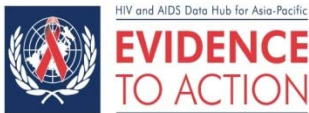




SEX WORK & HIV CHINA

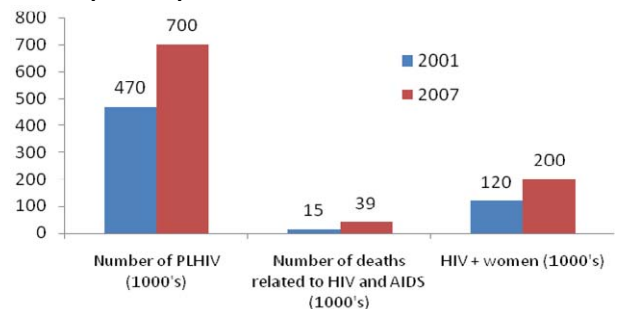


In China, HIV prevalence among the general population is 0.06%, with the number of infections continuing to increase [5]. At the end of 2009, an estimated 740,000 adults and children were living with HIV (range 560,000-920,000) and another 105,000 had AIDS [5]. Although infections have been reported in all 31 provinces, it is estimated that 80% of people living with HIV reside in rural areas [1]. The number of new HIV cases was estimated at 48,000 in 2009. Overall, China is still experiencing a low-prevalence, yet growing epidemic, with some key regions experiencing high-prevalence epidemics [5].

In the late 1990s, thousands of people were infected with HIV, mainly through unsafe blood handling and injection drug use. Figure 1 shows the increase in epidemiological indicators between 2001 and 2007 [50]. Among the 48,000 new infections estimated for 2009, heterosexual transmission accounted for 42.2% and homosexual transmission 32.5% of cases [5].

Overall, China is still experiencing a low-prevalence epidemic, with some key regions experiencing high prevalence epidemics. However, the epidemic has already started to spread from key populations at higher risk to the general population.

Figure 1. Comparison of HIV epidemiological data, 2001 and 2007, People's Republic of China



Source: UNAIDS, Epidemiological Fact Sheets, 2008.

SEX WORK

Sex work was especially common in the larger trading cities in the late 19th and early 20th centuries. When the communist government took power in 1949, the congress ordered the closure of all brothels. Moreover, female rehabilitation and treatment centres were set up and sex workers were detained [15]. In 1955, a national campaign promoting 'moral values' – condemning sexually-transmitted infections (STIs) and sex work – led to the purported abolishment of sex work, the closure of brothels, and the education of sex workers. It also contributed to the eradication of nearly all STIs by 1964 [1]. The rapid economic growth since the decision to open up the Chinese economy in 1978 resulted in a large-scale, rural-urban pattern of migration together with widening income gaps. In addition, more tolerant sexual attitudes and increased tourism resulted in the development of the commercial sex industry. The growing economy became the main driver of sex work, and, in turn, the commercial sex industry has grown dramatically over the past two decades [15].

The estimated number of female sex workers (FSW) was 25,000 in 1985 to 4-6 million in 2000 (Table 1) [1]. In 2001, a US State Department report on China estimated the number of sex workers to be around 10 million, although more recent 2005 estimations of the sex worker population by UNAIDS and the Chinese Government was between 2.8 and 4.5 million [1, 51].

Epidemics among FSWs in China are significantly diverse across the country and even in the within the provinces. Commercial sex is highly prevalent in the coastal provinces [6]. In the urban areas of Guiyang and Xingyi, the estimated size of the FSW populations are 17,500 (3.4% of the urban female population) and 2,500 (3.6% of urban female), respectively [7].

Table 1. Estimates of the size of the sex worker populations.

Group	Location	Year	Size of sex worker population	Ref.
Sex workers	Guiyang area	2007	17,500 (10,300-31,900)	[7]
	National			
	Xingyi area	2007	2,500 (2,000-3,400)	[7]
		2006	1.8-4.5 million	[4]
	National	2001	10 million	[1]
		2000	4-6 million	[1]
		1985	25,000	[1]
Clients of sex workers	National	2007	9% of adult men	[1]
		2005	18-37 million	[8]

The main cities, Beijing and Shanghai, have sex worker populations mainly made up of migrant workers from high-risk areas (which include Yunnan province and Xinjiang autonomous region, Guangxi, and Henan) [6]. The estimated population of clients of sex workers is between 17.7 and 37.4 million [8].

There is a spectrum of different types of sex workers of different socioeconomic status in China. At one end of the spectrum are 'high status' sex workers who work in higher class dance halls and private settings. On the other end are the 'streetwalkers'. The majority of sex workers encounter their clients in entertainment establishments or personal service sectors.

Establishment-based sex workers are commonly called "Xiaojie" ('Miss') [10]. In addition, new types of sex services have emerged, including call girls, sex service via the internet, renting houses, cars, etc, making the response more challenging.

