

Correlates of Forced Sex Among Populations of Men Who Have Sex with Men in Thailand

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Abstract Although forced sex is a correlate of HIV infection, its prevalence and associated risks are not well described among men who have sex with men (MSM) in developing-country settings. Between March and October 2005, we assessed the prevalence of forced sex and correlates among populations of MSM (this includes general MSM, male sex workers, and male-to-female transgender persons) in Thailand using a community-based sample. Participants were enrolled from venues around Bangkok, Chiangmai, and Phuket using venue day-time sampling. Handheld computer-assisted self-interviewing was used to collect demographic and behavioral data and logistic regression evaluated factors associated with forced sex, defined as ever being forced to

have sexual intercourse against one's will. Of the 2,049 participants (*M* age, 24.8 years), a history of forced sex was reported by 376 (18.4%) men and, of these, most were forced by someone they knew (83.8%), forced more than once (67.3%), and had first occurrence during adolescence (55.1%). In multivariate analysis, having a history of forced sex was significantly associated with being recruited in Phuket, classification as general MSM or transgender (versus classification as male sex worker), drug use, increased number of male sexual partners, and buying sex. The findings in our assessment were consistent with assessments from Western countries. Longitudinal studies are needed to understand the mechanisms of the relationships between forced sex correlates found in our assessment and HIV acquisition and transmission risks.

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Introduction

Forced sex is known to increase vulnerability to numerous adverse health outcomes, including drug use, psychological morbidities, HIV, and other sexually transmitted infections (STI) (Ellickson, Collins, Bogart, Klein, & Taylor, 2005; Gruskin et al., 2002; Hoffman, O'Sullivan, Harrison, Dolezal, & Monroe-Wise, 2006; Koenig et al., 2004; Lichtenstein, 2005; Vlahov et al., 1998; Zierler et al., 1991). Most studies on forced sex and its consequences have focused on women; many fewer have been conducted among men (Holmes & Slap, 1998). Studies among homosexual men have found HIV and STI risk behaviors and mental and psychological factors associated with a history of forced sex: unprotected anal sex, multiple sex partners, sex work, substance use, early initiation of injection drug use, suicidal ideation, depression, post-traumatic stress

disorder, and mood-related disorders (Bartholow et al., 1994; DiIorio, Hartwell, Hansen, & NIMH Multisite HIV Prevention Trial Group, 2002; Lenderking et al., 1997; Ompad et al., 2005; Ratner et al., 2003; Wolfe, Francis, & Straatman, 2006). Other studies among men have found associations of sexual abuse during childhood as a predictor of criminal behaviors (Johnson et al., 2006; Wolfe et al., 2006). Major limitations of these studies include lack of systematic sampling of participants and non-uniform definitions of coercion (Holmes & Slap, 1998). Furthermore, these studies were limited to the context of urban areas in North America; few reliable data on forced sex have been obtained from developing-country settings (Maman, Campbell, Sweat, & Gielen, 2000).

In Thailand, there have been few assessments of male-to-male sexual behavior. Most early studies investigated the prevalence of homosexual experiences among military recruits (Beyrer et al., 1995; Kitsiripornchai et al., 1998; London, Van Landingham, & Grandjean, 1997; Nelson et al., 2002). In 2003 (van Griensven et al., 2005) and 2005 (Centers for Disease Control and Prevention, 2006), the first studies were done to assess HIV prevalence and risk behaviors in community-based samples of men who have sex with men (MSM). Prior to that, in 1999, we assessed the prevalence of bisexual and homosexual orientation and related health risks among 1,725 adolescents in Northern Thailand. Of men who answered affirmatively to being bisexual or homosexual (9.0%), 26% reported having ever been forced into sexual contact or intercourse, which was significantly higher than the 4.6% of heterosexual males studied (Manopaiboon et al., 2003; van Griensven et al., 2004). These findings were consistent with studies from Western countries.

Since homosexual men in Thailand may engage in high-risk behaviors for HIV and STI infection, understanding factors associated with these behaviors may inform public health programs to better target these populations. In this article, we report the prevalence and correlates of forced sex in populations of men who have sex with men in Thailand.

