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The influence of stigma on HIV risk behavior among men who have sex with men in Chennai, India

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Abstract

Stigma has been shown to increase vulnerability to HIV acquisition in many settings around the world. However, limited research has been conducted examining its role among men who have sex with men (MSM) in India, whose HIV prevalence is far greater than the general population. In 2009, 210 MSM in Chennai completed an interviewer-administered assessment, including questions about stigma, sexual-risk, demographics, and psychosocial variables. More than one fifth of the MSM reported unprotected anal sex (UAS) in the past three months. Logistic regression procedures were used to examine correlates of having experienced stigma. The 11-item stigma scale had high internal consistency reliability (Cronbach's alpha=0.99). Almost 2/5ths (39%) reported a high-level of experienced stigma (> 12 mean scale-score) in their lifetime, and the mean stigma scale score was 12 (SD=2.0). Significant correlates of having experienced prior stigma, after adjusting for age and educational attainment, included: identifying as a kothi (feminine acting/appearing and predominantly receptive in anal sex) compared to a panthi (masculine appearing, predominantly insertive) (AOR= 63.23; 95% CI: 15.92, 251.14; p<0.0001); being “out” about one's MSM behavior (AOR=5.63; 95% CI: 1.46, 21.73; p=0.01); having clinically significant depressive symptoms (AOR=2.68; 95% CI: 1.40, 5.12; p=0.003); and engaging in sex work in the prior 3 months (AOR=4.89; 95% CI: 2.51, 9.51; p<0.0001). These findings underscore the need to address psychosocial issues of Indian MSM. Unless issues such as stigma are addressed, effective HIV prevention interventions for this hidden population remain a challenge.

Keywords

men who have sex with men; MSM; depression; India; HIV; stigma

Introduction

Global HIV prevention intervention efforts among men who have sex with men (MSM) have been limited since often information regarding their unique social determinants of HIV vulnerability and transmission is lacking (Naz Foundation International, 2004). In India, the stigma associated with male same-sex sexual behavior is accompanied by social pressure to identify as heterosexual. These combined influences have resulted in many MSM remaining silent about their sexual identity (Chakrapani, Newman, Shunmugam, McLuckie, & Melwin, 2007; Safren, et al., 2006). Surveillance data indicates a concentrated epidemic among MSM internationally, with recent HIV prevalence for this population in India estimated between 6–19% (National AIDS Control Organization, 2008). Furthermore, for many Indian MSM, cultural expectations presume that they will marry a woman (Asthana & Oostvogels, 2001). This expectation coupled with the high prevalence of HIV among MSM places the female sexual partners of Indian MSM at increased risk of HIV and threatens to expand the HIV epidemic (Kumta, et al., 2010).

MSM in India encompass a diverse group of men who endorse a variety of sexual identities. These include, but are not limited to: a minority who self-identify as gay men (Western acculturated), as well as kothis (receptive partners in oral/anal sex), panthis (insertive partners in oral/anal sex), and “double-deckers” (both insertive and receptive partners) (Asthana & Oostvogels, 2001; Go et al., 2004; Safren et al., 2004, 2006). It is not surprising that within this complexity, MSM who do not behave within the parameters of normative masculinity, or are considered gender nonconforming, experience direct discrimination and stigma leading to social marginalization and exclusion, as well as sexual vulnerability (Khan & Bondyopadhyay, 2006).

In the United States, stigma among MSM has been associated with social isolation, low self-esteem, and psychological distress (Díaz, Ayala, Bein, Henne, & Martin, 2001). These psychological outcomes of stigma have been proposed to serve as a pathway to the engagement in risky sexual practices, including having sex after consuming drugs or alcohol and having sex with a partner who refuses to wear a condom (Díaz, Ayala, & Bein, 2004).

Among persons living with HIV/AIDS, HIV-related stigma has been associated with poor mental health outcomes in both adults and young people (Dowshen, Binns, & Garofalo, 2009; Hatzenbuehler, O’Cleirigh, Mayer, Mimiaga, & Safren, 2011), as well as poor physical health and lower help-seeking behavior (Herek & Capitano, 1999; Logie & Gadalla, 2008). A 2011 study from Hatzenbuehler and colleagues (Hatzenbuehler et al., 2011) found HIV-related stigma to be associated with HIV sexual transmission risk behaviors, including unprotected insertive anal sex with partners of unknown serostatus. Notably, the association between stigma and sexual risk remained significant after controlling for mental health variables, indicating that social oppression may influence sexual risk above and beyond the related effects of psychological distress. The social discrimination related to having a sexual minority identity, as well as that related to having HIV, has a profoundly negative impact on the physical and psychological well-being of MSM and these negative health correlates of stigma may be components of the engine driving the spread of the HIV epidemic among this group.

