2% MSM proportion is applied to the total population of males in China, there would be approximately nine million MSM.

HIV Cases

Homosexual contact accounted for only 0.2% of 89,067 HIV cases reported through September 2004.⁶⁾ However, this figure might be grossly underestimated because MSM cases are being under-reported and under-detected when compared to other cases. Even though the first confirmed HIV case was found among MSM in Beijing in 1989,¹²⁾ MSM were not added to China's HIV/AIDS national sentinel surveillance system until 2003. By comparison, injection drug users, commercial sex workers, and patients attending sexually transmitted disease clinics had been part of the sentinel surveillance system since the late 1980s or the early 1990s.¹⁸⁾ By the year 2003, a total of 194 sentinel sites were in operation around the country, but only one site targeted MSM.⁵⁾

HIV Prevalence

Because few systematic efforts have been made to characterize an HIV epidemic situation among MSM in China, the true nature of the epidemic in this population is unclear. However, a few available studies indicate that HIV has entered MSM communities in various areas of China. In northeast China, the prevalence of HIV infection was 1% among MSM in Shenyang (the provincial capital of Liaoning)¹⁹⁾ and 1.38% among MSM in Harbin (the provincial capital of Heilongjiang).²⁰⁾ Similar HIV prevalence was found among MSM in east China (1.47% in Shanghai)²¹⁾ as well as in south China (1.75% in Shenzhen, which borders Hong Kong, and 1.7% in Guangzhou, the provincial capital of Guangdong).^{22,23)} In Beijing, the infection rate among MSM who participated in an HIV prevalence survey in 2001–2002 was higher (3.1%).²⁴⁾ The HIV prevalence rate was also higher among MSM in Hefei (3.4%).²⁵⁾

Other Sexually Transmitted Infections

Evidence suggests that a large number of MSM are infected with STIs, including those that are known to facilitate HIV transmission, such as syphilis.²⁶⁾ Data from MSM in Beijing and Shanghai showed that 23% and 24% of respondents reported a lifetime history of sexually transmitted diseases, respectively.^{14,24)} A survey of MSM in Shangtuo revealed that 41.3% of respondents reported STI symptoms during the past 12 months, including genital ulcers (7.6%), abnormal urinary discharges (17.4%), and abnormal anal discharges and ulcerations (27.1%).²⁷⁾ Among MSM in Hefei, 10.3% had ever had an STI, with 2.3% reporting two or more STIs.²⁵⁾ Studies conducted with MSM in Shenyang, Shanghai, and Shenzhen reported syphilis infection rates ranging from 2.63% to as high as 20.8%.^{14,19,28)}

HIV Transmission Knowledge and Misconceptions

Many MSM have limited knowledge about HIV transmission routes. A 2001–2002 survey of MSM in Beijing showed that most of respondents knew that HIV can be transmitted by sharing unclean needles (91%) and from an HIV-positive mother to her child (94%).²⁹⁾ However, almost one quarter (24%) did not know about sexual transmission of the virus. Many also had misconceptions about safer sex practices. For example, 27% believed that they will not get HIV if they withdraw before ejaculation or do not ejaculate inside their partner; 23% believed that they will get HIV if they have sex with foreigners; and 18% believed that they will not get HIV if they have sex with someone they trust. Similar results were reported from a survey of 215 MSM in Harbin where 23.7%, 19.4%, and 23.7% of participants responded affirmatively to the same questions, respectively.²⁰⁾ In addition, one-fourth of respondents thought that asymptomatic HIV-infected people would not transmit HIV to others. In a survey of 114 MSM in Shenzhen, the majority of respondents believed that HIV could be transmitted through sharing utensils (50.9%), sharing bathing facilities (50.0%), and shaking hands with an infected individual (69.3%).²²⁾ Of 342 MSM in Shenyang, only 56.1% believed that correct condom use could prevent STI/HIV infection and 28.1% believed that non-symptomatic HIV-infected individuals were not infectious.¹⁹⁾

Sexual Behavior

Data show that MSM in China initiate their first sex with other men in their late teens. In two nationwide MSM surveys, the average age of first sexual intercourse with another man was 19 years old.^{20,30)} Among MSM surveyed in Harbin, the median age of first sexual

intercourse was 19 with 69.6% of respondents experiencing first with a male partner.²⁰⁾ In a survey of MSM in Shenyang, the median age of first sexual intercourse was 18 years old.¹⁹⁾ Of those MSM surveyed in Shenzhen, 22.8% experienced their first sexual encounter with another man²²⁾ compared to 56.4% of respondents sampled from bars in Shenyang.¹⁹⁾

Several studies have revealed that many MSM in China are married and have sex with women. For example, a survey of MSM who were recruited around the country found that one-third of respondents were ever married and close to half reported having ever had sex with women.³¹⁾ Among MSM surveyed in Harbin, 26.5% were married and 9.3% were divorced while two-thirds had ever had sex with a female partner.²⁰⁾ In Hefei, 14.9% of respondents were married while 55.7% of respondents had had a female sexual partner in the previous two months.²⁵⁾ In an Internet-based survey, 17% of MSM recruited from Chinese gay chat rooms were currently married and 49% of them reported having ever had female sex partners.¹⁵⁾ Among MSM surveyed in Beijing, 64% of respondents reported having ever had sex with women.²⁹⁾ This Beijing survey also showed that 30% reported having had sex with women during the six months prior to interview.²⁹⁾