Method

Participants

Using venue-day-time sampling (VDTS), men were enrolled from entertainment establishments (bars, discos, show venues), parks, saunas, street locations, and male sex-work venues in Bangkok (capital, Central Thailand), Chiangmai (Northern Thailand), and Phuket (Southern Thailand). VDTS is a systematic method of identification and mapping of venues, followed by enumeration of male venue attendees, determination of attendees' eligibility and willingness to participate, and, finally, selection of venues to be included in the assessment. VDTS methodology in the Asian setting has been described in detail elsewhere (CDC, 2006; Mansergh et al., 2006). These cities

were chosen because they are the social, cultural, educational, and economic epicenters of their respective regions. To be eligible for the survey, participants had to be Thai, 15 years or older, male sex, resident of the study area, and reporting anal or oral sex with a man in the past 6 months. For this analysis, participants enrolled from locations where men congregate to socialize with other men and seek male sexual partners (e.g., bars, discos, saunas, parks) were classified as general MSM, those enrolled from male sex-work venues (e.g., "go-go" bars [bars where sex workers can be solicited] and massage parlors) were classified as male sex workers, and the remainder were classified as transgender (TG), based on their outward characteristics (as determined by trained recruitment staff) and on the characteristics of the enrollment venue (e.g., cabaret, revue, and show settings). Participation was anonymous and voluntary. Of 2,049 participants (response rate, 97.3%; *M* age, 24.8 years) enrolled, 949 (46.3%) were from Bangkok, 572 (27.9%) from Chiangmai, and 528 (25.8%) from Phuket; 821 (40.1%) were classified as MSM, 754 (36.8%) as male sex workers, and 474 (23.1%) as TG.

Procedure

Once eligibility and verbal informed consent were attained, hand-held computers were used to self-collect demographic and behavioral data. A local community-based organization, Rainbow Sky Association of Thailand (RSAT), aided research staff in mapping and recruiting men from these venues. The assessment protocol was determined a human subjects research activity by the Thailand Ministry of Public Health and was consequently reviewed and approved by the full Ethical Review Committee. However, the U.S. Centers for Disease Control and Prevention (CDC) determined this assessment to be a surveillance activity and not a human subjects research activity, which consequently did not require a CDC IRB review. The data analysis reported in this article was also determined a non-human subjects research activity by the Johns Hopkins Bloomberg School of Public Health.

Measures

Survey instruments used in this assessment were adapted from the CDC's Young Men's Survey (MacKellar, Vallerot, Karon, Lemp, & Janssen, 1996). All questions were locally tested and adapted to the social and cultural contexts of Thailand and for Thai MSM, with the help of the study's community partner RSAT (Mansergh et al., 2006). These questions measured demographics (e.g., education) and sexuality-related constructs that include gender identity (e.g., male, gay, female) (in the Thai language, gay is denoted as a separate gender: "phet gay" or "gay gender") (Jackson & Sullivan, 2000), sexual orientation

identity (e.g., heterosexual, bisexual, homosexual and transgender), and sex role identity (e.g., “top” [insertive sex role identity], “bottom” [receptive sex role identity], “versatile” [both “top” and “bottom”]). Other questions assessed alcohol and drug use (drugs refer to use of marijuana, methamphetamine/speed, ketamine, ecstasy, poppers [nitrates], inhalants [glue, thinners], and sleeping pills), number of lifetime male intercourse partners, sex work and frequency of condom use in the past 3 months. Responses included “always,” “sometimes—more than half the time,” “sometimes—less than half the time,” and “never.” Forced sex was defined as ever being forced to have sexual intercourse against one’s will. Forced sex-related questions assessed lifetime occurrence, number of occurrences, age at first occurrence, gender of perpetrator at first occurrence, condom use at first occurrence, and the relationship of the perpetrator to the participant at first occurrence.

Data Analysis

Differences in forced sex history were evaluated by recruitment city and population using Pearson’s chi-square test for categorical variables or Fisher’s exact test when expected values for these variables were below five. One way ANOVAS were used for all continuous variables. To identify independent risk factors for sexual coercion and CSA, variables that were theoretically relevant, were not collinear (e.g., gender identity, sexual orientation identity, anal sex role identity), and that had p values of .25 or lower in bivariate analysis were entered into generalized estimating equation (GEE) backward stepwise selection logistic regression. A variable identifying each venue and calendar date cluster was created, which is used to adjust the standard errors

and p values in the GEE regression analysis. There were a total of 152 clusters with the number of subjects ranging from 1 to 52, and a median of 11. STATA 9.0 (Version 9.1, 2005; Stata Corp., College Station, Texas, USA) was used for all data analysis.

