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Male-on-Male Intimate Partner Violence and Sexual Risk Behaviors Among Money Boys and Other Men Who Have Sex With Men in Shanghai, China

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Abstract

Background: Intimate partner violence (IPV) is known to increase HIV risk among heterosexual women, but less is known about IPV and HIV among men who have sex with men (MSM), with almost no data from non-Western countries. This study examined the prevalence of IPV and links between IPV and HIV risks among MSM in Shanghai, China.

Methods: A cross-sectional sample of 404 money boys (male sex workers) and other MSM were recruited via respondent-driven sampling.

Results: Overall, 51% of the sample reported emotional, physical, or sexual abuse from a male sexual partner. Money boys reported more overall abuse than did other MSM, and more were likely than other MSM to report experiencing multiple types of abuse. MSM who reported violence or abuse from male partners reported more overall sexual risk behavior, and specifically, more unprotected sex and more sex linked to alcohol and other substance use. The association between experience of abuse from male partners and increased HIV risk did not differ between money boys and other Chinese MSM.

Conclusions: We conclude that violence and abuse from male partners are highly prevalent among Chinese MSM, and that experience of violence from male sexual partners is linked to increased HIV risk. HIV prevention targeting Chinese MSM must address the increased risk associated with experience of male-on-male IPV. Future research should explore links between HIV risk and MSM's perpetration of violence against male partners, as well as exploring the role of violence in the male-female relationships of men who have sex with and men and women.

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Research from around the world documents a strong link between violence by male sexual partners and risk for HIV and other sexually transmitted infections (STIs) among women. For example, research from Africa and India has consistently found that women who have experienced male intimate partner violence (IPV) are more likely to be or become infected with HIV.[1] Intimate partner violence reduces the likelihood that victims will be able to influence the timing and circumstances of sex, resulting in more unwanted sex and less condom use.[1] Exposure to violence from a sexual partner is also consistently associated with subsequent high-risk sexual behaviors, including multiple and concurrent sexual partnerships, increased numbers of overall partners, lower levels of condom use, increased substance use and sex while intoxicated, and increased participation in transactional sex and sex work.[1–4] Jewkes and colleagues[5] recently published longitudinal cohort data from young women in South Africa showing that young women's experience of violence in sexual relationships with men increases subsequent HIV incidence (incidence rate ratio, 1.51; 95% confidence interval (CI), 1.04–2.21; $P = 0.032$), with a population attributable fraction for new HIV infection of 11.9%.

Far less is known globally about the prevalence of violence in sexual relationships between men who have sex with men (MSM),[6,7] or whether the strong links observed between violence and HIV/STI risks for women across a range of cultural settings will hold for the global MSM population. A relatively limited body of research from Western, developed countries does support a link between partner violence[8–11] and increased STI/HIV risk behavior and infection among MSM. However, with rare exception, this question remains almost largely unexplored in other global contexts, and no work with a representative sample from a non-Western country presently exists.

In China, MSM now have the highest population-specific prevalence of both HIV and syphilis, such that MSM are now considered the possible tipping point to a much more severe HIV/STI epidemic in China.[12] Although data on HIV/STI risk behaviors among Chinese MSM are still emerging, the available research affirms high levels of risky sexual behavior, including multiple sexual partners, unprotected anal intercourse, sex while intoxicated, and sex with both male and female sec workers.[13–17]

China is a communist country but has begun to embrace a free-market economy starting in 1978. This economic transformation has been accompanied by several important changes to the social landscape. These included increasing tolerance for a wider range of sexual expression, including male homosexuality (although intense homophobia remains widespread, as does familial pressure to marry and have children); a surge in rural-to-urban migration; and an increased prevalence of sex work.[18] An important subgroup of rural-to-urban migrants are MSM who engage in sex work, known as "money boys" (as they call themselves). Money boys are particularly of concern in the Chinese HIV and STI epidemics because (1) they have large numbers of sexual partners; (2) they often lack power to negotiate condom use with their customers; and (3) a significant number of money boys have both female and male partners as well as noncommercial and commercial partners, making them central figures in large sexual networks.[19]

It is therefore important not only to understand the role of violence in shaping HIV/STI risk among MSM in China, but also to explore whether any associated risk is higher or different for money boys than for other MSM. To that end, the purposes of this study were to (1) establish the prevalence of 1PV among a sample of money boys and other MSM in Shanghai, China, and (2) to explore possible correlations between IPV and sexual risk behaviors for HIV/STI among these men.

