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Male sex work and HIV risk among young heroin users in Hanoi, Vietnam

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Abstract

The present study describes complex drug and sexual risk in a group of male sex workers (*n*=79) who were recruited in the context of a larger study of young heroin users in Hanoi, Vietnam (*n*=1270). Male sex workers were significantly more likely than male non-sex workers to be migrants (*P*<0.001) and to have unstable housing (*P*<0.001), to have lifetime exposure to marijuana (*P*<0.001), 3,4 methylenedioxymethamphetamine (MDMA, ecstasy) (*P*<0.01), amphetamines (*P*<0.05), cocaine (*P*<0.01) and morphine (*P*<0.001). Male sex workers are more likely to currently use MDMA (*P*<0.05), amphetamines (*P*<0.001), morphine (*P*<0.05) and to 'smoke' as their most frequent mode of heroin administration (*P*<0.01). Male sex workers are more likely to have both male and female concurrent sex partners (*P*<0.001), to have a history of sexual victimisation (*P*<0.001), to have had more than three different sex partners in the past 30 days (*P*<0.001), and to have had partners who injected drugs before sex (*P*<0.001) or who used drugs during sex (*P*<0.01). In their last sexual encounter with a client partner, approximately one-third (31.1%) reported having had receptive anal sex. In nearly three-quarters of these exchanges (71.4%), no condom was used. Similarly, in their last sexual encounter with a client partner, 42.2% reported having had insertive anal sex and in nearly half (47.4%) of these encounters no condom was used. Consistent with recent data from elsewhere in the region, there is an urgent need for additional research on male sex work in South-east Asia in order to properly situate behavioural interventions for male sex workers in this region.

Additional keywords

drug abuse; epidemiological bridging patterns; high risk youth; masculinities; migration; sexual risk; sexually transmissible infections

Introduction

In 2005, the latest year for which complete data are available, there were an estimated 8.3 million HIV infections in Asia, one-fifth the disease burden worldwide.[1] Initially, HIV in South-east Asia was conceptualised largely in terms of injection drug use (IDU) (primarily associated with men) and commercial sex work (primarily associated with women), and there

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Conflicts of interest
None declared.

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was scant attention to risk among men who have sex with men (MSM), including MSM sex work. However, recent surveillance data implicate high rates of behavioural risk among MSM populations in Cambodia,[2] India,[3] Singapore,[4] South Korea,[5] Taiwan,[6] Thailand[7] and Vietnam.[8] At a general social and political level, MSM in the region have become more visible in recent years and some progress is being made in understanding their HIV risk.[1,9] Concurrent with the rapid economic changes in the region, there has also been a dramatic expansion in markets for international male sex tourism in South-east Asia. Although there has been some research in several more well-established male sex work populations, such as Thailand and the Philippines,[10–13] the available data on male sex work in the region as a whole is quite limited.

In 2002, in collaboration with Hanoi Medical University in Vietnam, the Youth at Risk Project initiated an ethno-epidemiological study of out-of-treatment, male heroin users in Hanoi, Vietnam. Phase Two of the study involved recruitment of a large cross sectional sample of young heroin users (n=1270) and was completed in 2005. Although not targeted to male sex workers per se, a substantial group of male sex workers met study criteria and were included in the behavioural assessment. The present study compares drug and sexual risk behaviours among both sex workers and non-sex workers in the sample, with the overall goal of highlighting the multiple sources of vulnerability and HIV risk in this population. Additionally, we consider some of the prevailing limitations in the way in which male sex work has been conceptualised in the available epidemiological reports, highlighting several issues that should be considered in future research on this population.

Methods

Metropolitan Hanoi is administratively divided into 14 districts, including nine ‘inner city’ and five ‘suburban’ zones. In 2002, ethnographic research was conducted in all nine inner city zones with the goal of characterising the relative level of drug-related activity in the area, including drug distribution activities, observable drug use, cooperative social activity related to multi-person drug purchases and public or semi-public environments in which evidence of drug injection paraphernalia was prevalent (e.g. syringe wrappers, used syringes, sterile water vials, etc.). These data were used to develop a targeted sampling plan for areas with high or medium density drug-related activity.[14,15] Areas with low density heroin activity were excluded because of the lack of efficiency of recruitment in these areas, as well as concerns about greater difficulty in maintaining confidentiality in these settings.