Results

Demographics and Forced Sex Prevalence

Of all participants, 376 (18.4%) reported a history of forced sex. Tables 1 and 2 depict the characteristics of study participants who reported a history of forced sex, stratified by recruitment city and population, respectively. These participants were most often forced before age 18, forced by a man, without condom use, and usually by somebody they knew (sexual partner, family member, friend or acquaintance). Participants from Phuket were more likely to report a history of forced sex ($p = .015$) and more likely to be forced before age 18 and by a friend ($p = .006$ and $.009$, respectively), as compared to men who were recruited from Bangkok or Chiangmai. Forced sex prevalence was higher among TG (26.3%, $p < .001$) compared to MSM or male sex workers. Compared to MSM or TG, male sex workers were less likely to be forced by a man ($p < .001$).

Bivariate and Multivariate Analyses of Factors Associated with Forced Sex

Table 3 shows variables associated with a history of forced sex in bivariate analysis. Of note, being recruited in Phuket

Table 1 History and context of forced sex by city of enrollment

	Bangkok <i>N</i> = 949	Chiangmai <i>N</i> = 572	Phuket <i>N</i> = 528	Combined <i>N</i> = 2049	p^a
History of forced sex (%)	158 (16.6)	99 (17.3)	119 (22.5)	376 (18.4)	.015
Among those with a history of forced sex					
Median age at first occurrence, years (SD, range)	18 (4.2, 6–30)	16 (4.6, 5–30)	16 (3.4, 8–25)	17 (4.1, 5–30)	.006
<18 years at first occurrence (%)	43.7	58.6	67.5	54.8	<.001
Forced by a man (%)	94.3	90.9	95.0	93.6	ns
Median number of times (SD, range)	2 (5.5, 1–60)	2 (15.7, 1–150)	2 (3.9, 1–28)	2 (9.1, 1–150)	ns
Condom used at first occurrence (%)	48.7	39.4	39.5	43.4	ns
Relationship of first coercive partner					
Steady sexual partner (%)	13.9	9.1	18.5	14.1	.009 ^b
Casual sexual partner (%)	9.5	13.1	9.2	10.4	
Family member (%)	7.0	10.1	1.7	6.1	
Friend (%)	19.0	12.1	27.7	20.0	
Acquaintance (%)	31.0	36.4	33.6	33.2	
Stranger (%)	19.6	19.2	9.2	16.2	

^a p value obtained from Pearson’s χ^2 test for categorical variables or from one-way ANOVAS for continuous variables, unless indicated otherwise

^b p value obtained from Fisher’s exact test

Table 2 History and context of forced sex by population

	MSM N = 821	MSW N = 754	TG N = 474	Combined N = 2049	p ^a
History of forced sex (%)	159 (19.4)	92 (12.2)	125 (26.4)	376 (18.4)	< .001
Among those with a history of forced sex					
Median age at first occurrence, years (SD, range)	17 (4.5, 5–30)	17 (3.6, 9–26)	17 (3.9, 8–30)	17 (4.1, 5–30)	ns
<18 years at first occurrence (%)	52.8	54.4	57.6	54.8	ns
Forced by a man (%)	93.1	85.9	100	93.6	<.001
Median number of times (SD, range)	2 (12.1, 1–150)	2 (8.2, 1–60)	2 (3.2, 1–20)	2 (9.1, 1–150)	ns
Condom used at first occurrence (%)	44.7	37.0	46.4	43.4	ns
Relationship of first coercive partner					
Steady sexual partner (%)	14.5	10.9	16.0	14.1	ns ^b
Casual sexual partner (%)	12.6	15.2	4.0	10.4	
Family member (%)	6.3	3.3	8.0	6.1	
Friend (%)	17.6	19.6	23.2	20.0	
Acquaintance (%)	33.3	32.6	33.6	33.2	
Stranger (%)	15.7	18.5	15.2	16.2	

MSM men who have sex with men, MSW male sex workers, TG male-to-female transgender persons