MATERIALS AND METHODS

Recruitment and Enrollment of Participants

We collected data from 404 Chinese MSM in Shanghai, China. Eligibility criteria included (*a*) male, (*b*) age 18 years or older, (*c*) ability to give consent, and (*d*) reporting sex with at least 1 male partner in the last 12 months (oral, anal, or both). The sample included both those who self-identified as money boys and other MSM. Recruitment was carried out using respondent-driven sampling (RDS)[20,21] during a 2-month period in spring, 2008. Eight seeds (4 gay-identified and 4 non-gay-identified MSM; with 2 money boys and 2 other MSM in each group) were selected in consultation with a nongovernmental organization that provides sexual risk prevention services for MSM in Shanghai. Each seed was asked to recruit up to 3 of his money boy and/or MSM peers, and each subsequently enrolled participant also recruited up to 3 peers for 1 to 7 waves of recruitment. A coupon tracking system was used to track recruitment, affirm relationships, and prevent recruitment overlap. In conjunction, a series of questions were posed to incoming participants to verify a relationship with their respective seed (e.g., friend, coworker, and sexual partner). Recruited participants were verbally informed of the nature and purpose of the study. This research was approved by the appropriate academic institutional review boards in the United States and China.

Data Collection

Participants self-administered a pencil-and-paper questionnaire (in Chinese), which took approximately 30 to 45 minutes to complete. The questionnaire covered (1) sociodemographic characteristics of the participants (i.e., age, ethnicity, place of birth, and money boy vs. other MSM), (2) psychosocial variables (i.e., IPV), and (3) HIV related behaviors and practices (i.e., unprotected anal sex and substance use).

Sociodemographic and Behavioral Variables

Sociodemographic characteristics included age, education, income, marriage to a woman, self-described sexual orientation, whether out versus closeted, and history of paid and unpaid sex with both men and women.

Intimate Partner Violence

To evaluate experience of male-on-male IPV, participants were asked about the number of different boyfriends or partners who had ever perpetrated a range of violent behaviors against them in the last 5 years. Violent behaviors included the following: being hit, being the target of thrown objects, being threatened with harm or harm to others, being threatened with having their sexuality revealed, being physically forced to have sex, or destruction of property.

Sexual Risk Behaviors

Sexual risk behaviors were assessed using 16 items (i.e., had multiple male sexual partners in last 30 days, ever had unprotected sex with a male or female sex worker, and ever had sex without a condom after alcohol or drug use) developed by the second author.

Statistical Analyses

Using the program RDSAT 5.6,[22] with the complete analysis of continuous variable and adjusted networks size options, we computed estimates of homophily ("the tendency for people to affiliate and associate with others like themselves")[23] and heterophily (those with disproportionately few in-group ties, suggestive of people or groups that avoid others or have greater social distance)[21] to explore recruitment patterns resulting from the RDS (e.g., seeds are theoretically more likely to recruit participants similar to themselves).[20]

Descriptive statistics, both overall and stratified by type of MSM (money boy vs. other MSM), were used to characterize the sample. Prevalence of IPV was calculated by type of MSM (money boy vs. other MSM). Finally, we conducted logistic regression to explore the relationships between experience of IPV and a range of HIV risk behaviors among participants.

RESULTS

The network sizes of seeds ranged from 5 to 128, with an average (SD) of 49.6 (39.6). Results indicated that money boys (homophily, 0.967) and other MSM (homophily, 0.955) had extremely high recruitment homophily and corresponding heterophily. These statistics indicate that almost 97% of the time money boys recruited other money boys, and more than 95% of non–money-boy MSM recruited fellow non–money-boy MSM. In fact, only 7 participants were cross-recruited in the current sample. Based on these results, in-group analyses for money boys and other MSM on the other demographic selection criteria and behavioral characteristics were undertaken to determine patterns of recruitment. These results have been reported elsewhere.[24] In short, results showed comparatively less heterophily and homophily numbers. In addition, results indicate that IPV was not related to recruitment, confirming that money boy versus other MSM was the primary factor driving RDS recruitment and supporting the analyses presented here.

