Research Article

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Sexual behaviour and practices of men who have sex with men in Ahmedabad city

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ABSTRACT

Background: Because many Men who have Sex with Men (MSM) in India do not openly acknowledge their sexual behaviour, this has resulted in scanty knowledge about their sex behavior and its context. Without this knowledge it is difficult to plan effective MSM-related HIV prevention. The objective was to study the different socio-demographic characteristics of the MSM population, their pattern of sexual behavior and practices and to find out various reasons for sexual acts with men.

Methods: Descriptive cross sectional study was conducted amongst 410 MSM in Drop In Centers of Non-Governmental Organization (NGO) working for MSM in Ahmedabad city through purposive sampling during the period of December 2010 – December 2011.

Results: The mean age of the study population was 33.6 ± 9.4 years. The sexual practices of MSM were not limited to male partners only. 74.6% MSM had their first sexual act in adolescent age group (10-19 years) and the mean age of the first sexual act was only 17.2 ± 4.3 years. First sexual partner of MSM was a male friend (57.3%) followed by girlfriend (12.7%), relative (10%) etc. MSM had an average 3.8 different male partner per month with weekly average frequency of sexual act 7.4 which indicates more frequent sexual act with multiple male sexual partners. Preferred place for sexual act was at home (57.3%) followed by at Hotel (31.2%). The commonest reasons for sexual act of men with men given were for specific sexual acts either anal or oral sex (67.8%), desire for other men gender and or sexual orientation (66.1%) etc. Only 42.2% MSM were using condom consistently and 9.5% did not have knowledge that HIV can be transmitted by unprotected sexual intercourse while knowledge regarding HIV transmission by infected blood contact, infected needle and syringes and parent to child transmission were 57.8%, 48.5% and 27.6% respectively.

Conclusions: MSM had more frequent sexual act with multiple male sexual partners preferably at home and 47.8% MSM were not using condom consistently.

Keywords: Sexual practices, Adolescent age, Unprotected sexual intercourse, Men who have sex with men

INTRODUCTION

Homosexuality is romantic or sexual attraction or behaviour between members of the same sex or gender. In most societies, heterosexuality is considered "natural" and "normative" and homosexuality is often considered "unnatural" or "abnormal". However, homosexuality is a fact of life, a social reality that has existed and continues to exist in different cultural and historical periods. As a sexual orientation, homosexuality refers to "an enduring pattern of or disposition to experience sexual, affectional, or romantic attractions" primarily or exclusively to people of the same sex. 2

Homosexuality is generally considered a taboo subject by both Indian civil society and the government. It has been inhibited by the fact that sexuality in any form is rarely discussed openly. In recent years, however, attitudes towards homosexuality have shifted slightly.

However, detailed information on the sex behavior of a large sample of MSM across a variety of urban-rural locations in any Indian state has not been reported to inform development of prevention programmes.³

A major difficulty in getting this information is that homosexuality is hidden to a large degree in India both because of cultural norms and because it is illegal.⁴

The high risk of HIV in men who have sex with men (MSM) has been documented in different parts of the world.⁵ The proportion of men in India who are MSM may not be particularly small.^{6,7}

Sexual acts with the same sex have long been an issue of legal debate in India. Homosexuality is mostly a taboo subject in Indian civil society and for the government. Section 377 of the Indian Penal Code makes sex with persons of same gender punishable by law. On 2 July 2009, in Naz Foundation v. Govt. of NCT of Delhi, the Delhi High Court held that provision to be unconstitutional with respect to sex between consenting adults, but the Supreme Court of India overturned that ruling on 11 December 2013, stating that the Court was instead deferring to Indian legislators to provide the sought-after clarity.⁸

However, because many MSM in India do not openly acknowledge their sexual behavior, this has resulted in scanty knowledge about their sex behavior and its context. Without this knowledge it is difficult to plan effective MSM-related HIV prevention.

Objectives:

- 1) To study the different socio-demographic characteristics of the MSM population.
- 2) To study their pattern of sexual behavior and practices of the MSM and correlate with their sociodemographic characteristics.
- To know behavior of society towards their MSM status.
- 4) To find out various reasons for sexual acts with men.
- 5) To assess the knowledge regarding routes of transmission of HIV/AIDS.

METHODS

MSM were operationally defined as 'any men who had any type of sex (oral or penetrative), paid or unpaid, with another men in the last one month'.