The commercial sex industry in China is less commonly based in brothels in comparison to most of their Asian counterparts. A 2000 study on brothel-based sex work found that there are three types of common employment arrangements that determine the economic and social relationship between the sex worker and their manager [11]. The most common combines housing and work, since most FSWs do business outside their hometowns in an attempt to maintain anonymity. Next, there are sex workers who give all earnings to their employer, who in return provides them with daily necessities. Lastly, there are "free agents" who either manage themselves or are free to choose their own managers.

Sex work is of a more transient nature and sex workers are usually based in karaoke or "song" bars, hotels, "hairdressing salons" and massage parlours [1, 6]. Street-based sex workers are also present, but this form of sex work is reportedly done on a short-term basis – perhaps out of fear of arrest or harassment from authorities. Sex workers are usually from the lower socio-economic bracket, often having a goal to save enough to help their family, or start a small business [6]. The average monthly income ranges from US\$50 to US\$85, depending on rural-urban areas [10].

Another important population of sex workers is made up of male sex workers (MSWs). MSWs who serve men in China are commonly referred to as 'money boys' ("yazi") and 'child' or 'son' ("haizi") [17]. Very little data is available on MSWs due to political and cultural restrictions as well as denial about their existence and social marginalization [18]. The population size of MSWs in China is unknown, but estimates range from 4.9% to 24% of all MSM¹ [17] and most of them are living in the cities.

¹ Estimated population size of MSM as of 2010 is 2~7.1 million [51]

MSWs may have sex with both men and women. One survey of MSWs in the cities of Beijing and Qingdao found that 44% identified themselves as homosexual, 44% identified as bi-sexual and 12% said they were heterosexual (n=85) [18]. A 2008 study conducted among 394 MSWs in Shenzhen showed that 25% of them self-identified as homosexual and over 70% had sex with both men and women [27].

Migration and Displacement

Economic reforms have been accompanied by the rural-to-urban migration of ‘floating populations’ of 120-140 million people [1]. Male migrant labourers are known to frequent FSWs (who themselves are often migrants). A 2002 survey of a group of migrants in Beijing and Nanjing showed that slightly over 6% of migrant women engage in commercial sex, whereas only 1% of the general female population does [1].

A behavioural serial sentinel surveillance survey involving approximately 1,400 FSWs was carried out in 1999-2000 in the Government Social Hygiene Clinics in Hong Kong. The results showed that the majority of the FSWs interviewed were of Chinese ethnicity (approximately 85%), while Thai and Filipino sex workers represented smaller minorities [14]. Other reports show that there are also a large number of Russian sex workers migrating to China each year.

Clients of sex workers

The clients of sex workers serve as a bridging population for HIV transmission from high-risk FSWs to the low-risk general population.

The one-child family planning policy and son preference have resulted in an estimated 8.5 million surplus men among cohorts born between 1980-2000, who are mostly unmarried and disproportionately poor and migrant [1]. The percentage of adult men visiting sex workers has been reported to be around 9% (in 2002), and may rise as the 8.5 million surplus men become sexually active in the next 5-10 years [1]. More recently, at the end of 2005, it was estimated that 21.9 – 37.4 million clients of FSWs in China [51].

In one survey of 315 male clients of FSWs in Yunnan in 2008, 28% fell within the 16-25 age range, 105 (33%) within the 26-40 range and the remainder (121) were over 40 years of age [19]. About 87% reported engaging in commercial sex less than four times a month, while the remainder reported a frequency of more than four times. In the province of Sichuan, a 2008 study of 601 male clients of sex workers found that the group’s median age was 38 years old, 58% were married, and 83% were full- or part-time employed [28]. Two surveys conducted among miners (as a possible representative group for clients of sex workers) in the mining regions of Gejiu city in Yunnan province in 2006 (n=339 & 1,798) found that 60-70% of miners who patronized sex workers never used a condom and HIV prevalence was 1.8% and 0.7% respectively [33],[39].

Table 2. Administrative detention of sex workers in China.

Punishment	Duration/amount	Upon first offense	Trial
Community re-education	-	Yes	None
Fines and detention	<15 days and/or \$625	Yes	None
Custody and Education	6 months – 2 years	Yes	None, unless woman admits to a separate crime
Re-education through labour	<3 years	Usually for repeat offenders	None, unless woman admits to a separate crime

Source: Tucker, J., et al., *Incarcerated Sex Workers and HIV Prevention in China: Social Suffering and Social Justice Countermeasures*. Social Science and Medicine, 2010. 70: p.121-129

Sex Work and the Law

Sex work in China is officially illegal based on the 1992 *Women's Law* and other legislation [20]. The Chinese government uses the traditional strategy of implementing strict laws regarding sex work with the intention of preventing risk behaviours. Sex workers are subject to administrative penalties, including official warnings, writing self-criticisms, administrative fines, short-term detention or longer-term incarceration (Table 2) [15].