On average, money boys were younger than other MSM and had less education but higher income (see Table 1). Money boys were less likely to be married to a female partner but more likely to identify as heterosexual. There were no statistically significant differences in lifetime or recent history of having sex with female partners.

Both money boys and other MSM reported high levels of abuse and violence from male sexual partners (see Table 2). Overall, 57.4% of money boys versus 44.8% of other MSM ($P = 0.01$) reported any abuse from a male sexual partner. Money boys were also more likely to report experience of multiple types of abuse, with 32.0% of money boys vs. 24.1% of other MSM reporting 2 of more types of abuse ($P = 0.04$). However, among MSM experiencing abuse, the proportion reporting multiple types was similar between money boys (55.7% of abused money boys) versus other MSM (53.4% abused other MSM). Looking at abuse by

specific type, money boys were more likely to report experience of threats to others and marginally more likely to report financial abuse, defined here as threats to withdraw financial or housing support and damage to or destruction of property.

After adjusting for being a money boy, education, income, marriage to a woman, and being out versus closeted, MSM who had experienced more than 1 type of abuse from a male partner were more likely to report any unprotected sex with a man (odds ratio [OR], 2.76 95% CI [1.26–6.07]), unprotected anal sex (OR, 1.85 95% CI [1.03–3.32]), sex while drunk or high (OR, 1.81 95% CI ([1.10–2.98]), or sex with a prostitute (OR, 1.97 95% CI [1.13–3.46]) (Table 3).

DISCUSSION

This is the first study we are aware of to directly examine the link between IPV and HIV risks among MSM in China. The results presented here demonstrate high levels of IPV among Chinese MSM, with money boys being more vulnerable to overall abuse and specifically more vulnerable to threats and financial abuse than other MSM. This experience of violence is linked to increased HIV risk behaviors among all MSM, regardless of their status as money boys: all MSM who had experienced multiple types of abuse were more likely to report HIV risk behavior. This association is similar to that seen in heterosexual women[2–5,25–28] and among MSM in Western cultures.[8–11,29–31]

An important aspect of our findings is that money boys are more at risk for violence than other MSM, and that they are at risk for violence from boyfriends. Although previous research has shown that money boys lack power and may experience violence in relationship with clients,[19] our data suggest that they are vulnerable in their intimate partnerships with other men. This has important implications for thinking about the necessary scope of violence prevention interventions, or of linked interventions to prevent violence and HIV. Given the different circumstances faced by money boys compared with other MSM, targeted prevention is likely to be advisable.

Although the higher prevalence of violence among money boys suggests that violence prevention may be a particularly important prevention need for this subgroup of MSM, our data also demonstrate that nearly 1 in 4 other MSM in Shanghai have experienced multiple types of abuse from a boyfriend and that such abuse is linked to increased HIV risk behavior. This suggests a clear need to address male-on-male violence in HIV prevention for Chinese MSM.

Although our data suggest increased HIV risks among MSM who have experienced violence, they do not currently speak to perpetration of violence against male (or female) partners and HIV risks. The levels of male-on-male IPV perpetration are unknown and unknowable at this stage, but the high levels of reported male-on-male victimization suggest that perpetration must also be high. Investigating whether the links between perpetration of violence and high-risk sex observed among men who have sex with women[2–4,28,32] will hold true for Chinese MSM will be an important question for future research.

This study has several limitations. First, the cross-sectional design of this study is limited in inferring causation. Second, IPV and disclosure of sexuality are both sensitive topics to discuss; hence, it is possible that same-sex partner abuse and other key variables may have underreported. Third, generalizations to other MSM populations in China are limited because recruitment took place in Shanghai only.

Conclusions

Overall, this study confirms that Chinese MSM who have experienced IPV engage in higher levels of HIV risk behavior. Longitudinal studies are needed to clarify the temporal relationship between violence and HIV risk. More importantly, further research is required to understand the social mechanisms underlying perpetration by men against other men. Violence screening and services should be integrated into HIV testing programs in China to help mitigate the impact of violence against MSM and within same-sex male relationships. However, responding to violence against MSM in health settings is insufficient. A multisectorial approach, including the involvement of the societal-level interventions, is required to change the community attitudes, beliefs, and cultural norms that support IPV.

