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Recreational drug use: an emerging concern among venue-based male sex workers in China

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Abstract

A 2009 survey of 418 venue-based male commercial sex workers (male CSWs) in Shenzhen, China revealed that 19.9% used recreational drugs. Consistent condom use by drug users was lower than by non-users. HIV, syphilis, and herpes simplex virus 2 (HSV-2) prevalence, however, were higher among drug users. Prevention programs need to address drug use among male CSWs in China.

The combination of recreational drug use and sexual risk-taking promotes transmission of HIV and other sexually transmitted diseases (STDs) such as syphilis and herpes.¹ Numerous studies have shown a high prevalence of recreational drug abuse among men who have sex with men, especially among male CSWs.² One study suggested a significant level of drug use among male CSWs³ may lead to higher numbers of sex partners and sexual encounters. However, another study claimed that drug use was not necessarily associated with increased risk behaviors.⁴ There has been no systematic study conducted in China to examine recreational drug use by male CSWs and its impact on the magnitude of HIV/STD infection.

In a 2009 survey in Shenzhen, China, we recruited 418 male CSWs by time-location cluster sampling, and respondents self-administered a computerized questionnaire. Details about the methodology employed in the survey are available in a previous publication.⁵ Respondents completed a self-administered computer survey (CASI) that collected information about recreational drug use and sexual risk factors. They were also asked for a 5-ml blood sample to test for syphilis, HSV-2, and HIV.

In the past six months, 14.8% had used ketamine, 9.1% methamphetamine, 5.5% ecstasy, 3.8% “ma gu” tablets (main component, methamphetamine), and 2.4% marijuana. In total, 19.9% reported use of at least one of the above substances, and 8.4% reported use of two or more types in the past six months. Only one male CSW reported ever injecting drugs. All others reporting drug use had ingested by snorting, swallowing, smoking, and/or freebasing. We asked the 59 participants who had used ketamine in the past six months how frequently they had used it; 15.3% reported once or more a week, 11.9% once every two weeks, 16.9% once a month, and 55.9% less than once a month. Socio-demographic characteristics of the

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418 participants are presented in Table 1, with comparisons of HIV/STD prevalence and condom use between drug-using and non-drug-using male CSWs. It was found that those more likely to use drugs were younger, self-identified as heterosexual or bisexual, worked at dorm- or bar-based venues, and/or had higher income.

Consistent condom use with male clients by male CSWs who used drugs was 73.2%, whereas it was 84.6% by male CSWs who did not use drugs ($P=0.015$). Condom use with female clients was only 28.0% by drug-using male CSWs, compared to 81.2% by those who did not use drugs ($P=0.000$).

Among the 83 male CSWs who had used drugs in the past six months, HIV, syphilis, and HSV-2 prevalence was 3.6%, 14.5%, and 16.9%, respectively, compared to 3.3%, 9.6%, and 9.6% among the 335 male CSWs who did not use drugs. Prevalence for at least one of those infections was 27.7% among drug users but 18.5% among non-users ($OR=1.69$, $P=0.062$).

We interviewed 28 male CSWs in-depth, who were recruited with help from a local non-governmental organization for gay men. Representation of venue types, sexual orientations, and roles during anal intercourse (receptive or insertive) were taken into consideration. Over half of the participants admitted to using ketamine and/or methamphetamine with other male CSWs or clients at least once. Reasons for use included social pressure, boredom, or curiosity, or the desire to enhance sex, reduce psychological pressure, or lose weight. When asked whether substance use had influenced their condom use with clients, they thought it did not. One 23-year-old homosexual (CSW for three years) said that “drugs only make your sexual desires change, but don't make you stupid... condom use is still a habit”. However, another CSW (22 years old, homosexual, CSW for over two years) mentioned that he had a client who, on several occasions, had put knock-out drops into water for him to drink, then during his prolonged unconsciousness, had sex with him. He was not sure whether that client had used a condom.

Recreational drug use has become a concern among male CSWs in China, and compromises use of condoms, especially with females. Therefore, intervention programs targeting male CSWs need to address recreational drug use. For example, peer education or outreach programs should include information about the harms of drug abuse to users, both biologically and psychologically, as well as skills for refusing negative peer pressure and referrals for seeking help for drug dependence.

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Table 1

Comparison of characteristics, condom use, and HIV/STI infections among venue-based male sex workers in Shenzhen, China by recreational drug use

Characteristics	Drug use N (%)		Total n* (%) (N=418)	P-value [†]
	Drug users (N=83)	Non-users (N=335)		
Age (yrs), mean	22.5	23.8	23.6	0.009
Duration of being MSW (yrs), mean	1.0	0.9	0.9	0.117
Self-identified sexual orientation				0.022
Homosexual	19(22.9)	115(34.3)	134(32.1)	
Heterosexual	31(37.4)	75(22.4)	106(25.3)	
Bisexual	28(33.7)	112(33.4)	140(33.5)	
Uncertain	5(6.0)	33(9.9)	38(9.1)	
Venues				0.060
Dorm-based	50(60.3)	196(58.5)	246(58.8)	
Gay bar-based	29(34.9)	93(27.8)	122(29.2)	
Massage parlor-based	4(4.8)	46(13.7)	50(12.0)	
Consistent condom use with male clients				0.015
Yes	60(73.2)	281(84.6)	341(82.4)	
No	22(26.8)	51(15.4)	73(17.6)	
Consistent condom use with female clients				0.000
Yes	7(28.0)	69(81.2)	76(69.1)	
No	18(72.0)	16(18.8)	34(30.9)	
HIV infection				0.881
Yes	3(3.6)	11(3.3)	14(3.4)	
No	80(96.4)	324(96.7)	404(96.6)	
Syphilis infection				0.192
Yes	12(14.5)	32(9.6)	44(10.5)	
No	71(85.5)	303(80.4)	374(89.5)	
HSV-2 infection				0.057
Yes	14(16.9)	32(9.6)	46(11.0)	
No	69(83.1)	303(80.4)	372(89.0)	
Any HIV/STI infections				0.062
Yes	23(27.7)	62(18.5)	85(20.3)	
No	60(72.3)	273(81.5)	333(79.7)	

§One-way analysis of variance

* The numbers do not necessarily reach total sample size because of missing values

[†] Pearson Chi-square test unless otherwise indicated;