Article 358 of the *People's Republic of China's Criminal Law* stipulates that a person found guilty of forcing a woman into sex work can be sentenced to imprisonment for 5-10 years [52]. The maximum punishment was subsequently raised to death by the 1991 *Decision on Forbidding Prostitution* [52]. Article 359 of the Criminal Law states that a person who profits, invites or accommodates a woman for sex work can be sentenced to up to 5 years imprisonment. The *Decision on Forbidding Prostitution* also criminalizes organizing others for sex work, and visiting minors under the age of 14 years for sex work – both punishable by death [52].

In addition, raids on suspected sex work establishments are carried out. One study out of Beijing in 2008-2009 found that – of 348 migrant FSWs surveyed – 31% had been arrested by police [40]. Those arrested are detained at sex worker re-education centres for three months to two years where they must attend education sessions on law and morality, participate in productive labour and undergo examinations for STIs [1]. In addition, an “active testing programme” is conducted

according to national law and local regulations whereby HIV testing is made mandatory for selected populations, including sex workers. The process, however, often excludes proper counselling and, although it is stated that the detainees are allowed to refuse a test, there is significant social pressure from local authorities and health workers to comply with testing [21].

The *Administrative Punishment Act* in China warrants detention of both sellers and purchasers of sexual services [22]. The punishment is detention for 15 days and a fine, or four years in re-education centres or ‘labour camps’. Each year, approximately 40-50 thousand women are detained in these ‘re-education through labour’ camps for selling sex and as many as 300,000 may currently be incarcerated [22, 23]. More recently, the law has included STI and HIV prevention education due to the rise in prevalence, but unfortunately implementation of this aspect of the law has been far from adequate [23].

The Chinese government also enforces the *Frontier Health and Quarantine Law*, and can detain an offender for 6 months to 2 years [24]. The law states that those knowingly infected with HIV who continue to engage in sex work would be subject to these charges.

Tucker *et al.* did a comparison of incarcerated and non-incarcerated sex workers’ access to essential HIV services during the period of incarceration. Their findings, summarized in Table 3, show that substantial variations in the availability HIV resources at administrative detention centres exist.

Table 3. Comparison of incarcerated and non-incarcerated sex workers in China in terms of access to essential HIV services during the period of incarceration

Variable	Sex workers outside of detention centres [41]	Sex workers while at detention centres [42]
HIV test accessibility	Voluntary testing at free VCT centres	Mandatory testing, patients may not receive results
HIV anti-retroviral therapy accessibility	Free through the China CARES program [43]	Dependent on re-education through labour camps and sex worker/guardian relationship
HIV prevention access	Easily available through periodic public health campaigns	Once per year, variable dependent on re-education through labour camp's relation to STI/HIV clinic.

Source: Tucker, J., *et al.*, *Incarcerated Sex Workers and HIV Prevention in China: Social Suffering and Social Justice Countermeasures*. Social Science and Medicine, 2010. 70: p.121-129

SEX WORK AND HIV

Table 4. Vulnerability of sex workers, according to the 2009 National HIV/AIDS Sentinel Surveillance Results

Indicators	Percentage (%)	Year recorded
HIV prevalence among sex workers	0.6	2009
Sex workers that used a condom with their last client	85.1	2009
Sex workers reached by HIV prevention programmes	74.3	2009
Sex workers who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	54.1	2009
Sex workers who received an HIV test and knew of the results	37	2009

Source: National HIV/AIDS Sentinel Surveillance Results 2009

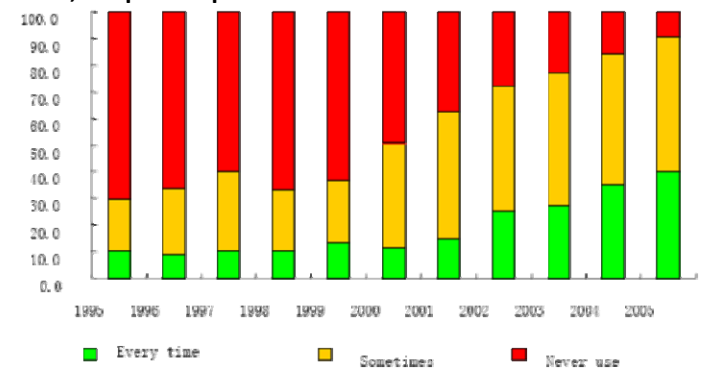
Trends in HIV estimates have shown that the flourishing sex industry creates the possibility that this population may soon experience an HIV epidemic. In 2005 it was estimated that there were 127,000 sex workers and their clients living with HIV in China, making up almost 20% of the total estimated number of people living with HIV [2, 25].

HIV prevalence among female sex workers was 0.6% in 2008 [4]. However, several surveillance sites showed prevalence of HIV that exceeded 1% – mainly concentrated in the provinces of Yunnan, Xinjiang, Guangxi, Sichuan and Guizhou [4].