Participants were interviewed in and around the settings in which they were recruited. Eligibility was restricted to males and females between the ages of 16 and 29 who self-reported heroin use within the past 30 days (including heroin smoking, ‘snorting,’ or injection). Domains in the interview instrument included demographic characteristics, lifetime exposure and current use of alcohol, tobacco, and a wide range of illegal drugs, detailed questions on heroin use and injection risk, onset of sexual activity, current sexual practices, and concurrent drug and sexual risk practices with sexual partners.

Participants were paid the equivalent of US$5 in Vietnam monetary currency (‘Dong’) in compensation for their time in participating in the interview. All study procedures and instruments were reviewed and approved by the institutional review boards at National Development and Research Institutes, Inc. as well as Hanoi Medical University.

Study participation was relatively high, with 90% of eligible subjects agreeing to participate. The final sample included a total of 1270 young heroin users, including 1115 males and 155 females. Because the objective of the current report is to highlight behavioural risk among male sex workers, the current analysis is limited only to men in the sample, including 1036 males with no history of male sex work and 79 males with a history of male sex work. For the purposes

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of this analysis, sex work is defined as the exchange of sex with another male with the expectation of payment in the form of money, drugs, clothing, shelter, or other types of material compensation and our assessment included both lifetime involvement and current involvement (defined conservatively as within the past 30 days).

Data analysis primarily involved between-group comparisons of sex workers and non-sex workers. Comparisons of continuous variables were made by independent samples *t*-tests, whereas comparisons of categorical variables were made by χ^2-test analyses.

Results

Demographic and background characteristics

The mean age of sex workers is 22.8 years (s.d.=3.1), non-sex workers is 23.2 years (s.d.=3.2) (see Table 1). Significant differences are seen in relation to birth place and housing status, with sex workers being significantly more likely to have been born outside of Hanoi ($P<0.001$). Significant differences were also observed in current residential status, with sex workers more likely to be currently living in some kind of short-term hotel, on the streets, or in some other kind of a public area such as a bus station and non-sex workers more likely to be currently living with their family or with a friend ($P<0.001$). Consistent with the fact that many of the sex workers are migrants who had come to Hanoi looking forwage labour, and the market forwage labour in Hanoi is often intermittent and unstable, non-sex workers are somewhat more likely to have been employed at the time of the interview ($P<0.05$).[16,17] Both groups have comparable rates of previous exposure to incarceration (21.5% among sex workers and 22.6% among non-sex workers).

Although the nature of the street-based interview precluded a formal assessment of mental health status, it is noteworthy that both groups evidence relatively high rates of lifetime suicide ideation (31.6% v. 26.4%) and high rates of having had one or more suicide attempts (8.9% v. 8.2%). Both groups also report comparable levels of exposure to the kinds of health problems that are commonly observed in IDU populations, including self-reported hepatitis B infection (6.3% among sex workers and 7.9% among non-sex workers). Both groups report low rates of HIV testing (40.5% among sex workers and 48.5% among non-sex workers). Particularly given the young age of the sample, it is noteworthy is that both groups self-report relatively high levels of HIV infection (29.1% among sex workers and 37.1% among non-sex workers).

Exposure and onset of drug use

Both groups describe having initiated heroin use at roughly the same age and both also report comparable levels of lifetime exposure to a broad array of other illicit or illegal substances (see Table 2). However, sex workers are significantly more likely to report lifetime exposure to marijuana (55.7% v. 36.5%, $P<0.001$), 3,4 methylenedioxymethamphetamine (MDMA, ecstasy) (30.3% v. 18.5%, $P<0.01$), amphetamines (43.0% v. 31.2%, $P<0.05$), cocaine (10.1% v. 3.7%, $P<0.01$) and morphine (21.5% v. 9.0%, $P<0.001$).

Current drug use

Sex workers are also significantly more likely to be current users of a wide range of drugs, including MDMA (7.6% v. 2.7%, $P<0.05$), amphetamines (12.7% v. 3.9%, $P<0.001$) and morphine (3.8% v. 1.0%, $P<0.05$). It is not readily apparent why male sex workers are more likely to have both lifetime exposure and current use of substances, such as MDMA and amphetamines, particularly because these substances are not widely available in street-based drug markets in Hanoi. One plausible explanation is that male sex workers may be accessing them in the context of male client sex partners.