MSM is a very important subgroup of Targeted Intervention (TI) for NACP phase III. In the Ahmedabad

Municipal Corporation (AMC) area NACP implemented by AIDS Control Society (ACS) in which NGO has taken the responsibility for TI for MSM. Present study was conducted on registered MSM of Ahmedabad city after taking permission from AMCACS, Chuwal Gram Vikash Trust Unit 1, 2 and SWAVLAMBI CHUWAL MANDAL UNIT, Ahmedabad. There were 4100 MSMs registered under the TI by these NGOs. Through Purposive sampling, 10% registered MSM (total 410 MSM) from each unit were selected. The interview of MSM was conducted personally through semi structured questionnaire when they were coming in drop in centers (DICs) of their respective unit in meetings. To get correct and reliable answer, the help of counsellor, out-reach workers (ORW) and peer educators (PE) was taken for gathering informations they have good rapport with MSM. Informed verbal consent was taken before interviewing MSM.

RESULTS

The present study was conducted amongst 410 registered MSM from all 8 Drop in centers of Ahmedabad city with the help of Non-Governmental Organization (NGO) which was working for MSM.

In Table 1, the study was carried out in Hindu dominated city, most of the MSM were found Hindus (92%) followed by Muslims (7.8%) and Christians (0.2%) in the study population. The illiteracy rate among the study population was 19.3% while 16% were educated higher secondary or above. As the present study was carried out in urban area (Ahmedabad Municipal Corporation Area), majority of the MSM (93.2%) were residing in the urban area with mean length of stay of MSM in urban area was 22.6 years \pm 13.1 years.

Table 1: Socio-demographic characteristics of the study population.

Sl No.	Characteristics		Freque ncy	Percen tage (%)
		Hindu	377	92
1	Religion	Muslim	32	7.8
		Christian	1	0.2
		15-25	82	20
	Age	25-35	184	44.9
2		35-45	96	23.4
		45-55	40	9.8
		55-75	8	1.9
		Illiterate	79	19.3
		Primary	190	19.3 46.3
	Litoroov	Secondary	75	18.3
3	Literacy status	Higher secondary	33	8
		Graduate and above	33	8
4	Occupat	Professional	9	2.2

Semi-professional 8 2					
owner 23 5.6 Clerical 3 0.7 Skilled worker 127 31 Semi-skilled worker 171 41.7 Unskilled worker 45 11 Unemployed 24 5.8 Married 195 47.6 Unmarried 205 50 Divorce / separated 10 2.4 Socio- II 88 21.5 Economi III 136 33.2 IV 144 35.1	ion			8	2
Skilled worker 127 31 Semi-skilled worker 171 41.7 Unskilled worker 45 11 Unemployed 24 5.8 Married 195 47.6 Unmarried 205 50 Status Divorce / separated 10 2.4 Socio-			•	23	5.6
Semi-skilled worker			Clerical	3	0.7
Worker			Skilled worker	127	31
Worker Unemployed 24 5.8				171	41.7
Marital status Married 195 47.6 Divorce / separated 205 50 I 36 8.8 Socio- II 88 21.5 Economi c Class IV 144 35.1				45	11
Marital status Unmarried Divorce / separated 205 50 I 36 8.8 Socio- II 88 21.5 Economi c Class IV 144 35.1			Unemployed	24	5.8
Status Divorce / separated 10 2.4 I 36 8.8 Socio- II 88 21.5 Economi c Class IV 144 35.1			Married	195	47.6
Socio- II 136 33.2 C Class IV 144 35.1	5		Unmarried	205	50
Socio- II 88 21.5 6 Economi c Class III 136 33.2 144 35.1	3			10	2.4
6 Economi III 136 33.2 c Class IV 144 35.1		Socio-	I	36	8.8
c Class IV 144 35.1	6		II	88	21.5
		Economi	III	136	33.2
V 6 1.5		c Class	IV	144	35.1
			V	6	1.5

41.7% and 31% MSM were semiskilled workers and skilled workers respectively. 0.7% (n= 410) of the study population was the students. $2/3^{rd}$ (68.3%) of MSM belong to class III and IV according to Modified Prasad Classification. Most of the MSM were living with their family (80%).

Half of the MSM were ever married. Almost half of the married MSM wanted to marry with male but they married to female gender either because of the social pressure by family members or did not want to go against social norms (Table 2). Among the unmarried MSM, 43.4% of MSM wanted to marry with male gender and 2.9% of MSM did not want to marry at all. Almost 35.9% had disclosed their sexual behavior to their wives. In more than $2/3^{\rm rd}$ unmarried as well as ever married man, relatives were not aware regarding their MSM status.

Table 2: Desire of the MSM for selection of life partner.

