

# Extent of alcohol use and its association with inconsistent condom use among hijras/transgender (male-to-female) people in India: Survey findings from urban and rural sites in Maharashtra and Tamil Nadu

Authors: [Murali Shunmugam](#)<sup>1,2</sup>, [Murugesan Sivasubramanian](#)<sup>2</sup>, [Soma Roy Karmakar](#)<sup>3</sup>, [Miriam Samuel](#)<sup>4</sup>, [Venkatesan Chakrapani](#)<sup>1,2,\*\*</sup>

Institutions: <sup>1</sup>Centre for Sexuality and Health Research and Policy (C-SHaRP), Chennai, India, <sup>2</sup>The Humsafar Trust, Mumbai, India,

<sup>3</sup>Solidarity and Action Against The HIV Infection in India (SAATHII), Kolkata, India, <sup>4</sup>Madras Christian College, Department of Social Work, Chennai, India

\*\* [cvenkatesan@hotmail.com](mailto:cvenkatesan@hotmail.com)

## 1. BACKGROUND

- In India there is lack of information about alcohol consumption and HIV-related risk behaviours among hijras and other male-to-female transgender (hereafter "TG") people.
- HIV prevention interventions supported by the National AIDS Control Programme do not explicitly address alcohol use in the context of sexual risk behaviours.
- In this analysis from a multi-site study, we report findings on alcohol consumption and sexual risk behaviours of TG people.

## 2. METHODS

- During the last quarter of 2011, as part of a larger study among both MSM and TG people, we conducted a survey among hijras/TG accessing sex work sites ('hot spots') and drop-in centres of four community-based organizations in four cities (Chennai, Kumbakonam, Mumbai and Sangli) in Maharashtra and Tamil Nadu.
- This analytic sample included 141 participants.

### Measures

#### Sexual risk and condom use.

- Participants were asked about the type of male partners (steady, casual and paying) and whether or not they used condom the last time they had anal sex (receptive or insertive) with a man.
- Consistency of condom use was measured as every time, often, sometimes, rarely, and never, in the past three months with different type of male partners (steady, casual and paying). Later these four categories were dichotomized into 'consistent' (used condoms every time) and 'inconsistent' condom use.

#### Alcohol use

- Questions included whether they consumed alcohol before last anal sex; and whether alcohol was consumed in the past three months, and if yes, the frequency of alcohol use (every day, most days of a week, a few days a week, once a week, a few days a month, once a month, less than once a month).
- Participants who reported consuming alcohol at least few days a week, most days of a week and every day were considered 'frequent drinkers' and those who consumed alcohol a few days a month, once a month, less than once a month were considered as 'infrequent drinkers'.
- For analysis, we clubbed infrequent alcohol users with those persons who had never drunk alcohol so that we had a dichotomous variable of 'frequent drinkers' and 'infrequent/non-drinkers'.

### Analyses

Using chi-squared tests, we examined associations of condom use in last anal sex and alcohol use in last anal sex; consistent use of condoms in anal sex (past one month) and alcohol consumption in past three months by partner type; and consistent use of condoms in anal sex (past one month) and frequency of alcohol consumption in past three months by partner type.

## 3. RESULTS

### 3A. Sociodemographic characteristics

- Participants' (n=141) mean age was 30 years and primarily from lower socioeconomic and lower educational status.
- Over two-thirds (77%) self-identified as hijras, 16% as jogtas, and 7% as 'transgender'.
- More than two-thirds (72%) reported having had sex in exchange for money in past 3 months.
- More than two-thirds (70%) reported having consumed alcohol in past 3 months, among which one-third (n=34/99) consumed alcohol most days of the week. (See Table 1 for more details).

### 3B. Condom use in last anal sex and alcohol use in last anal sex

- Among the 99 participants who reported having consumed alcohol in the past 3 months, 62 persons reported having consumed alcohol in the last anal sex.
- Persons who consumed alcohol in last anal sex were less likely to use condoms in last anal sex than were persons who did not consume alcohol [ $\chi^2(1, n=99) = 4.24, p = .01$ , one-tailed].

Diagram 1. Comparison of condom use in last anal sex among those who reported alcohol use in last anal sex Vs. who did not ( $p < .05$ )