^a p value obtained from Pearson's χ^2 test for categorical variables or from one-way ANOVAS for continuous variables, unless indicated otherwise

^b p value obtained from Fisher's exact test

(versus Bangkok), classification as MSM or TG (versus male sex workers), and being recruited from entertainment, parks/street or other venues (versus saunas) were significantly associated with a history of forced sex. Moreover, identity-related variables were also significantly associated with a history of forced sex, including gender self-identifying as gay or female (versus male), sexual orientation identification as homosexual or transgender (versus heterosexual), and anal sex role identification as bottom or versatile (versus top). Finally, traditional HIV correlates, such as usually practicing receptive only or practicing receptive and insertive anal sex (versus insertive only), having ever used drugs; having used drugs in the past 3 months, having had more than one lifetime male intercourse partner (versus one or no partner), and having ever received or given money, gifts, or valuables for sex were all significantly associated with a history of forced sex in bivariate analysis.

In multivariate analysis, only a few variables were significant. These included being recruited in Phuket (versus Bangkok), classification as MSM or TG (versus male sex workers); having used drugs in the past 3 months, having had more than one lifetime male intercourse partner (versus one or no partner), and having ever given money, gifts, or valuables for sex.

Discussion

To our knowledge, this is the first systematic assessment of forced sex conducted among MSM in Asia. We found an overall prevalence of forced sex to be 18.4%. This prevalence

was consistent with findings from Western countries (Holmes & Slap, 1998; Paul, Catania, Pollack, & Stall, 2001; Ratner et al., 2003). In an earlier convenience sample of young self-identified bisexual and homosexual men attending vocational colleges in Northern Thailand, we found a higher forced sex prevalence of 26% (van Griensven et al., 2004). However, the definition of forced sex was broader and included other types of sexual acts besides sexual intercourse. Despite this, factors related to forced sex were similar: being forced for the first time during adolescence, by someone they knew and without condoms (Manopaiboon et al., 2003). Consistent with the literature and the earlier assessment, we found that drug use and having higher numbers of lifetime sexual partners were independently associated with a history of forced sex (Bartholow et al., 1994; DiIorio et al., 2002; Lenderking et al., 1997; Manopaiboon et al., 2003; Paul et al., 2001). A recent meta-analysis also found a significant association between sexual abuse during childhood/adolescence and substance use, mental health problems, risk behavior, and HIV prevalence during adulthood (Friedman et al., 2008). Longitudinal studies in this population are needed to provide insights into the specific mechanisms and the possible causal relationships of these correlates (e.g., number of sex partners and coercion).

In our study, men recruited from Phuket were more likely to have been forced to have sex by a friend and before age 18, as compared to men recruited from Bangkok or Chiang-mai. Culture may have played an important mediator in this relationship since Southern Thailand tends to be more socially conservative and premarital heterosexual relations are

Table 3 Correlates of forced sex among men who have sex with men populations in Thailand 2005