Limited data indicate a significant proportion of MSM have sex with foreigners. One study conducted in Beijing reported that 11% of respondents interviewed reported having sex with foreigners in the past six months; among these men, 73% had partners from the United States, Canada, Australia, Russia, or Europe, 46% had partners from Japan, Korea, Thailand, or other Asian countries, and 2% had partners from Latin America.²⁹⁾

As the sex industry has grown in China, the commercial sex industry for MSM has also developed. In two cross-sectional surveys conducted in Harbin in 2001 and 2003, 26.3% and 31.0% of respondents reported having sold sex, respectively.²⁰⁾ In Shenzhen, 36.0% of respondents had ever offered paid sex services to others, 68.3% to male clients and 31.7% to female clients.²²⁾ Of MSM surveyed on the internet, 15% had paid for sex with another male and 17.7% provided sex for money.¹⁵⁾ In Hefei, 17.8% of respondents reported having had a sexual encounter with a male commercial sex worker in the two months leading up to the survey.²⁵⁾

Studies have documented low rates of condom use among MSM in China. According to a survey of MSM in Hefei, 16% of respondents reported consistent use of a condom during anal sex in the previous six months while 21.6% consistently used a condom for heterosexual vaginal sex during the previous six months.²⁵⁾ In Harbin, 84.5% of respondents had had anal intercourse without a condom within the last six months.²⁰⁾ In the

same study, only 14.4% of individuals reported using a condom every time. In a study of MSM in Beijing, 49% of respondents had unprotected anal intercourse with men and 11% had unprotected intercourse with both men and women in the past six months.²⁹⁾ There was a number of reasons given for not using condoms during sex with men or women in this study. The most commonly cited reasons were the perception that respondents (57%) and their sexual partners (66%) were at low risk for HIV, respondents' (58%) and their partner's (62%) negative attitudes toward condoms, being in a mutually faithful sexual relationships (61%), not thinking one could get the AIDS virus or pass the AIDS virus on to others (57%), and not having access to condoms when having sex (52%). Other barriers to using condoms during sex included respondents' (27%) and their partner's negative HIV status (25%), a bad quality of condoms (24%), being under the influence of alcohol during sex (21%), an inability to buy enough condoms for consistent use during sex (10%), and trying to get one's partner pregnant (8%).

HIV Test Seeking and Knowledge of HIV Infection

Free HIV testing was not available in China until April, 2004.³¹⁾ HIV testing has not been promoted among Chinese MSM, however, and consequently is not common practice in the MSM population. According to a survey of MSM recruited around the country, 9.4% of respondents reported having ever been tested for HIV.³²⁾ Among MSM in Harbin and Beijing, the prevalence of HIV testing was 11.7% and 18%, respectively.^{20,33)} Among participants in the Beijing study who had never been tested for HIV, the most common reasons for not testing were perceived low risk of HIV infection (72%), not knowing the location of test sites (56%), fear of positive test results (54%), fear of people learning about their homosexuality (47%), and fear of breach of confidentiality about test results (47%).³³⁾ Substantial proportions also cited costs (22%), fear of needles (17%), and transportation (17%) as barriers to seeking HIV testing services. Within the same study, of 15 participants who tested positive for HIV, only one person (7%) knew their status before being tested in the study.

Perceived Risk for HIV Infection

Although data suggest high levels of sexual risk-taking among MSM in China, only a handful of individuals perceive that they are at high risk for HIV. In a study of MSM in Beijing, only 15% of respondents believed they were at somewhat high or very high risk for HIV; the remaining 85% felt they were at either low risk or no risk at all for HIV.²⁹⁾ A similar level of

low perceived risk was observed in a study of MSM in Shanghai and Hefei, with 20% and 5% believing themselves at high risk, respectively.¹⁴⁾ MSM surveyed in Harbin also perceived their risk for HIV to be low with 87% of respondents believing their own risk for HIV to be either none or very low.²⁰⁾

Availability and Utilization of HIV Prevention Programs

Few HIV/AIDS prevention programs are currently targeting MSM in China. The "Friends" magazine, beginning in 1998 and distributed in more than 30 cities, contains articles on basic facts related to HIV/AIDS and STIs, in addition to discussions of social issues relevant for MSM and individual testimonials.^{12,20)} Telephone hotline counseling services, originally begun in Beijing in 1997, are now available in 17 major cities (www.aizhi.org/jkwz/hotline.htm). Trained volunteers provide psychological health services, referrals to other services, as well as HIV/AIDS related information. Volunteers also carry out outreach services at local gay venues, distributing "Friends", brochures, and condoms, and organize social events in the community. Such venue-based interventions were popular among MSM in Beijing, although not held on a regular basis.¹³⁾ As the Internet has become more popular, gay websites that provide information related to HIV/AIDS have been proliferating. Over 500 gay sites were found in 2001 with most containing gay-related news, galleries, communities, and chat rooms, as well as information about HIV/AIDS, but no services for HIV prevention.¹⁵⁾ Moreover, the Internet provides additional privacy and accessibility that may be available elsewhere. Some localities provide free volunteer counseling and testing services and general information regarding HIV/AIDS is available from clinics and doctors.⁶⁾