Although research on stigma and its negative physical and mental health sequelae among MSM is growing, little is known about the specific manifestations of MSM-related stigma in resource limited countries, such as India. The current paper aims to narrow these gaps by examining the effects of experiencing stigma on psychosocial wellbeing and sexual health among Indian MSM.

Methods

Participants and procedures

Participants (N = 210) were recruited through peer outreach workers at an MSM non-governmental organization in Chennai called the India Council of Medical Research (ICMR), Tuberculosis Research Centre (TRC),, a sexual health organization for Indian MSM that conducts outreach. Study visits occurred at the [name deleted to maintain the integrity of the peer review process], a governmental research institution involved in studies of HIV prevention. Participants completed an interviewer-administered psychosocial assessment battery and underwent standard-of-care HIV pre- and post-test counseling. Additional specifics on procedures and HIV testing algorithms for this study can be found elsewhere (Thomas, Mimiaga, Menon, Chandrasekaran, Murugesan, Swaminathan, ...Safren, 2009). The study was approved by the Institutional Review Boards at Massachusetts General Hospital/Harvard Medical School, as well as the Ethics Committee at the TRC.

Study instruments

Demographics—Participants were asked about their age, MSM subpopulation identity (e.g., kothis, panthis, double-deckers, and other sexual identities), religion (Hindu, Christian, or Muslim), marital status and whether they had children, education level, employment status, and their openness about sexual behavior to family.

Experienced stigma/discrimination—Experiences of MSM-related stigma/discrimination were assessed using an 11-item scale (Cronbach's alpha=0.99) adapted from existing measures (Lewis, Derlega, Berndt, Morris, & Rose, 2001; Lewis, Derlega, Griffin, & Krowinski, 2003). Each scale item had a Likert score ranging from 1 (“never”) to 4 (“many times”); total scale score=44. Example questions included: 1) “As an adult, how often have you been hit or beaten up for being homosexual or effeminate?” 2) “As you were growing up, how often did you feel that your homosexuality hurt and embarrassed your family?”.

Sexual risk taking—Participants were asked about their total number of male and female sexual partners in the three months prior to study enrollment, as well as whether or not they engaged in any unprotected anal insertive or receptive sex with another man and unprotected vaginal sex with a woman in the same timeframe. They were also asked about their engagement in transactional sex (“sex work”) with another man for money in the past 12 months. These questions were adapted from widely used assessments of sexual risk taking among MSM in the U.S. (Chesney et al., 2003; Koblin et al., 2003).

Depressive symptoms—Depressive symptoms were assessed with the Center for Epidemiologic Studies Depression Scale (CES-D) a validated survey of clinically significant distress as a marker for clinical depression (coefficient alpha=0.90; Cronbach's alpha=0.89) (Radloff, 1977). The 20-items were scored on a 4-point Likert scale from 0 to 3, with a score of 16 or greater indicative of clinically significant depressive symptoms.

Data analysis

SAS® version 9.1.3 (SAS Institute, 2003) statistical software was used to perform each analysis, where statistical significance was determined at $p < 0.05$. The outcome of interest for this analysis is a dichotomous measure of above or below the mean stigma scale score for the sample. Statistically significant bivariate demographic, behavioral and psychosocial

factors associated with experiencing stigma for the sample were retained in a final fitted multivariable model, adjusted for age and educational attainment.

Results

Demographic, behavioral and psychosocial characteristics of the study sample are outlined in Table 1, dichotomized by experiencing stigma. The mean age was 28.9 years (SD=7.83); and 25.7% of the MSM described themselves as kothi, 37.6% as panthi and 36.7% as “double-decker.” Eight percent tested positive for HIV. More than one fifth (46/210) reported unprotected anal intercourse in the past 3-months. Stigma scale scores ranged from 11 to 19, with a mean of 12 (SD=2.0) and 39% reported a higher level of lifetime stigma (12 mean scale-score).

In a final fitted multivariable logistic regression model, variables associated with experiencing stigma, after adjusting for age and educational attainment, included: identifying as kothi compared to panthi (AOR= 63.23; 95% CI: 15.92, 251.14; $p<0.0001$); being “out” about one's gay/MSM behavior (AOR=5.63; 95% CI:1.46, 21.73; $p=0.01$); having clinically significant depressive symptoms (AOR=2.68; 95% CI: 1.40, 5.12; $p=0.003$); and engaging in sex work in the previous 12 months (AOR=4.89; 95% CI: 2.51, 9.51; $p<0.0001$).