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Current heroin use

It is difficult to obtain precise measurements of the frequency and volume of current heroin use because high rates of cooperative activity related to accessing and sharing of heroin solutions often serves to confound estimates of individual consumption. In general, however, both groups evidence comparable patterns of current heroin use (see Table 3). For example, both groups reported a similar number of days (within 30 days before the interview) in which they had used heroin at least once (24.6 days for sex workers and 26.3 days for non-sex workers). In a separate question, sex workers were somewhat less likely than non-sex workers to report using heroin 'every day' within the past 30 days (62% and 73%, $P<0.05$). Both report comparable rates of preference for either smoking (30.8% and 26.5%) or injection (69.2% and 73.5%), suggesting that there are not significant differences in relation to overall severity of chronic heroin dependence. However, male sex workers are significantly more likely to describe the use of heroin smoking (as opposed to injection) as their most frequent mode of self-administration (50.6% v. 31.4%, $P<0.01$). Significant differences are also seen in a preference for heroin smoking (as opposed to injection): Non-sex workers are more likely to report that injection provides a longer lasting high (59.3% v. 39.5%, $P<0.05$) and a more intense sexual experience (14.8% v. 5.4%, $P<0.05$). It is also noteworthy however, that heroin smoking is a less efficient and therefore a generally more expensive way of using heroin because it generally requires the use of larger volume to achieve comparable effects. Regardless of preferences and perceived effects, the fact that the actual practice of heroin smoking is more frequent among sex workers may be attributable to the fact that the sex work may provide access to the kind of cash income which would be required to sustain a habit of heroin smoking. This is consistent with the fact that sex workers reported higher levels of current income (see Table 1).

Sexual history

As noted above, a total of 79 men within the overall sample report a history of having engaged in male sex work at some time in their lives, defined as the exchange of oral or anal sex with another male in the context of an expectation or promise of material reward (see Table 4). Sex workers are significantly more likely to report a history of having had only male partners in their lifetime (8.9% v. 0.1%) or to have both male and female sex partners (53.2% v. 3.6%) ($P<0.001$), whereas non-sex workers are significantly more likely to report having a history of having had only female partners (38% v. 96.3%, $P<0.001$). Male sex workers are also significantly more likely than non-sex workers to a history of having been forced to have sex against their will (11.4% v. 2%, $P<0.001$).

Current sex work

Of the total number of men in the sample who reported having ever engaged in male sex work, over half ($n=45$, 57%) reported continued and current male sex work (defined as sex work within 30 days before the interview). Within the 30 days before their interview, male sex workers are significantly less likely than non-sex workers to report having had one sex partner (35.1% v. 65.1%), more likely to have had one to three different partners (33.6% v. 41.6%), and more likely to have had more than three different sex partners (23.4 v. 1.3%) (overall $P<0.001$). Although non-sex workers are significantly more likely to have themselves used drugs during sex in the past 30 days (83.3% among non-sex workers and 68.3% among sex workers, $P<0.01$), sex workers are more likely to have had partners who injected drugs before the sexual exchange ($P<0.001$) and also more likely to have had partners who used drugs during sex (31.7% v. 17.3%, $P<0.01$). Current male sex workers described a mean number of 8.6 sexual exchanges with a client partner within 30 days before the interview (s.d.=9.8) and a mean number of 6.1 different client partners (s.d.=8.2) (Table 5). 4.4% reported having had recent exposure to physical violence by a client partner. In their last sexual encounter with a

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client partner, nearly half (48.9%) of the current sex workers had a client partner that they estimated was 5 or more years older than themselves. In their last sexual encounter with a client partner, approximately one-third (31.1%) reported having had receptive anal sex. In nearly three-quarters of these exchanges (71.4%), no condom was used. Similarly, in their last sexual encounter with a client partner, 42.2% reported having had insertive anal sex and in nearly half (47.4%) of these encounters no condom was used.

Discussion

There are several limitations to the current study: First, the sampling strategy that was used did not target male sex worker venues and groups. Moreover, many of the male sex workers who were found within the sampled venues did not meet study criteria because they had no history of heroin use. Thus, these data may not be generaliseable to the overall male sex worker population in Hanoi. Second, the survey instrument that was used was not intended as a comprehensive assessment of drug and sexual risk within the context of male sex work. These data may not fully describe drug and sexual risk in this population. Nor do they adequately reflect the complexity of drug and sexual risk within these types of sexual exchanges.

These limitations notwithstanding, the data indicate that substantial behavioural risk exists within the male sex workers population in Hanoi. Even within the context of a sample that is by definition substantially drug-involved, male sex workers evidence high rates of both lifetime exposure to drugs, as well as high rates of current drug use. It is particularly noteworthy that sex workers evidence substantial exposure to ‘club drugs,’ including MDMA and amphetamines (substances that have been associated with sexual risk among MSM).Yet current prevention and treatment programming in Vietnam is primarily oriented to heroin use and there is little attention to risk associated with other types of substances.