Marital status (n)	To get married with	Numbe rs	Percen tage (%)
	Female	97	49.7
Married (195)	Male	97	49.7
	Both	1	0.6
	Female	110	53.7
Unmarried (205)	Male	89	tage (%) 49.7 49.7 0.6
Olimarried (203)	Don't want to marry	6	2.9
Divorce /	Female	5	50.0
Separated (10)	Male	5	50.0

When MSM were asked regarding the behavior of society towards their MSM status, 53.8% MSM answered that there was no change in the behavior of most of their

friends of MSM when friends knew their status as MSM, but 70.5% MSM replied that the people other their friends started behaving bad when they knew their status as MSM.60.7% MSM were stigmatized by people. Most MSM perceived community stigma and discrimination to be a major problem in their life. Due to MSM status, 13% of the study population had lost their job.

The first sexual partner was a male friend in majority of the cases (57.3%) while rest of 42.5% MSM had relative, girlfriend or classmate or commercial sex worker as their 1st sexual partner (Table 3).

Table 3: Type of first sexual partner of MSM.

Type of sexual partner	Frequency	Percentage (%)
Male friend	235	57.3
Girl friend	52	12.7
Relative	41	10
Wife	36	8.8
Commercial sex worker	34	8.3
Classmate	12	2.9
Total	410	100

The mean numbers of sexual acts in one week was 7.4 ± 5.7 . It was not unusual for MSM to maintain relationships with women and men simultaneously. There is no significant association between education level of MSM and their partner's characteristic (regular or casual partner), (chi squire test, p value > 0.05).

Table 4 shows 75.6% MSM were playing either receptive role or playing both (insertive and receptive) role during anal intercourse. Anal intercourse can potentially place a receptive sexual partner at higher risk of contracting an STI from their penetrating partners. Half of the MSM were involved in oral sex also.

Table 4: Nature of sexual intercourse.

Nature of Sexual Intercourse	Frequency	Percentage (%)
Insertive anal sex	100	24.4
Receptive anal sex	177	43.2
Both (Insertive and Receptive anal sex)	133	32.4

Table 5 shows for most of the MSMs (57.3%) preferred place for sexual act at home followed by hotel (31.2%), public toilet (25.9%), by road side (13.9%).

Table 6 shows that although majority of MSM (68.3%) had their first sexual act during their adolescence (10-19 years, mean age 17.2 ± 4.3 years), 4 MSMs had first sexual act with man, was found as young as 7-8 years as they were sexually abused mainly by relatives, neighbors.

Sexual exposure to man was significantly earlier in MSM who had attraction towards same sex at very early age. (Chi-squire value 51.5, Degree of Freedom=2, p value < 0.0001). 14.1% of MSM gave history of sexual exploitation in one or other forms.

Table 5: Place of sexual activities with men.

Place	Frequency	Percentage (%)
Home	235	57.3
Hotel	128	31.2
Public Toilet	106	25.9
By road side	57	13.9

Figure 1 shows the study population gave varied responses when they were asked about the reason for the attraction towards male partner/s. In majority (73.9%) it was for desire for specific sexual acts (anal / oral sex) or wife was not willing to perform anal/oral sex or he was ashamed to ask his wife for oral sex while 66.1% MSM did because of desire for other mengender and /or sexual orientation, and 43.4% MSM did for same for pleasure and enjoyment.

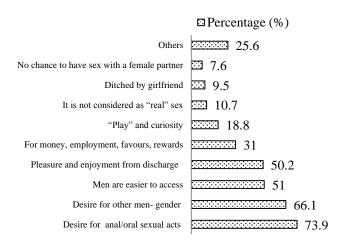


Figure 1: Various reasons of sexual acts with men.

Figure 2 shows although all MSM heard about HIV/AIDS, 9.5% did not know that HIV can be transmitted through the unprotected sexual intercourse, while knowledge regarding HIV transmission by infected blood contact, infected needle and syringes and parent to child transmission were 57.8%, 48.5% and 27.6% respectively. Poor knowledge regarding the route of transmission may make MSMs more at risk of HIV-AIDS infection and its transmission.

Present study was carried out amongst MSM registered at TI sites where they were regularly counseled by counselor, only 42.2% MSM were using condom consistently. There were no significant association between age of MSM and consistent use of condom during sexual act (p value > 0.05, Chi-squire value 1.07).

There was no significant association between the education levels of MSM with their partner characteristic either regular partner (14%) or casual partners (86%) (Chi-squire value 0.91, p value 0.47) and also no association found between the education level of MSM and knowledge regarding transmission of HIV-AIDS (Chi-squire value = 5.0, p value > 0.05).