Discussion

This study found that stigma was prevalent among Indian MSM and was more pronounced among MSM who identified as kothi, are “out” about their MSM sexual behavior, had current depressive symptoms, and engaged in sex work in the prior 12 month. Because men who identify as kothi can be more readily identified as effeminate and could be readily seen as socially variant due to gender non-conforming behavior, they may be more likely to experience stigma in Indian society. This is consistent with results from an earlier qualitative study in Chennai that highlighted men identifying as kothi as being subjected to discrimination and violence across multiple social and institutional contexts due to their more “effeminate” mannerisms (Chakrapani, et al., 2007). Other studies have corroborated that Indian MSM who disclose their sexual orientation, or are publicly “out” with their identity/sexual behavior with other men, are more likely to report family rejection, public humiliation, harassment by authorities, and ridicule by health-care workers (Beyrer, et al., 2008; Geibel, et al., 2008; Niang, et al., 2003). In this current study, the finding that men who engage in sex work in the past 12 months experienced greater stigma may result in this high-risk group being vulnerable to psychological distress, maladaptive coping, and social isolation, which may then increase their risk for HIV acquisition or transmission (Cloete, Simbayi, Kalichman, Strebel, & Henda, 2008; Courtenay-Quirk, Wolitski, Parsons, & Gomez, 2006; Dowshen, et al., 2009; Hatzenbuehler, 2009).

The innovativeness of this study among this Indian sample of MSM is that the experiences of MSM-related stigma/discrimination have been systematically and quantitatively assessed using an 11-item scale (Cronbach's alpha=0.99) adapted from existing measures (Lewis et al., 2001; 2003). Important social and behavioral variables associated with MSM-related stigma relevant to Indian MSM have been identified. These factors should be incorporated into future HIV prevention interventions and outreach services to effectively reach the full spectrum of MSM sexual identities in India.

Stigma can be a barrier to reducing sexual risk and accessing health care among sexual minority populations. Screening for experiences of physical abuse or threats, with triage to appropriate services, may improve HIV prevention program effectiveness. Deliberate

ignorance on the part of governments toward populations of MSM influences policy-level discrimination and may stymie research on MSM in developing countries (Chapman et al., 2011; Niang et al., 2003). Further, the mental health concerns of HIV infected MSM in India are high and services are few (Safren et al., 2009). For example, as noted by Khan (2005), stigma towards MSM in India, particularly against men who identify as kothi and are considered gender nonconforming, disadvantages MSM both economically and socially thereby increasing their relative poverty and often forcing them to pursue sex work. This culturally sanctioned stigma toward MSM is likely a strong contributing factor to both poor mental health among HIV-infected individuals and the lack of services available to them. Prior to this report, little is understood about the effects of stigma on MSM in India, although Safren (2006) reported high prevalence of harassment by the police and others among MSM outreach workers in Chennai. Better understanding of the factors related to experiencing stigma among MSM in India and their effect on sexual risk behavior is warranted, which would inform future HIV prevention intervention programs with this group.

While it is generally accepted that a rights-based approach to HIV prevention, care, and support is essential to reduce the potential spread of the virus, it is imperative that we approach specific interventions in the context of empowerment, participation, and ownership that enhances one's self-worth, self-acceptance, and self-esteem (Khan & Bondyopadhyay, 2006). It is important to create an enabling environment free of stigma and discrimination so that HIV prevention and intervention programs are within the reach of all MSM irrespective of their cultural identity.

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Table 1

Demographics, sexual risk taking, and other psychosocial variables by self-reported lifetime experiences with stigma (N = 210)

	Greater than or Equal to the Mean Stigma Scale Score (N=82)	Less than the Mean Stigma Scale Score (N=129)
Mean age (SD)	28.1 (7.5)	29.5 (7.9)
Engaged in unprotected anal sex with a male partner, past 3 months	22 (26.8%)	20 (15.0%)
MSM subpopulation identity		
Panthis	36 (44%)	43 (33%)
Kothis	40 (49%)	14 (11%)
Double Deckers	6 (7%)	72 (85%)
Religion		
Hindu	65 (79%)	103 (79%)
Christian	10 (12%)	16 (12%)
Muslim	7 (9%)	10 (9%)
Frequency married to women	16 (20%)	31 (24%)
Education		
Graduate or professional	2 (2%)	4 (3%)
Degree	9 (11%)	18 (14%)
College Degree	38 (46%)	56 (43%)
High School Degree	26 (32%)	27 (21%)
Middle School	6 (8%)	20 (16%)
Elementary School	1 (1%)	4 (3%)
No formal education		
Employment Status		
Full-time/Part-time	65 (79%)	103 (80%)
Unemployed	17 (21%)	26 (20%)
Tested positive for HIV	7 (9%)	9 (7%)
Self reported STI history last 6 months	7 (9%)	6 (5%)
Family knows about sexual identity	23 (28%)	22 (17%)
Depression (CES-D) – screened positive	54 (66%)	62 (48%)