Risk factor	<i>n/N (%)</i>	Bivariate Odds ratio (95% CI)	Multivariate ^a Odds ratio (95% CI)
Ever forced sex, overall	376/2049 (18.4)		
Recruitment city			
Bangkok	158/949 (16.6)	1	1
Chiangmai	99/572 (17.3)	1.05 (0.80–1.38)	1.12 (0.81–1.55)
Phuket	119/528 (22.5)	1.46 (1.12–1.90)	1.40 (1.08–1.82)
Population			
Male sex workers	92/754 (12.2)	1	1
MSM	159/821 (19.4)	1.73 (1.31–2.28)	1.79 (1.33–2.42)
TG	125/474 (26.4)	2.58 (1.91–3.48)	2.36 (1.72–3.24)
Recruitment venue			
Sauna	24/211 (11.4)	1	Not included
Entertainment	176/1001 (17.6)	1.66 (1.05–2.62)	
Park/street	141/664 (21.2)	2.10 (1.32–3.34)	
Other ^b	35/173 (20.2)	1.98 (1.12–3.47)	
Education			
Lower than high school	168/964 (17.4)	1	
High school	47/217 (21.7)	1.17 (0.78–1.74)	
Technical or vocational college	86/450 (19.1)	0.89 (0.67–1.19)	
University or higher	75/418 (17.9)	0.93 (0.66–1.30)	
Gender identity ^c			
Male	157/1172 (13.4)	1	Not included
Gay	39/170 (22.9)	1.92 (1.30–2.86)	
Female	175/683 (25.6)	2.23 (1.75–2.83)	
Sexual orientation identity			
Heterosexual	50/419 (11.9)	1	Not included
Bisexual	49/309 (15.9)	1.39 (0.91–2.13)	
Homosexual	186/989 (18.8)	1.71 (1.22–2.39)	
Transgender	91/332 (27.4)	2.79 (1.90–4.08)	
Anal sex role identity			
Insertive/top	62/651 (9.5)	1	Not included
Receptive/bottom	160/628 (25.5)	3.25 (2.36–4.46)	
Versatile	154/770 (20.0)	2.38 (1.73–3.26)	
Usual anal sex role ^c			
Insertive only	82/681 (12.0)	1	Not included
Receptive only	187/776 (24.1)	2.32 (1.75–3.08)	
Insertive and receptive	88/418 (21.1)	1.95 (1.40–2.71)	
Drug use ^d (ever)			
Yes	257/1223 (21.0)	1.58 (1.25–2.01)	Not included
No	119/826 (14.4)	1	
Drug use ^d (past 3 months)			
Yes	164/734 (22.3)	1.50 (1.19–1.88)	1.47 (1.15–1.88)
No	212/1315 (16.1)	1	1
Alcohol use (times having 5 drinks or more in the past 3 months)			
0	144/721 (20.0)	1	
1–4	76/434 (17.5)	0.85 (0.63–1.16)	

Table 3 continued

Risk factor	<i>n/N (%)</i>	Bivariate Odds ratio (95% CI)	Multivariate ^a Odds ratio (95% CI)
5–9	64/358 (17.9)	0.87 (0.63–1.21)	
10 or more	92/536 (17.2)	0.83 (0.62–1.11)	
Number of lifetime male intercourse partners ^c			
0–1	72/694 (10.4)	1	1
2–10	140/700 (20.0)	2.16 (1.59–2.93)	1.86 (1.34–2.59)
11–50	86/399 (21.6)	2.37 (1.69–3.34)	2.00 (1.41–2.82)
51 or more	78/256 (30.5)	3.79 (2.64–5.43)	3.07 (2.09–4.52)
Always used condom with male intercourse partners (past 3 months) ^c			
Yes	46/192 (24.0)	1	
No	207/938 (22.1)	0.90 (0.62–1.30)	
Ever received money, gifts, or valuables for sex ^c			
Yes	273/1205 (22.7)	2.12 (1.66–2.71)	Not included
No	102/840 (12.1)	1	
Ever gave money, gifts, or valuables for sex ^c			
Yes	162/703 (23.0)	1.58 (1.26–1.99)	1.47 (1.15–1.88)
No	213/1337 (15.9)	1	1

CI confidence intervals, MSM men who have sex with men, TG male-to-female transgender persons, N/A not applicable

^a For the multivariate model, *drug use lifetime* was not included because of collinearity with *drug use in the past 3 months* ($p < .001$). Additionally *recruitment venue*, *gender identity*, *sexual orientation identity*, *anal sex role identity*, *usual anal sex role* and *ever received money, gifts or valuables for sex* were not included in the multivariate model because they were collinear with *population* ($p < .001$)

^b Other refers to dormitories, gyms, gas stations, and beauty salons

^c Totals may vary due to missing values

^d Drugs here refer to use of any of the following: marijuana, methamphetamine/speed, ketamine, ecstasy, poppers, inhalants, and sleeping pills

stigmatized, as compared to other regions in Thailand (Knodel, Gray, Sriwatcharin, & Peracca, 1999). Hence, unsolicited or unwanted sexual events may be more likely among young men in Southern Thailand since premarital sex with females is not allowed.