MSM in China appear to be accessing available HIV-related services. According to a survey of MSM in Beijing, respondents reported using four different types of HIV prevention services during the two years prior to interview on average (range 0–15).²⁹⁾ The most commonly cited services were mass media (85%), the "Friends" magazine (49%), one-on-one peer education (49%), the Internet (44%), and social events such as dance parties, house parties, and sports games (37%). Fewer men used the following services: free condoms (24%), free condom lubricants (19%), the Beijing Tongzhi Hotline Program (11%), small group meetings to discuss issues related to being gay and at risk for AIDS (10%), and the AIDS/STD Hotline (5%). Among MSM surveyed in Shenzhen, the main source of information about safe sex was newspapers and magazines (77.2%) followed by television (54.4%), friends (47.4%), the Internet (24.6%), healthcare workers

(22.8%), and gay venues (15.8%).²²⁾ Similarly, the mass media was the primary source of information about HIV prevention among MSM surveyed in Harbin (i.e., 80.5% from newspapers and magazines and 76.3% from television and radio versus 16.3% from healthcare workers).²⁰⁾

Experiences of Social Discrimination

Although homosexuality may now be more visible in China, the social climate surrounding homosexuality still deeply stigmatizes it. In qualitative interviews conducted with 30 MSM in Shanghai in 2004, a total of 97 descriptions of stigma and discrimination related to homophobia were documented; each respondent reported at least one instance of stigma or discrimination.³⁴⁾ Four settings for stigma and discrimination were identified from the interviews: with family or close friends, in public, with the police, and at work. Most often, the respondents experienced stigma and discrimination with family members or close friends (N=60). The situation often involved pressure, coercion, or fears by MSM of causing distress in friends and family. Other encounters occurred in public settings (e.g., on the street) (N=29) involving experiences with people not included in their immediate social networks. Some encounters involved interactions with police or public security officials (N=3), in which respondents were singled out because they were homosexual or were perceived to have homosexual attributes, or occurred in work-related settings (N=7) involving colleagues or clients. Although MSM may face rejection, social ostracism, and police abuse, they more often contended with persistent fear and anxiety related to their homosexuality. As a consequence, respondents often evaded the scrutiny of others by actively avoiding potentially stigmatizing situations, such as decreasing contact with family members, eluding invasive questions, and some even left their families and homes in rural areas for more socially tolerant urban areas. Respondents also reported lying about having girlfriends and pretending to be "normal", while others rationalized away the stigma that they felt, often citing lack of understanding by family members. Disclosure was an uncommon response—one that many respondents believed was not a viable option.

Conclusions

HIV prevalence is relatively low among MSM in China. However, HIV could spread rapidly within the MSM community given MSM's limited knowledge about HIV transmission routes, low perceived risk for HIV infection, and high rates of unprotected anal sex with men. Moreover, there is the possibility that MSM in China may serve as a sexual "bridge" between high-

risk men and low-risk women as a significant proportion of MSM are sexually active with both men and women and practice unsafe sex with both types of partners. The emergence of MSM communities around the country could facilitate the rapid acceleration of the HIV epidemic by providing easier access to potential sex partners. Despite the potential impact of an unchecked epidemic within this risk group, given its population size, few efforts have been made to stop further spread of HIV among MSM in China. In recent years, China has scaled up its efforts to combat the HIV epidemic by implementing new prevention programs, such as methadone maintenance, syringe exchange, better management of blood collection, and free testing and counseling.²⁾ Unfortunately, none of these new initiatives specifically target MSM. China must expand its commitment to MSM and provide resources to this population if it is to bring the HIV epidemic under control.

However, social discrimination against MSM in China may hinder HIV/AIDS prevention efforts while contributing to high-risk behaviors at the same time. MSM may be reluctant to seek out health care services or be willing to accept outreach services, even if free, out of fear of discrimination or disclosure of their homosexuality. In addition, and as found in studies of MSM in other countries, deterioration of physical and psychological well being from both discrimination and perceived social stigma can ultimately lead to increased risk for HIV/AIDS.³⁵⁾ Intervention into this population to stem the further spread of HIV will require sincere attention to the social realities of MSM in China. Prevention efforts will need to be sensitive to MSM issues and address aspects of social discrimination. Education and awareness campaigns should also work to dispel misconceptions of homosexuality and stereotypes of gay men while propagating truthful and accurate HIV/AIDS information. The fostering of safe and nonjudgmental environments can facilitate coping as well as the dissemination of crucial HIV/AIDS prevention services.

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