Male sex workers also evidence multiple sources of complex sexual risk: These risks include high risk for exposure to sexual violence and victimisation, high numbers of different sex partners, high rates of both insertive and receptive unprotected anal intercourse with client partners, high numbers of encounters with sexual partners who are using drugs, and concurrent heterosexual risk. In this context it is noteworthy that like other areas in South-east Asia in which markets for male sex work have been established, male sex work in Hanoi is not limited to exchanges between local populations, but rather is increasingly influenced by global sex tourism (notably involving client partners from countries with high background levels of sexually transmissible infections (STI) and HIV, including treatment-resistant strains of HIV). The overall drug and sexual profile of this population suggests the potential for epidemiological bridging patterns between client partner population, male sex workers and the other collateral risk partners with whom male sex workers are involved, including the local MSM population, the local drug injection population, and multiple types of female sex partners (including female sex workers and non-commercial female sex partners of male sex workers) and this may significantly accelerate the spread of STI and HIV.[18,19]

In assessing this data, we examined the available reports on male sex work and HIV in South-east Asia. Somewhat surprisingly, we found that there is little high quality epidemiological data, a fact that has also been highlighted in review articles on this issue.[20–22] Indeed, and much like the overall male sex work literature, much of the available data on male sex work in South-east Asia is derived from brief and relatively limited surveillance studies of cognate risk populations in which male sex work is also prevalent (particularly IDU). In most cases, these studies use a sampling approach and assessment measures that are not well suited to assessing the social, economic and behavioural complexity of male sex work itself, a fact that we fully acknowledge is also a limitation of the study from which this data is derived.

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Given the fact that the available data suggest that substantial drug and sexual risk exists in this population, there is clearly a need to obtain a more detailed social and epidemiological understanding of these risks so as to properly situate prevention and care programming and services. However, it may be prudent to consider some of the conceptual challenges that may need to be addressed before more targeted inquiry and programming can be successfully advanced: First, as noted above, much of the available behavioural epidemiology on male sex work, both in South-east Asia and globally, has been conducted using assessment tools that were intended for studies of other high-risk populations, particularly female sex worker populations and in some cases IDU. To highlight just one of the many limitations that this kind of limitation may introduce, applying models of female sex work effectively suspends the complex influence that gender may have on sexual risk in this group, thereby distorting our understanding of the nature of these exchanges and pathways for intervention within them.

Second, and on a related point to the issue of gender, assumptions about the sexual identity of male sex workers (which is often assumed to be 'gay') may also need to be reconsidered. Particularly in the context of South-east Asia, neither the client partner nor the sex worker himself may understand themselves to be 'gay' (at least as this term has evolved in Western 'gay culture'). Indeed, many cultures in this region (including Vietnam) have institutionalised forms of sexual exchanges among men that have nothing whatsoever to do with a 'gay' identity.[23–25] Many 'gay' venues in South-east Asia mimic forms of Western 'gay' culture, in part because Western gay men comprise a substantial part of their client base. However, MSM in South-east Asia – including male sex workers – are also actively producing new forms and meaning for same-sex exchange that are quite distinct from Western 'gay culture,' and indeed sometimes in direct counter-position to it. Particularly noteworthy is that emerging MSM populations in South-east Asia are much less preoccupied with 'sexual object choice' as the single source, or primary-axis, for constructing sexual self-concepts or for ordering social life.

Third, a corollary to problems in the way that gender and sexual identity have been conceptualised in research on male sex workers may also be found in the way in which sex work itself has been understood. Perhaps owing to a tendency to borrow concepts and measures from earlier studies of female sex worker populations, much of the reports on male sex work betrays an assumption that these are relatively simple straightforward, quid pro quo exchanges, and that they can be easily understood within rationalist-oriented 'cost-benefit' decision-models. Whether these models are in fact valid for female sex work remains an open question. However, there is growing consensus in more recent documentation on masculinity that suggest that we may need to consider the possibility that these exchanges are considerably more complex and varied than earlier models would suggest. For example, some participants in these exchanges may view these exchanges under the general rubric of 'work',whereas others may view them as 'play', and this may equally apply to either the client or the sex worker himself. Sex work may initially be predicated upon an interest in immediate economic gain. But non-monetary interests may also be operant, or may evolve over time. For example, opportunities for social contact with someone from a different culture or the chance to practise skills in using a different language may also be substantively important. Some exchanges may be transacted on the basis of immediate payment, while others may be organised under the rubric of more generalised forms of reciprocity in which expectations of material rewards are deferred, substituted, or recalculated. Moreover, exchanges that were initially predicated solely upon material reward may evolve into enduring social relationships in which play, mutual affection and social support, overwhelm expectations of material exchange. Multiple types of interests and objectives may co-exist simultaneously, forming a context for complex forms of liminality that may have instrumental social and economic import for one or both of the participants in the exchange. As noted above in the context of the assumptions about sexual identity, male sex workers may be unreceptive to programming that imposes assumptions about the nature of these exchanges that do not match their experience and interests.