Prevalence of HIV and other STIs among clients of sex workers have been shown to be higher than in the general population. In the Sichuan study, HIV prevalence was determined to be 1.7% among the group [28]. Moreover, a 2006 study of 339 miner clients of FSWs in a mining region of Yunnan Province found that HIV prevalence among the group was 1.8%, and 23.2% were infected with an STI [39].

Condom use

The percentage of FSWs who reported the use of a condom every time they had sold sex in the last month increased from approximately 10% in 1995 to 30% in 2005 (fig. 2) [3]. More recent data showed that condom use at last sex with a client was high, at 82% in 2007 and 85% in 2009 [4]. Table 5 shows, among other risk factors, the range in condom use among sex workers and their clients, as revealed by numerous independent studies in various regions of China.

Figure 2. Percentage of female sex workers who report the use of condoms in commercial sex in the last month, 1995-2005, People's Republic of China.

Source: National HIV Sentinel Surveillance, 2006

In an 'organised' sex work setting, where there are managers (pimps, owners of establishments, etc), these managers or 'gatekeepers' may have a role in the level of condom use by sex workers. Yang *et al.* (2005) reported that the perceived support by managers was positively associated with condom use communication and frequency [16]. It was not, however, associated with the proper use of condoms or knowledge of correct condom use.

Gatekeepers are the persons who manage brothel-based sex workers. They often have negative attitudes toward both condoms and STI education [12]. Fears lie that condom negotiation with clients will deter business, while STI education may cause the sex workers to reconsider sex work.

Despite this crucial role of managers, many have negative attitudes toward condom use as they fear that forcing clients to use condoms will negatively affect

business [1]. Only about 8-10% of managers required condom use or provided condoms [1, 29]. In a 2004 study of 454 establishment-based FSWs, only 8% reported that their gatekeepers required them to use condoms, and 14% reported that they were allowed to refuse to have sex with a client who refused to use a condom [29]. Another 52% reported that they had had no discussion about condom use and as many as 90% claimed that they had never received a free condom from their gatekeepers [29]. Female gatekeepers, however, were reported to be more supportive of condom use [29].

Among clients of FSWs, condom use is inconsistent. In a convenience sample of men who work in the mining industry in Yunnan Province, of those who actively sought FSWs, 77% did not use condoms [1]. In the 2008 sample of 315 male clients, 106 clients (34%) reported always using condoms [19]. Another study conducted in the cities of Beijing, Shanghai and Nanjing in 2002 found that only 19% and 14% of clients in two convenience samples consistently used condoms in their last three sexual encounters [1].

The Sichuan sample of male clients found that the majority had non-commercial regular sex partners and casual partners in addition to FSW partners (82% and 45%, respectively) [28]. The prevalence of consistent condom use² with FSWs was 31%, but was lower with non-commercial regular and casual partners – at 3.5% and 18%, respectively [28]. Similarly, the Yunnan sample of miner clients found that consistent condom use with FSWs was only 13%, 20% used a condom in their last encounter with a FSW, and 61% reported that they never used a condom with FSWs [39]. Furthermore, 67% of the clients also had regular partners, but only 2.6% reported consistent use of condoms with their regular partners, and 84% reported never using a condom with regular partners [39].

Among MSWs, the study out of Beijing and Qingdao found that condom use in commercial sex practices in the previous 3 months was 34% in oral sex, 84% in

receptive anal sex, 88% in insertive anal sex and 58% in vaginal sex [18]. Another survey carried out in Shenzhen among 394 male sex workers revealed that, although the HIV related knowledge level was high, about one-third of the men reported consistent condom use and it varied with type of sexual partner [27]. The prevalence of HIV and syphilis was 5.3% and 14.3%, respectively [27]. These high figures were associated with low consistent condom use among the sample (37%) as well as the MSWs' working venues (those working in small home-based family clubs had higher STI prevalence) [27].

² Overall frequency of condom use when having sex with FSWs

Table 5. Results of selected surveys on sex worker populations (1997-2004).