We found that population (MSM or TG versus male sex workers) was significantly associated with a history of forced sex. A U.S.-based study by Friedman, Koeske, Silvestre, Korr, and Sites (2006) found gender-role nonconforming behavior to be significantly associated with being subjected to bullying and other physical victimization from peers. Although we did not specifically assess gender-role nonconforming behaviors among our participants, it may be that effeminate Thai young males are more vulnerable to sexual harassment and forced sex than their gender-role conforming peers. For instance, male sex workers in our study were more likely than MSM and TG to self-identify as male (not shown, 48.7%, 48.7% and 2.6%, respectively) and heterosexual (not shown, 69.9%, 19.3%, and 10.7%, respectively) and also reported the lowest prevalence of forced sex (12.2%), followed by MSM (19.4%) and TG (26.4%). We may assume that male sex workers, as a group, adhere more to the male heterosexual role and thus less subjected to gender-role conforming social and sexual pressure.

This pattern remained even when we substituted population (male sex workers, MSM, TG) with gender identity (male, gay, female) and anal sex role identity (top, versatile, bottom). Although speculative, there seems to be a relationship between levels of gender-role nonconforming behaviors, or levels of being effeminate, and forced sex prevalence. However, this is just one piece of complex, interrelationships of masculinity and partner sexual violence that ultimately involve upstream issues like internalized and social homophobia, socially-constructed gender norms, sexual role expectations, sexual domination, and relationship power (Burke & Follingstad, 1999; Moore & Stuart, 2005; Stall, Friedman, & Catania, 2008).

Furthermore, intimate partner violence in the context of taking on traditional gender roles among populations of men who have sex with men is not well understood (Island & Letellier, 1991; Leventhal & Lundy, 1999). Studies among heterosexual males and females have found that experiences of sexual violence and controlling behavior from male partners were significantly associated with increases in HIV risk behaviors among women (Dunkle et al., 2004; Vlahov et al., 1998). In our assessment, Thai men who perceived themselves to be female or transgender may, in fact, take on traditional gender roles of a Thai woman in both the private

(e.g., sexual) and public contexts, and hence may be more prone to forced sex from their male partners. Still, research on the cultural meanings of identities and gender norms and their relationships to sexual domination, power and control and the spaces (e.g., public, private/intimate, virtual) where these domains transpire in the context of sexual health risks is desperately needed.

Limitations

There were some limitations in our analysis of forced sex. Since our assessment was venue based, the prevalence and correlates of forced sex may be different in men who do not attend such venues (van Griensven et al., 2005). This includes men who meet on the Internet, through a telephone service, or through other non-venue based social networks. Secondly, only sexually active men were eligible for enrollment, which may over- or under-estimate the prevalence of forced sex. In addition, since our assessment took place at remote locations, time was limited and detailed questions on forced sexual experiences and related sociocultural contexts (e.g., socioeconomic status) could not be asked. Consequently, in-depth information, including types of sexual activities, location of the incident, age of the perpetrator, or information relating to mental health outcomes, such as neuroses and depression, could not be assessed. Finally, because this was a cross-sectional assessment, we cannot make causal inferences.

Implications

Despite these limitations, our assessment is one of the few systematic estimates of forced sex among populations of men who have sex with men in the region. To our knowledge, other major behavioral assessments among this population in Asia did not ascertain information on forced sex (Choi et al., 2003; Girault et al., 2004; Pisani et al., 2004). Thailand is currently in the midst of an escalating HIV epidemic among MSM. The significant association between forced sex history and traditional HIV correlates found in our assessment warrant considerable attention to the vulnerabilities of Thai MSM.

Our findings thus have policy implications for these populations both in Thailand and the Southeast Asian region. Some initial steps in responding to this crisis may include a candid discussion of anal sex (forced and non-forced) between males and between males and females as part of school-based sex/sexuality education curricula. Second, teachers, school-based counselors, and community-based organizations working with sexual minority populations must be sensitive to the reality of forced sex among effeminate young males. Third, healthcare practitioners and HIV prevention specialists need to be alert to this issue not only among adolescent MSM, but also MSM who are in later stages of their lives.

With respect to policy, a recent success in Thailand is that the Bureau of Epidemiology of the Thailand Ministry of Public Health in 2004 assessed forced sex for the first time among eleventh grade female students, as part of the national behavioral surveillance (Chemnasiri & Plipat, 2004). We suggest that future assessments involve males (gender and non-gender role conforming) and the gender of their partners. This will be extremely useful in understanding adolescent sexual health to inform programs in this area for general MSM, male sex workers, and TG in Thailand.

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