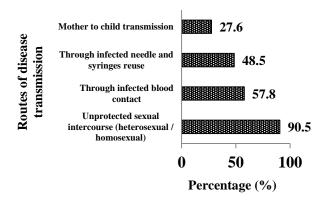


Figure 2: Various reasons of sexual acts with men.

All MSM have knowledge of test for diagnosis of HIV/AIDS. All MSM ever tested for HIV/AIDS. But 12.7% of the study population did not undergo regular six month HIV testing.68.5% tested for HIV/AIDS within last 3 months. 70.5% MSM knew that their partner's test for HIV-AIDS was done.

Table 6: Debut age of sex with men and attraction towards same sex from beginning.

Debut age of having	Attraction towards the same sex from beginning		Total	P
sex with men (in years)	Yes (%)	No (%)	Total	value
=<10	28 (90.3)	3 (9.7)	31	
10-19	184 (65.7)	96 (34.3)	280	0.0001
>=20	30 (30.3)	69 (69.7)	99	0.0001
Total	242	168	410	

DISCUSSION

The mean age of the study population was 33.6 ± 9.4 years which was older than metro cities where average age of MSM in Mumbai was 27.5 years. 9 44.9% MSM were in the age group 25 to 35 years. Whereas Chennai reported 50% of study participants in the age group of 18-25 years 10 & in China, reported about 44.4% were of age 25 years or below. 11 Zhang, *et al.* reported the sample was young (80% were under thirty). 12

The majority of the respondents were well educated with 78% having had ten or more years of schooling. 7.2% of the respondents noted that sex work was their main

source of income, the rest were mostly either in business/trade (22.9%), self-employed (16.7%) or worked as clerks/salesmen (13.4%). A few (9.7%) were students. In Chennai Saravanamurthy, *et al.* reported 59% had basic education (6th-12th grade-59%). 10

Half of the MSM were ever married in the present study and their mean age at marriage was 22.7 years± 3.8 years. In similar type of study by Raja ram S, *et al.* reported 58.4% respondents had never been married, and 39.9% were currently married and their mean age at marriage was 23.9 years.⁹

This married MSM serve as the bridge population in the transmission of different sexually transmitted diseases including HIV epidemic.

In Chennai, Solomon *et al.* reported that 2% had disclosed their behavior to their wives, other family members (6%). Most participants reported fear that their families would not accept their sexuality as one of their biggest barriers to disclosure of their sexual preferences. ¹³

In the similar other study Rodolph, *et al.* reported23.5% replied that they had ever experienced harassment or coercion because of their male-to-male sex behaviour. ¹⁴ In other study Shaw SY et al. reported Prevalence of Sexual Violence among MSM – Transgender in Karnataka was 18% in the past year. ¹⁵

In present study, the mean age of the first sexual act was only 17.2 ± 4.3 years. Early sexual debut of the study participants is an indicator of engaging in multiple partner sex (Harrison et al., 2005) and vulnerability to STIs (Christine et al., 2005). Miche Rodolph, et al. reported similar findings, where majority of MSM had their first sexual partner between the ages of 16 and 18 in Cambodia.14 High-risk behavior with both men and women were common among MSM who were married. 13 The weighted mean age at sexual debut was 12.2 (1.7 SD) years. With regard to the type of first sexual experience, more than three fifths (60.7%) of the participants reported anal sex as their first sexual experience, with 32.0% and 3.3% reporting vaginal sex and masturbation/oral sex, respectively. MSM in this study were mainly younger men with an age at first sexual experience of about 12 years. 16 These findings are similar to what has been reported in other studies in which age at sexual debut ranged from 16-18 years as discussed above.

Kumta *et al.* reported almost 66% of men had their first sexual encounter with a male or transgender person.¹⁷ Saravanamurthy, *et al.* reported that participants had their first sexual partners included childhood friends, relatives, neighbours, adult family friends and teachers.¹⁰

The mean number of sexual partners of MSM in last 1 month was $3.8\pm$ 3.6.High proportions of MSM showed

relationship with multiple male partners. Solomon SS, *et al.*¹³, Rodolph, *et al.*¹⁴ in Cambodia and Liu, *et al.*¹¹ had observed similar findings in their study.

85.9% MSM had casual partners which were higher than in the similar study in Mumbai Kumta, *et al.*¹⁷ and in Zhang, *et al.*¹² where casual partners were 68% and 54% respectively.