Population, year & sample	Sex worker profile	Risk factors	HIV/STI prevalence	Ref.
<p>Beijing (2008-2009)</p> <p>Street-based, establishment-based, personal service sector (hair salons, footbath, sauna, and massage parlours); (n=348)</p>	<p>Median age: Street-based, 35; Establishment-based, 28; Personal service, 27.</p> <p>Completed middle or high school: Street-based, 41%; Establishment-based, 87%; Personal service, 76%.</p> <p>Married: 26%; Divorced 24%; Had a child: 52%.</p> <p>Monthly income: Less than 150 USD, 8%; 150 – 450 USD, 34%; 450 – 750 USD, 28%; More than 750 USD, 30%.</p>	<p>Consistent condom use: 68% with clients; 24% with regular partners</p> <p>76% reported situations where their clients refused to use a condom</p> <p>71% experienced verbal abuse; 48% were forced to engage in unwanted sexual practices; 48% were forced to have sex; 29% experienced physical abuse; 31% had been arrested by police.</p> <p>22% had been tested for HIV in the past year.</p>	-	[40]
<p>Sichuan Province (2002, 2004, 2005)</p> <p>Establishment-based (sauna, karaoke, hair salons) FSWs (n=7,068 in 2003; 6,875 in 2004; 6833 in 2005)</p>	<p>67% were 24 years old or less;</p> <p>81% attained junior high or lower level of education;</p> <p>44% worked in nightclubs, saunas or karaoke bars and 37% worked in “hair salons”.</p>	<p>Condom use, last sex, regular partner: 46% (2005); 37% (2004); 38% (2003).</p> <p>Consistent condom use, regular partner: 21% (2005); 16% (2004); 16% (2003).</p> <p>Condom use, last sex, with client: 88% (2005); 82% (2004); 81% (2003).</p> <p>Consistent condom use, with client: 53% (2005); 40% (2004); 41% (2003).</p>	-	[44]
<p>Guangxi Autonomous Region (2005)</p> <p>Establishment-based FSWs (n=362)</p>	<p>Average age: 21.5 years; 28 % had ≤ 6 years of education; 32% were married or cohabited; 77% reported having >USD120 (about 1,000 CNY) monthly income.</p> <p>Median age for initiating sex work: 16.5 years; Median duration of sex work: 2 years.</p>	<p>Median no. of clients in the past week: 2.8 men; 95% had more than 10 clients in the past month.</p> <p>Consistent condom use in the past month: 63% with clients; 29% with regular sex partners.</p> <p>10% had sex with drug users.</p>	<p>-HIV prevalence: 2.3%;</p> <p>-Syphilis prevalence: 11%;</p> <p>-42% had STI symptoms.</p>	[45]
<p>Guangxi Zhuang Autonomous Region (2004)</p> <p>FSWs in restaurants,</p>	<p>Mean age: 23.5 yr;</p> <p>Ethnicity: 54.5% Han; 31.8% Zhuang; 13.7% other.</p> <p>6% had less than 6 yr. of schooling; 60% never been</p>	<p>Clients (per week): 80.6% less than 2; 19.4% 2 or more.</p> <p>Mean 2/wk; Max 1.2/day</p> <p>Condom use with clients:</p>	<p>-410 tested: -41.5% at least one STI; 18.9% Chlamydia; 16.4% gonorrhoea; 8.5% syphilis; 7.1%</p>	[1, 10]

barbershops and hair-salons (n=454)	married; 80% of rural origin. Duration as FSW: 50% less than 1 yr.	15% consistent; 19% never. 2% anal sex 30% alcohol influence	trichomonas; 1.7% genital warts.	
Shanghai (2004) Female entertainment workers in entertainment establishments (n=297)	Mean age: 22.9 yr; 83% single; 75% temporary migrants. Of those reporting transactional sex: 57% received more than junior high school education.	Condom use with clients: 21% consistent; 23% seldom; 27% never. <5% anal sex (past month).	-	[1]
Yingjiang County, Yunnan Province (2003) FSWs in (i) small brothels (n=54) and (ii) hotel brothels (n=30)	Duration as FSW: median 3.5 mo.	(i) small brothels Clients (per week): 66% 1-4; 31% 5-10; 3% 11 or more. Condom use with clients: 50% always; 44% sometimes; 3% rarely; 0% never.	13% admitted to having an STI, no one knew of another FSW with HIV.	[1]
		(ii) hotel brothels Clients (per week): 20% 1-4; 30% 5-10; 50% 11 or more. Condom use with clients: 0% always; 12% sometimes; 60% never.		
Beijing and Nanjing (2002) Sexually experienced female migrants (n=633)	Of those ever engaged in transactional sex: Mean age: 24 yr; 77% never been married; 72% less than 9 yr. of schooling; 75% worked in entertainment establishments.		-	[16]
Beijing (2000) FSWs from karaoke bars, bathing centres, hair salons and the street	72% aged 25 yr or less; mean schooling 9 yr; 68.1% never been married; 93% Han; most of rural origin.	Clients (mean per week): Karaoke bars 1.77; Bathing centres 3.65; Hair salons 4.88; Street 5.16.	-	[30]
Guangdong Province (1998) Institutionalised FSWs (women's re-education centre) (n=701)	68.5% aged <25 yr; 80% had 8 yr or less of schooling; 67% never been married; 97% Han; 90% from outside Guangdong. Duration as FSW: 51.4% 6 mo or less; 14% 6-11 mo; 10.1% 12-24 mo; 3.6% 25 mo or more.	Clients (per day): 40.9% 1/day; 15.7% 2/day; 11.3% 3 or more/day.	14.5% reported ever having an STI	[1]