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In summary, rapidly expanding markets for male sex work may significantly accelerate the HIV epidemic in this region. Future research on the nature of drug and sexual risk practices among male sex work is needed to more fully define the scope and complexity of behavioural risk in this population. However, much of the earlier research on HIV has been grounded in 'risk factors models' that have conceptually privileged individual deficits in understanding patterns of disease. But it is increasingly apparent that it is imprudent to assume that the physical and sociocultural environment exert only passive, background influences on individuals' behavioural risk. It is also imprudent to assume that behavioural risk is itself inherently Male sex work and HIV risk in Vietnam irrational. Male sex workers in South-east Asia play an active role in organising and directing these exchanges, a fact that should give substantial pause to assumptions about failed rationality in understanding HIV risk behaviour. We are unlikely to identify successful points of intervention in these exchanges if we do not also properly understand the complex social and economic contexts, and surrounding sociocultural environment, in which these exchanges are situated. At a minimum that will require an approach that examines male sex work in South-east Asia on its own terms, rather than simply funnelling them through Western-bound concepts of masculinity, identity and exchange. Moreover, while the development of a more detailed understanding of behavioural risk among male sex workers is clearly needed, there is also a critical need to identify sources of social and behavioural resiliency in this population. The latter may be especially important in yielding the types of information that are critical to advancing behavioural risk reduction and sexual health.

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Table 1

Sociodemographic characteristics

	Sex worker (*n* = 79)		Non-sex worker (*n* = 1036)		*P*-value
	% or mean	*n* or s.d.	% or mean	*n* or s.d.	
Age	22.8	3.1	23.2	3.2	—
Born in Hanoi	46.8%	37	79.0	818	<0.001
Housing status					<0.001
Family's home	32.5%	25	64.3%	666	
Friend's home	2.6%	2	5.0%	52	
My own home or apartment	—	—	1.4%	14	
Hotel or temporary/short-term room	42.9%	33	17.7%	183	
Street/bus station/other public venue	22.1%	17	11.7%	121	
Currently employed	29.1%	23	41.6%	431	<0.05
Income past month (USD)[A]	200.3	248.5	143.3	153.4	0.003
Ever have been in jail	21.5%	17	22.6%	234	—
Ever tested positive					
Hepatitis B or hepatitis C	6.3%	5	7.9%	82	—
Pneumonia	7.6%	6	8.6%	89	—
Ever thought of suicide	31.6%	25	26.4%	273	—
Ever attempted suicide	8.9%	7	8.2%	85	—
Ever received drug treatment	57.0%	45	65.0%	673	—
Ever tested for HIV	40.5%	32	48.5%	502	—
HIV status					—
HIV-positive	29.1%	23	37.1%	384	
HIV-negative	2.5%	2	3.4%	35	
Didn't know/have not tested	62.0%	49	55.4%	574	
Did not disclose	6.3%	5	4.2%	43	

[A] 1 US dollar (USD) was ~15 000 Vietnam Dong (VND) at the time of survey.

