

Associations between HIV-related stigma, sexual risk and alcohol use among MSM in India



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Introduction

HIV-related stigma and alcohol use have been shown to influence sexual risk behavior among men who have sex with men (MSM) in western countries (e.g., Bruce et al., 2012; Hatzenbuehler et al., 2011).

Limited studies among Indian MSM have separately documented the associations between HIV-related stigma and sexual risk (Thomas et al., 2012), and alcohol use and sexual risk (Mimiaga et al., 2011), but not explicitly examined the associations between all three of these variables/constructs.

To help inform HIV prevention interventions, we examined the associations between HIV-related stigma, alcohol use and sexual risk among MSM.

Materials and Methods

Between May and October 2012, we conducted a cross-sectional survey among a venue-based sample of 400 MSM in Chennai and Mumbai.

Bivariate and logistic regression analyses were conducted to assess the relationship between problematic alcohol use (CAGE score ≥ 2), HIV-related stigma (vicarious and felt normative stigma) and sexual risk behavior (condom use in last anal sex).

We measured HIV-related vicarious stigma (hearing stories about enacted stigma) and felt-normative stigma (an individual's awareness of or anticipation of stigma) using an adapted version of HIV-related stigma scale of Steward et al.'s (2008) study. We have used these HIV-related stigma subscales among MSM in Tamil Nadu, and those subscales had good reliability (Logie et al., 2012).

References

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Results

Participants' mean age was 26 years (SD: 4.6). One-fourth (n=99/400) had completed high school, 21% (n=84/400) completed college degree and only 3.5% were illiterate. About two-fifths (44%; n=177/400) were private company staff, 21% (n=84/400) were unemployed and 9% (n=34/400) were sex workers. Seventy-one percent (n= 215/301) had a monthly income of <10000 INR. Less than 20% (n=68/400) were married. About two-fifths self-identified as kothi (43%; n=171/400), 27% (n=109/400) as double-decker, 13% (n=52/400) as panthi and 9% (n=36/400) as gay.

Fifty-seven percent (n=227/400) of the participants reported having drunk alcohol in the previous three months, among whom 31% (n=71/227) were identified to have problematic alcohol use.

Among problematic alcohol users, 83% were above 25 years of age, 25% were sex workers, 18% were married and 51% self-identified as kothi (Table 1).

In logistic regression analyses, problematic alcohol use and HIV-related stigma (total score) were found to be significantly associated with unprotected anal sex in last sexual encounter (Table 2).

Table 1. Demographic and sexual risk characteristics, and stigma experiences of MSM by problematic alcohol use (CAGE score ≥ 2)

	Total sample (n=400)	No alcohol problem (n=129)	Problematic alcohol use (n=271)	P-value
Mean age (SD)	26 (4.6)	26 (4.6)	26 (4.6)	
Education (high school)	99 (24.8%)	38 (29.5%)	61 (22.4%)	0.000
Occupation (private company staff)	177 (44.3%)	68 (52.7%)	109 (40.2%)	0.000
Monthly income (<10000 INR)	215 (53.8%)	84 (65.1%)	131 (48.3%)	0.000
Marital status (Married)	68 (17.0%)	25 (19.4%)	43 (15.7%)	0.746
Self-identified (Kothi)	171 (42.8%)	68 (52.7%)	103 (37.9%)	0.000
Sexual risk in the past month (Unprotected anal sex with regular partner)	102 (25.5%)	41 (31.8%)	61 (22.4%)	0.001
Sexual risk during last sex encounter (Unprotected anal sex with a new partner)	83 (20.8%)	32 (24.8%)	51 (18.7%)	0.002
Physical health (Poor)	115 (28.8%)	42 (32.6%)	73 (26.9%)	0.000
HIV-related stigma (Total score)	118 (29.5%)	49 (38.0%)	69 (25.4%)	0.000
Disclosure of sexual identity (Yes)	318 (79.5%)	123 (95.3%)	195 (71.8%)	0.000

Table 2. Alcohol Use and Stigma as Predictors of Sexual Risk Behavior of MSM in Chennai and Mumbai, n=600

Variable	Unprotected anal sex in last sexual encounter (N=227)	Adjusted Odds Ratio (95% Confidence Interval)	P-value
Age (years)			
< 25	1	1	
≥ 25	0.43 (0.22 - 0.85) [*]	0.015	
Education			
< High school	1	1	
More than high school	0.40 (0.24 - 0.95) [*]	0.025	
Occupation			
Aid in sex work	1	1	
Sex worker	0.40 (0.12 - 1.29)	0.127	
Monthly income			
< IN 5000	1	1	
5001 - 10000	0.60 (0.29 - 1.24)	0.173	
Marital status			
Single	1	1	
Married	0.80 (0.31 - 2.04)	0.641	
Problematic alcohol use (CAGE score ≥ 2)			
No	1	1	
Yes	2.23 (1.04 - 4.77) [*]	0.039	
HIV-related stigma [†]			
Low normative stigma	1.04 (1.00 - 1.07) [*]	0.024	
Concomitant of alcohol before last anal sex [‡]			
No	1	1	
Yes	6.41 (2.25 - 18.22) ^{***}	0.000	

* p < .05, ** p < .01, *** p < .001
[†] Total score of vicarious and felt normative HIV-related stigma
[‡] Data for this variable was available only for Chennai site (n = 162/200). The AOR reported here is from the separate analysis of Chennai data with the same set of variables.

Conclusions

Our findings provide empirical evidence for the associations between HIV-related stigma, problematic alcohol use and sexual risk behavior.

Further research is needed to examine the mechanisms of these associations and possible differences by type and gender of partners of MSM.

HIV prevention interventions for MSM need to include information on alcohol use-related sexual risk behaviors and screening for problematic alcohol use along with treatment referrals. Also, structural interventions are needed to decrease HIV-related stigma both among the general public and within the MSM communities.

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