Hainan Province (1997) Hospitality women (from restaurants) (n=221)	Of those who were FSWs (Li minority): Mean age: 18 yr; 4.9 yr of schooling. Duration as FSW: median 2.7 mo.; range 1-30 mo.	7.7% anal sex.	10% reported an STI	[31]
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VULNERABILITIES

Other sexually-transmitted infections

Sexually transmitted infections other than HIV are of concern among both sex workers and their clients. Among clients of FSWs, the survey of miners in the Yunnan Province found that the prevalence of gonorrhoea and chlamydia was 0.5% and 9%, respectively [1]. A cross-sectional study among FSWs in Yunnan Province (n= 96) showed high prevalences of syphilis (12.5%), gonorrhoea (36.8%), and Chlamydia (46.3%) [39]. Moreover, a 2005 cross-sectional study of establishment-based FSWs in the Guangxi region of Southern China found that, of 362 participants, the prevalence of syphilis was 11% [45]. In Guangdong province, 320 FSWs were sampled and the prevalence of syphilis, gonorrhoea, and chlamydia were 8%, 9.5% and 3.9% respectively [46] (Table 4).

Knowledge and awareness

According to the 2009 National HIV/AIDS Sentinel Surveillance Results, 54% sex workers surveyed (n=62,016) had comprehensive knowledge about HIV – that is, were able to both correctly identify ways of preventing the sexual transmission of HIV and to reject major misconceptions about HIV transmission [4]. A common misconception among FSWs is to associate physical appearance with health status. Most feel that it is sufficient to visually inspect their clients in order to prevent HIV/STI infection [1]. After visual inspection, vaginal douching and washing were the next most commonly used methods of preventing infection [1, 10].

In settings where sex work is managed by gatekeepers, many of these managers tend to have the view that STI education will cause girls to quit sex work, thus it is not favoured. In one study done on hospitality women in Hainan, managers taught girls about hygiene and contraception, but much of this information was incorrect [31].

Up to 46% of sex workers were reached through HIV prevention programmes in 2007, and 55% in 2008. Between 2003 and 2005, the figure was only at about 38%. About 23-41% of sex workers had comprehensive HIV knowledge [26]. In the 2009 sentinel surveillance, it was found that 37% of sex workers had received an HIV test and knew their results [4].

Stigma and discrimination

HIV-positive FSWs are sometimes discriminated against because they are perceived as potential sources of HIV infection [1]. Medical professionals often perceive FSWs negatively, which is compounded by the general population's belief that HIV-positive individuals should be quarantined [1].

Fear of police crackdowns and arrest may lead to increased mobility of sex workers, thereby expanding sexual networks and discouraging sex workers from turning to the healthcare system for testing and treatment of HIV and other STIs [1]. This problem is exacerbated by the fact that many sex workers are migrants and are thus already susceptible to mistreatment if caught by the police [1].

As commercial sex work is illegal, female sex workers become more vulnerable to exploitation as they are unable to appeal to police for protection from clients,

managers or bosses, and are also subject to harassment from the police themselves [20, 32].

Violence and other gender-related issues

A recent (2008-2009) cross-sectional survey conducted among 348 migrant FSWs in Beijing found that participants reported high rates of violence. In the last year, 71% reported having experienced verbal abuse, 57% had clients refuse to pay the negotiated fee, 48% were forced to engage in unwanted sexual practices, 48% experienced forced sex and 29% experienced physical abuse [].

In the 2007 study on the profile of sex workers in Guangxi, 15% reported having been raped or forced to have sex in the previous six months. Another 2004 study among 200 FSWs in Southwestern China found that 68.4% had experienced client-perpetuated violence in the previous year [48]. Among them, 63.5% reported verbal abuse, 32% reported physical violence. In terms of sexual violence, 33.5% were threatened into providing oral sex; 20.5% were forced to have oral sex; 8.5% were threatened into providing anal sex; 7% were forced to have anal sex; 33% were threatened into having sex when they wanted to terminate the transaction; and 23% were forced to have sex when they wanted to terminate the transaction.

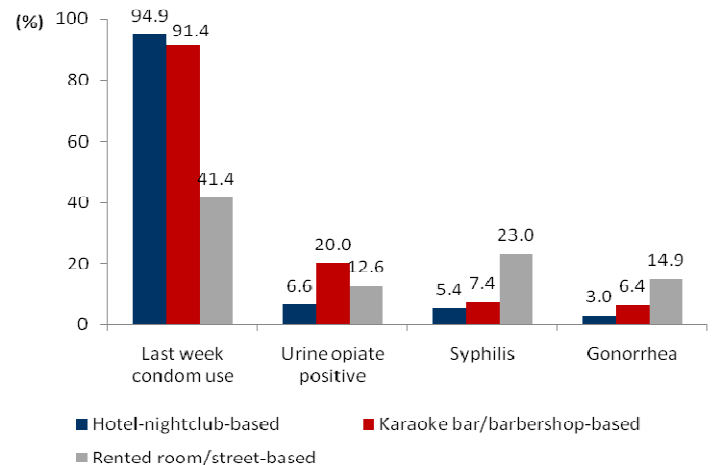
Due to existing gender-based occupational discrimination, Chinese women are likely to earn less than men or to be the first to be laid off by downsizing state-owned enterprises. To survive, or to supplement their incomes, many women have turned to sex work [1].