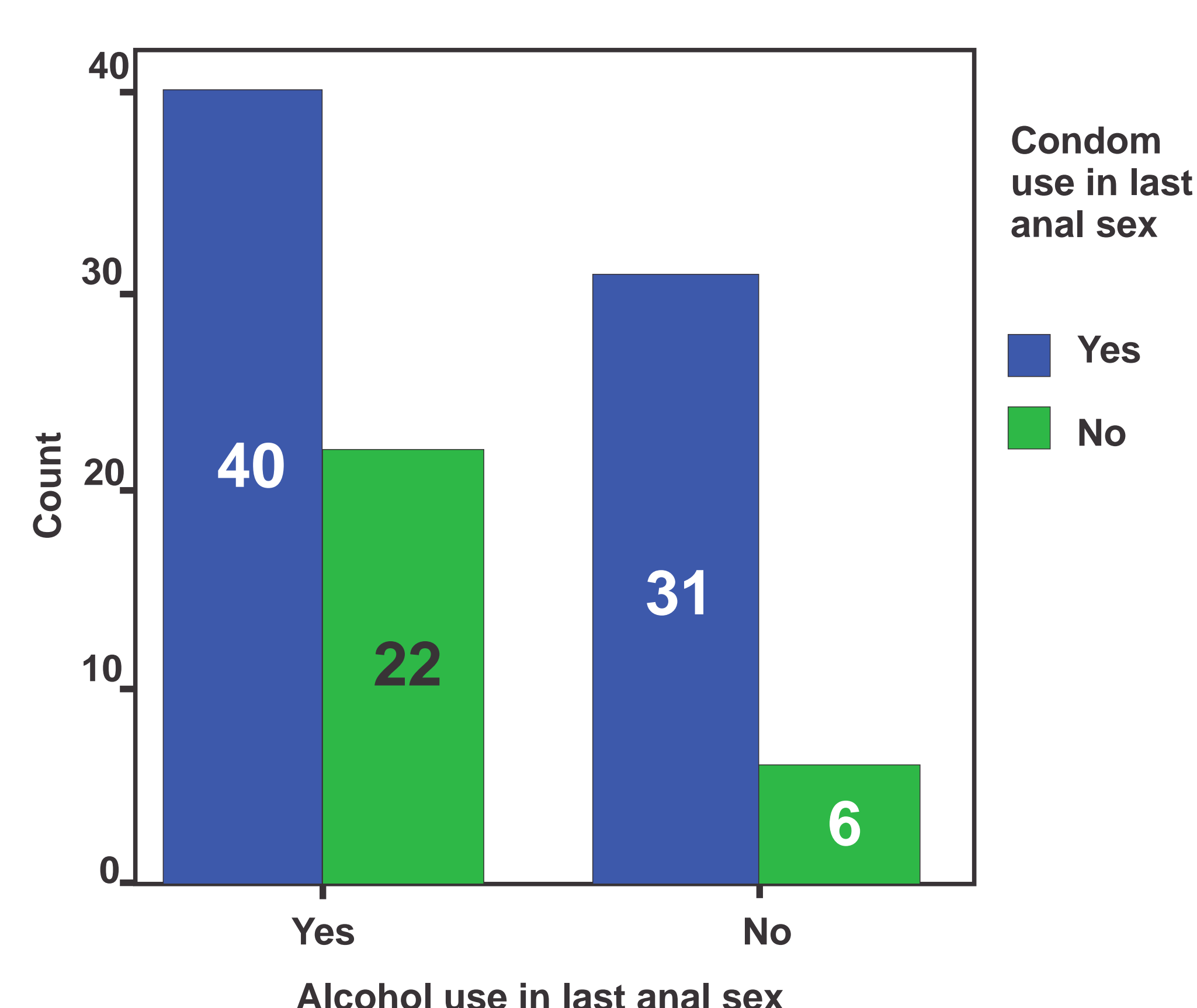


Table 1. Socio-demographic characteristics of study participants

Number of participants		141	
Age (years)			
Mean	30.6		
Range	18-65		
	N	%	
Marital status			
Unmarried	125	89	
Married	16	11	
Highest level of completed education			
5th grade	34	24	
8th grade	29	21	
10th grade	34	24	
12th grade	20	14	
College degree	9	6	
Illiterate	15	11	
Employment			
Unemployed	5	4	
Sex work	42	30	
Voluntary organization staff	10	7	
Private company staff	1	0.7	
Daily wage laborer	7	5	
Self employed	6	4	
Other	70	50	
Living status			
Living alone	75	53	
Living with parents	27	19	
Living with male sexual partner	10	7	
Living with wife	6	4	
Living with friends	11	8	
Other	12	9	
Sex in exchange for money in the past 3 months			
No	40	28	
Yes	101	72	
HIV status			
HIV-positive	12	9	
HIV-negative	115	82	
Never tested	14	10	
Gender-identity			
Hijra	109	77	
Transgender	10	7	
Jogta	22	16	

### 3C. Consistent use of condoms in anal sex (past one month) and frequency of alcohol consumption in past 3 months by partner type

Chi-square test found that the relation between the variables (See Table 2) was not significant for steady partner ( $p = .2$ ) but significant for casual and paying partners. This means that hijras/TG who were 'frequent drinkers' in the past 3 months were less likely to consistently use condoms with their casual or paying partners when compared with those who were 'infrequent/non-drinkers'.

Table 2. Chi-square tests of independence for consistent use of condoms in anal sex (past one month) and frequency of alcohol consumption in past 3 months by type of partner

Consistent use of condoms (past one month) among frequent alcohol users (past 3 months) compared with less frequent/non-alcohol users	Chi-square		Sample size (n)	Degrees of freedom
	test statistic	p value (one-tailed)		
Steady partners	.441	.2	90	1
Casual partners	11.12	.0005**	90	1
Paying partners	9.099	.0015*	97	1

(significant at \* $p < .05$  and \*\* $p < .001$ )

## 4. CONCLUSIONS

High prevalence of alcohol consumption and its association with inconsistent condom use among hijras/transgender people, especially those in sex work, call for addressing alcohol-related sexual risk behaviours in HIV interventions and link those with problematic alcohol use to alcohol-dependence treatment.