In the study by Kumta, et al. reported 35% had anal receptive sex. 64% insertive anal sex in the past 6 months.¹⁷ A study in Mumbai city, Raja ram S, et al. reported 38.2% were Double Decker, 30.4% were Kothis (males who show varying degrees of "femininity" which mav be situational, take the "female" role in their sexual relationships with other men), and 23.9% were Panthis ("masculine" insertive male partner or anyone who is masculine and seems to be a potential sexual (insertive) partner).9 Rodolph, et al. reported that majority of MSM were feminized practicing receptive anal sex (traditionally called Kothis) followed by Duplis. 14 Sex between men frequently involves anal intercourse, which carries a very high risk of STIs including HIV transmission for the receptive partner, and a significant risk, though a lesser one, for the insertive partner.²

Larmarange, *et al.* reported that 65% of sexual acts that took place in a public place or outside (park, beach, cinema, bar or nightclub, toilet).¹⁸

Onyango-Ouma, *et al.* reported most of MSM were looking for pleasure (52 percent) or love (22 percent) when they have sex. For another 20 percent of respondents it was for financial support. Solomon *et al.* reported one fifth of the married MSM exchanged money for sex.

Knowledge regarding the rout of HIV transmission, Liu *et al.* reported "blood transmission" option was chosen by 95.3% MSMs; "mother to child" option by 93.1%; and 89.5% chose "sexual transmission" option as a route of transmission of HIV/AIDS.¹¹ But present study revealed MSM had poor knowledge regarding HIV transmission even though they are registered under the National AIDS Control Programme.

Solomon *et al.* reported nearly half (51%) had been previously tested for HIV, but only 63 had received an HIV test in the prior six months, suggesting a low frequency of regular testing.¹³

CONCLUSION

As the study was carried out in Hindu dominated city, most of the MSM were Hindus (92%) followed by Muslims (7.8%). 44.9% MSM were in the 25 to 35 years age group. Illiteracy rate among the study population was 19.3% while 16% were educated up to higher secondary and above. Mean length of stay of MSM in urban area is

22.63 ± 13.1 years.41.7% and 31% MSM were semiskilled workers (like labourer, factory worker etc.) and skilled workers (like mason, carpenter, rickshaw driver etc.) respectively. Only 0.7% of the study populations were the students and residing at home.2/3rd of MSM belongs to class III and IV (68.3%) according to Modified Prasad Classification.

The sexual practices of MSM were not limited to male partners only. Half of the MSM were ever married and had mean age at marriage 22.7 ± 3.8 years.

Most of the MSM were living with their family (80%). In 64.4% of MSM's wife did not know that their husbands were MSM and also 67.3% of MSM's relatives did not know about their MSM status. Almost half of the married MSM wanted to marry with male.

14.1% of MSM gave history of sexual exploitation in one or other forms. The youngest age of first sexual act with man was found as 7-8 years in 4 MSM as they were sexually abused. 68.3% MSM had their first sexual act in adolescent age group (10-19 years) and the mean age of the first sexual act was only 17.2 + 4.3 years.

In 57.3% MSM, the first male sexual partner was a male friend followed by girlfriend (12.7%), relative (10%), wife (8.8%), commercial sex worker (8.3%) and classmate (2.9%). 75.6% MSM were playing either receptive role or playing both (insertive & receptive role) during anal intercourse. Almost half of the MSM were also involved in oral sex. 57.3% MSM preferred place for sexual act at home followed by Hotel (31.2%).

The commonest reasons for sexual act with man given were for specific sexual acts either anal or oral sex (67.8%), desire for other men gender and or sexual orientation (66.1%), also for sexual pleasure and enjoyment (43.4%) etc.

Even though study population was MSM registered at TI sites where they were regularly counselled by counsellor, only 42.2% MSM were using condom consistently and 9.5% did not have knowledge that HIV can be transmitted by unprotected sexual intercourse. Those MSMs who are not registered under the program may have even poorer knowledge.

Non-use of condom and lack of knowledge regarding HIV transmission along with multiple male sexual partners (average 3-4 per week) with frequent sexual act (7-8 per week)amongst MSMs make them may increase their vulnerability for any sexually transmitted disease including HIV.

Recommendation:

Condom promotion is one of the important objectives of targeted intervention in high risk group like MSM but

from the study finding (less than half of MSMs using condom), counselling for consistent use of condom should be done intensively to improve condom use. Promoting awareness regarding HIV-AIDS transmission & its prevention may sensitize them to use condom correctly during every sexual act.

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