Injecting Drug Use

Given that injecting drug use is also one of the primary modes of HIV transmission in China, sex workers become increasingly vulnerable to HIV infection when their clients are injecting drug users, or when they themselves injecting drugs. According to a survey among the street-based sex workers in Kaiyuan, Yunnan China (2006), low price sex workers and sex workers

using drugs are at much higher risk of HIV infection (Fig. 3).

Figure 3. Higher risk of HIV infection among street-based sex workers, Kaiyuan, Yunnan, 2006



Source: courtesy of Dr. Chen Zhongdan, UNAIDS

Another study in Guangxi revealed that 10% of the 362 FSWs sampled had sex with injecting drug users [45]. Another 2006 study from Yunnan Province found that injecting drug use was the single greatest risk factor for HIV infection among FSWs (n=737) [47]. In that study, overall HIV prevalence was 10.3%, and prevalence among injecting drug users was 49.3%.

NATIONAL RESPONSE

The government showed reluctance in setting up education and prevention programmes on the risks of HIV transmission as it was felt that this could encourage sex work [9]. However, in response to the increase in heterosexually-acquired HIV, the attitude towards HIV prevention among sex workers has changed, and China increased spending on HIV programs to a total of USD 77.1 million in 2007 [3]. Coverage of intervention programmes among sex workers has increased from 46% in 2007 to 74% in 2009, with 2,701 counties and districts carrying out condom promotion work targeted at sex workers [5].

In Yunnan and Guangxi, international development partners are working with provincial HIV/AIDS committees and local governments to develop models

for HIV prevention and care. The activities aimed at sex workers are: drop-in centres that provide information and support; clinics for those with STIs; advocacy activities promoting the rights of people living with HIV/AIDS; and HIV-related policy development [34].

HIV Surveillance

Surveillance of the HIV epidemic has been described in phases. The passive surveillance stage (1985-1994) was initiated in 1986 after the first AIDS case was recognized. There were three levels that worked together to collate the information; from local districts to the provincial health departments and thereafter to national agencies.

The second stage spanned from 1995 - 1998 during which the Ministry of Health implemented an expanded surveillance system to include: i) passive case reporting; ii) active sentinel surveillance; and iii) special studies focusing on high-risk populations. Forty-two national sentinel sites were established in 1995.

The system was strengthened again from 1999 to 2006, with specific epidemiological studies, a web-based HIV reporting system, and an increase in the number of sentinel sites. An increase in VCT centres to 2,850 in 2005 also complemented this system [24].

Condom use programmes

Active condom promotion and prevention schemes vary between provinces depending on the local authorities and the severity of the epidemic in the region [9].

Condom use promotion campaigns were conducted at entertainment venues across four provinces (Hubei, Hunan, Yunnan and Hainan) during 2006. After the success of these campaigns, other provinces – including Xinjiang, Shandong and Sichuan – followed suit across relatively large areas. Intervention programmes for SWs and their clients had been expanded to all counties by 2007. Reports showed that about 460,000 sex workers were reached through these intervention programmes.

In 2005 the China-UK HIV/AIDS Prevention and Care Project launched an enhanced intervention programme in Suining, Sichuan [35]. The Programme involved peer education, seminars, testing services and social gatherings. It also included two small behavioural surveillance studies targeting clients of sex workers in Suining, Sichuan. The studies showed that the proportion of respondents using at least one prevention service increased from 50% in 2005 to 69% in 2006 [35]. It was also estimated that, in this city, 74% of clients of FSW used condoms [35].

Outreach interventions saw a significant improvement in condom use by the end of 2009. Specific condom promotion activities included placing condoms in public facilities, condom vending machines, peer education, as well as the implementation of STI services and HIV behavioural interventions [5].

Non-governmental organisations are also playing a role in HIV intervention programmes. For example, the charity organisation AIDS Concern, which is based in Hong Kong Special Administrative Region, recently secured funding to set up a drop-in and information centre in Shenzhen, across the border from Hong Kong SAR, covering two districts frequented by sex workers and their clients [25]. The centre distributes condoms and provides free, rapid and anonymous HIV testing to sex workers and their clients.

Nonetheless, because commercial sex is illegal and because sex workers are often highly mobile, the national government has faced challenges in effectively implementing a 100 percent condom campaign targeting sex workers [36].