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TABLE 1.

Sociodemographic Characteristics of the Participants (N = 404)

	Overall		Money Boy		Other MSM		
Variable	**n**	**%**	**n**	**%**	**n**	**%**	***P***
Age, mean (SD), y Education	29.6	10.4	24.1	4.34	35.0	11.6	<0.001
Middle school	149	36.8	80	40.2	68	33.5	<0.001
High school	162	40.0	90	45.2	71	35.0	
College	93	23.1	29	14.6	64	31.5	
Income (per month)							
<1000 ($150)	25	6.2	6	3.0	19	9.3	<0.001
1000–2999	204	50.6	89	44.7	115	56.4	
3000–4999	115	28.5	71	35.7	44	21.6	
≥5000 ($715)	59	14.6	33	16.6	26	12.7	
Marital status							
Never married	303	75.1	182	91.0	121	59.4	<0.001
Married now	61	15.0	11	5.5	50	24.3	
Divorced/Widow	40	10.0	7	3.5	33	16.3	
Sexual orientation							
Openly gay/bi	49	12.1	26	13.2	23	11.1	<0.01
Closet gay/bi	321	79.5	147	73.5	174	85.3	
Hetero or other	34	8.4	27	13.5	7	3.4	
Sex with both men and women							
Lifetime	308	76.2	153	76.5	155	76.0	0.90
Last 12 mo	154	38.1	85	42.5	69	33.8	0.07
Last 30 d	75	18.6	34	17.0	41	20.1	0.42

TABLE 2.

Prevalence of IPV Among Chinese MSM

	Overall, n (%)	Money Boy, n (%)	Other MSM, n (%)	*P*
Threatened to stop helping you with money or with housing	44 (11.0)	27 (13.8)	17 (8.2)	0.07
Damaged or destroyed your property	55 (13.7)	33 (16.9)	22 (10.6)	0.06
Threatened to tell others about your sexuality	36 (9.0)	14 (7.2)	22 (10.6)	0.23
Verbally threatened to physically harm someone you care for	100 (24.9)	57 (29.2)	43 (20.9)	0.05
Verbally threatened to harm you physically or emotionally	103 (25.7)	55 (28.2)	48 (23.3)	0.26
Hit you or threw something at you	59 (14.7)	31 (15.9)	28 (13.5)	0.50
Forced you to have sex when you did not want to	23 (5.7)	14 (7.2)	9 (4.3)	0.22
Any abuse	204 (51.0)	113 (57.4)	91 (44.8)	0.01
2+ types of abuse	112 (28.0)	63 (32.0)	49 (24.1)	0.04

TABLE 3.

Adjusted ORs for Lifetime Experience of Violence From a Male Sexual Partner and Various Sexual Risk Behaviors

Outcome (Lifetime)	Freq of Abuse	Adjusted OR*	95% CI	*P*
Unprotected sex with main partner	None	1.00	Reference	
	1 event	1.40	0.80–2.45	0.24
	2+ events	1.86	1.11–3.12	0.02
Sex with male or female sex worker	None	1.00	Reference	
	1 event	1.75	0.93–3.27	0.08
	2+ events	1.96	1.11–3.45	0.02
Unprotected sex with sex worker	None	1.00	Reference	
	1 event	1.35	0.58–3.15	0.49
	2+ events	2.77	1.38–5.58	0.004
Unprotected anal sex	None	1.00	Reference	
	1 event	1.80	0.96–3.38	0.07
	2+ events	1.85	1.03–3.32	0.04
Sex after drinking alcohol	None	1.00	Reference	
	1 event	0.70	0.41–1.19	0.19
	2+ events	1.87	1.14–3.05	0.01
Unprotected sex after drinking alcohol	None	1.00	Reference	
	1 event	0.99	0.55–1.75	0.96
	2+ events	1.74	1.05–2.89	0.03
Sex while drunk or high	None	1.00	Reference	
	1 event	0.64	0.37–1.09	0.10
	2+ events	1.81	1.10–2.98	0.02

*All models are adjusted for being a status as a money boy or other MSM, education, income, marriage to a woman, and out versus closeted about sexual orientation.

CI indicates confidence interval.