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Table 2

Prevalence of lifetime and current drug use

MDMA, 3,4 methylenedioxymethamphetamine (ecstasy)

	Sex worker		Non-sex worker		*P*-value
	% or mean	*n* or s.d.	% or mean	*n* or s.d.	
Marijuana					
Ever used	55.7%	44	36.5%	378	<0.001
Age of first use	20.3	3.2	20.0	3.3	—
Used in the past 30 days	12.7%	10	8.0%	83	—
MDMA					
Ever used	30.3%	24	18.5%	192	<0.01
Age of first use	20.3	3.3	20.6	3.2	—
Used in the past 30 days	7.6%	6	2.7%	28	<0.05
Amphetamine/methamphetamine					
Ever used	43.0%	34	31.2%	323	<0.05
Age of first use	20.6	2.8	20.4	3.2	—
Used in the past 30 days	12.7%	10	3.9%	40	<0.001
Ketamine					
Ever used	3.8%	3	1.6%	17	—
Age of first use	24.3	1.5	18.9	2.6	<0.01
Used in the past 30 days	—	—	0.4%	4	—
Cocaine					
Ever used	10.1%	8	3.7%	38	<0.01
Age of first use	20.8	2.5	19.6	3.8	—
Used in the past 30 days	1.3%	1	0.6%	6	—
Morphine					
Ever used	21.5%	17	9.0%	93	<0.001
Age of first use	18.9	3.4	20.5	3.2	—
Used in the past 30 days	3.8%	3	1.0%	10	<0.05
Opium					
Ever used	44.3%	35	38.6%	400	—
Age of first use	19.3	3.1	18.9	3.2	—
Used in the past 30 days	6.3%	5	2.4%	25	—

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	Sex worker		Non-sex worker		*P*-value
	% or mean	*n* or s.d.	% or mean	*n* or s.d.	

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Table 3

Lifetime and current heroin use and injection risk practices

	Sex worker		Non-sex worker		*P*-value
	% or mean	*n* or s.d.	% or mean	*n* or s.d.	
In the lifetime					
Ever used heroin	100%	79	100%	1036	—
Age of first use	18.4	3.1	18.4	3.1	—
Ever injected	68.4%	54	77.2%	800	0.07
Age of first injection	20.2	3.2	20.9	3.0	—
Used in the past 30 days	100%	79	100%	1036	—
In the past 30 days					
Mode of administration					
Smoked	53.2%	42	38.1%	395	<0.01
Sniffed/snorted	—	—	1.4%	14	—
Injected	62.0%	49	72.5%	751	<0.05
Most frequent mode of administration					<0.01
Smoking	50.6%	40	31.4%	325	
Sniffing	—	—	1.2%	12	
Injection	49.4%	39	67.5%	699	
Preferred mode of administration					—
Smoking	30.8%	12	26.5%	185	
Injection	69.2%	27	73.5%	514	
Days of heroin use	24.6	9.2	26.3	7.7	—
Used heroin every day	62.0%	49	73.0%	756	<0.05
Reasons for preferring injection over the others					
High and rush more intense more pleasurable	70.4%	19	84.0%	432	
High or rush lasts longer	59.3%	16	39.5%	203	<0.05
More intense sexual experience	14.8%	4	5.4%	28	<0.05

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Table 4

Sexual risk and drug/sex interactions

	Sex worker		Non-sex worker		*P*-value
	%	*n*	%	*n*	
Gender of sex partners					<0.001
Exclusively male	8.9%	7	0.1%	1	
Both male and female	53.2%	42	3.6%	33	
Exclusively female	38.0%	30	96.3%	878	
Ever been forced to have sex against will	11.4%	9	2.0%	18	<0.001
In the past 30 days					
Number of sex partners					<0.001
None	35.1%	27	65.1%	594	
One to three	41.6%	32	33.6%	306	
More than three	23.4%	18	1.3%	12	
Used drugs during sexual encounters	68.3%	41	83.3%	269	<0.01
Partner used drugs during sexual encounters	31.7%	19	17.3%	56	<0.01
Partner injected drug before sex	30.4%	14	9.7%	28	<0.001

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Table 5

Current sex work among male sex workers (*n*=45)

	% or mean	*n* or s.d.
Age of first sex work	20.1	2.9
In the past 30 days		
Involved in sex work	57.0%	45
Number of sex work exchanges	8.6	9.8
Number of clients	6.1	8.2
Physical violence by clients	4.4%	2
Non-paying male sex partners	4.4%	2
Number of non-paying female sex partners	33.3%	15
On last sex work occasion		
Age of sex work partners		
Partner was more than 5 years younger	4.4%	2
Partner was 3–5 years younger	4.4%	2
Partner was 1–2 years younger	4.4%	2
Partner was same age	4.4%	2
Partner was 1–2 year older	6.7%	3
Partner was 3–5 years older	17.8%	8
Partner was more than 5 years older	48.9%	22
Don’t know/not sure	8.9%	4
Receptive anal sex	31.1%	14
Without a condom	71.4%	10/14
Insertive anal sex	42.2%	19
Without a condom	47.4%	9/19