Awareness programmes

HIV behavioural interventions among FSWs most commonly target HIV-related knowledge, education and behavioural skills training. While these can lead to improved knowledge, increased condom use and reduced STIs, gaps reportedly remain given the fact that the programmes tend to lack multi-faceted interventions and have inadequate follow-up and outcome measurements [37].

Access to treatment

In 2003 China was awarded a five-year Global Fund grant to strengthen the operational system of a free ARV programme, increasing government funding to US\$ 185 million in 2006 [9]. By 2007, it was estimated that China was providing ARV treatment to 19% of those in need [9]. In reality, however, although the treatment is free, patients still have to pay for the associated clinical tests. Furthermore, among the most affected groups, only 25% of sex workers who were living with HIV were estimated to be receiving ARV treatment in 2006 [38].

KEY ISSUES FROM THE DATA

- **Rising incidence of heterosexual transmission**

Contribution of sex workers to China's epidemic is unclear. HIV prevalence among sex workers has been levelling out nationwide and stayed at relative low level, yet, at the same time sexual transmission including heterosexual transmission increased dramatically. Surveillance for HIV and STIs and studies done among FSWs are mainly focused on the FSWs in re-education centres. More representative studies are needed in FSW communities to better understand their risk behaviours and prevention services needs.

- **The legal environment is posing challenges to the successful implementation of prevention**

Sex work is officially illegal in China, a factor that causes sex workers to make up a hidden population. Efforts are currently underway to implement HIV intervention programs in detention centres and prisons.

- **Stigma and discrimination**

Stigma and discrimination affect the sex worker population in multiple ways in China, as in many other countries. The stigma associated with sex work drives the population underground, where education and prevention efforts and other interventions are difficult

(and, at times, impossible) to implement. An HIV positive diagnosis escalates this stigma and discrimination, and can lead to social ostracisation which in turn makes treatment, care and support even more difficult.

Stigma has profound implications for the control of the HIV epidemic in China, as it may dissuade FSWs from consulting medical professionals for HIV testing, or from acquiring the necessary tools to adopt safer-sex behaviours. The double stigma associated with being a sex worker and a potential cause of the spread of infection may discourage condom use, as FSWs fear that if they insist on condom use they may be perceived as diseased [1].

- **Clients of sex workers**

Clients of sex workers remain a group whose behaviour and risk will be difficult to monitor, however, their importance in China's epidemic is inarguable. Limited data shows that risk behaviours are prevalent and that the estimated population size of clients has risen [8]. The (i) widening surplus in men (ii) increase in client numbers and (iii) the rise in heterosexual transmission and a flourishing sex work industry all point to the fact that there is an urgent need for enhanced prevention programmes targeting behaviour change (including condom use) within this population.

- **Male sex workers**

There is very little quantitative or qualitative information about the prevalence of HIV and risk factors among MSWs in China [27]. Few reports have targeted MSW as study subjects and no biological data are available to address the issue.

- **Migrant Populations**

The sex worker population that may be increasingly affected by HIV are the "floating population". In China this is a combination of two entities, namely the rural-

urban migrating population as well as the foreign migrant sex worker population. Illegal migration and the fact that HIV-positive migrants can be detained by law increase the vulnerability of these populations [1]. Moreover, given the massive internal migration in China, disadvantages in economic sectors that drive women to become involved in sex work must be addressed [40].

- **Intimate partner transmission**

Of the total number of people estimated to be living with HIV in 2009, around 1/3 were infected by their spouses [5]. Clients represent a 'bridging population' in that they may transfer HIV to the general population when they have unprotected sex with their intimate partners. At the same time, sex workers themselves can transmit HIV to their regular partners, especially given the fact that condom use is lower with regular partners than with clients.

In China, intimate partner transmission of HIV has still not been paid sufficient attention [13]. The fact that clients of sex workers and their regular partners are difficult to identify makes it difficult to target them with education on risk reduction and basic HIV knowledge.

- **Strategies for HIV prevention**

Targeting the focus of prevention, treatment and care towards sex workers and their clients without increasing stigma and discrimination will be key in intervention programmes. Beyond that, changes also need to be made towards the socio-political contexts that shape their capacity to engage in safe sex practices. Specifically, these include state laws and policies – particularly those that impact migration and gender [1].

STI services, behaviour change communication (involving outreach and peer education), condom promotion are the main intervention approaches for sex workers. However, the quality of such interventions has remained a concern and needs to be better monitored and evaluated. The constant rise in STIs among sex workers and clients show that current programs are not yet effective, despite their reach.

Moreover, efforts to empower sex workers need to be improved in a more systematic manner. For example, a mapping of community based organizations (CBOs) and NGOs involved in HIV prevention programmes among sex workers should be done, which may better clarify the CBO/NGOs' roles and avoid service gaps and overlap. Moreover, CBO/NGOs require mechanisms to ensure access to resources, and thereby ensure sustainability of their activities.

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