

Building evidence around adolescent same-sex behavior and vulnerability to HIV

Report Prepared
The Humsafar Trust



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List of Acronyms

AIDS	Acquired Immunodeficiency Sndrome
FGD	Focus Group Discussions
HIV	Human Immunodeficiency Virus
KABP	Knowledge, Attitude, Behaviour and Practices
MSM	Men who have Sex with Men
NACO	National AIDS Control Organisation
VDRL	Venereal Disease Research Laboratory

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Executive Summary

India has about 2.3 million cases of Human Immunodeficiency Infection (HIV). The HIV epidemic in India is primarily driven by sexual transmission which accounts for more than 80% of HIV infections. Though the overall adult HIV prevalence in India is about 0.40%, the prevalence among men who have sex with men (MSM) is relatively high (4.43%) – the primary mode of transmission being sexual. Despite all these initiatives, the population below the age of 18 years is often left out from most of these intervention programmes.

Adolescence (10–19 years) is a phase marked by physical and psychological development. This is a period of exploration and experimentation, risk taking that may include early sexual debut, and may be prone to sexual coercion and violence, trafficking, and substance abuse. Adolescents in India find themselves subjected to a dichotomy of expectations. While on one hand, moral policing and strict norms subject them to suppression of any expression of sex or sexual feelings, on the other hand same sex grouping is an accepted phenomenon and is encouraged. There is an urgent need to understand the sexual behaviours of adolescents, particularly same sex desiring adolescents. Thus in this study we: 1) Compared the sexual behaviours, and knowledge and attitudes about HIV, and HIV prevalence among MSM younger than 19 years with those who are more than 19 years of age; and 2) Compared the sexual behaviours, and knowledge and attitudes about HIV, and HIV prevalence among MSM who report first sex act before the age of 19 with those who report it after the age of 19 years.

The study has two components: 1) Quantitative analysis of three data sets forms the major component; and 2) Qualitative data analysis of in-depth interviews with MSM and focus group discussions with counsellors form the other component. Data from three existing data sets were used for quantitative analysis. They were: 1) Understanding Social and Sexual Networks of Married MSM d (2009-2010); 2) Clinical data (2011); and 3) Knowledge, Attitude, Behaviour and Practices (KABP) survey (2007 and 20011). Qualitative data from 'Understanding Social and Sexual Networks of Married MSM' from forty interviews (already existing) were analysed to understand the first sexual experience and associated feelings among MSM. Additionally, we conducted two focus group discussions (FGDs) with counsellors from MSM organisations in Mumbai. The FGDs focussed on issues related to sexual needs of adolescents who have sexual experience with men at an early age. The study was conducted at The Humsafar Trust, Mumbai.

We found that MSM who reported their first sexual act between 10 to 14 years were more likely to identify themselves as *kothis* (47%), whereas those who had their first sexual later in life were more

likely to identify themselves as double-deckers (36%) or bisexuals (14%). About 88% of the MSM reported that the first sexual exposure was with their consent. Though, the proportion was slightly higher among MSM who had their first sexual exposure after the age of 17 years (88%) compared with those who had it between 10 and 14 years (77%), the proportions were not significantly different. About 46% of MSM who reported having their first sexual exposure between 10-14 years had disclosed their sexual orientation to a doctor ($p < 0.003$). About 58% of the participants who reported having first sex between the ages of 10 and 14 years had experienced 'being made fun of' or called names for being homosexual or effeminate; this proportion was lowest among MSM who reported having their first sexual exposure after the age of 19 years. The levels of internalised homophobia were higher among respondents who had their first sexual intercourse before the age of 16.

A significantly higher proportion of MSM aged 20 years and above reported sex with a female partner in the past one month compared with 18 and 19 year old MSM (77% vs 46%, $p = 0.01$). Though none of the MSM in the 18-19 years old group were married, about 46% of them reported sex with a female. A significantly higher proportion of MSM aged 20 and above had heard of STI compared with 18 and 19 year old MSM. Though, a higher proportion of younger MSM reported having an STI in the past six months, a significantly lesser proportion of them had taken treatment for these complaints. Furthermore, a significantly lower proportion of 18-19 year old MSM knew about places to obtain condoms or heard of lubricants compared with those 20 year old and above. Finally, HIV testing was significantly lower in MSM aged 18 and 19 year old compared with older MSM (6% vs 50%, $p < 0.001$).

None of the MSM who reported having first sex between the ages of 10 to 14 years perceived that they were at risk for HIV; however, about 5% of the MSM who reported having first sex at 20 years or later perceived themselves to be at risk for HIV. However, a higher proportion of MSM who reported having had their first sexual exposure between 10 and 14 years of age were HIV infected (16%) compared with others.

This report, one of the first in-depth analyses of same-sex behaviour among adolescents in India, is a useful contribution to literature and provides useful direction for research and interventions. We did find that MSM who start having sex early have different identities and behaviours compared with those who start later – potentially indicating a greater sense of sexual desire, orientation, and identity. Furthermore, they are also subjected to 'name calling' and other 'discriminatory behaviour' in the society. We also found that younger MSM had low levels of awareness about HIV but had high risk behaviours compared with older MSM. Lack of adequate documentation of same-sex behaviour among adolescents often is a deterrent in designing appropriate targeted interventions for this population. Thus, there is an urgent need to pursue research and develop targeted interventions for same-sex desiring adolescents in India, with an aim to reduce HIV transmission in this population.

Background

India has about 2.3 million cases of Human Immunodeficiency Infection (HIV). With more than 16 million people, Mumbai the largest city in India, has a high number of HIV infected individuals and has been in the forefront of HIV interventions since the beginning of the epidemic in the country. Indeed, interventions in high-risk populations such as female sex workers and men-who-have sex with men (MSM) started early on in the epidemic in Mumbai compared with other regions of the country. The HIV epidemic in India is primarily driven by sexual transmission which accounts for more than 80% of HIV infections. Though the overall adult HIV prevalence in India is about 0.40%, the prevalence among MSM is relatively high (4.43%) – the primary mode of transmission being sexual. Furthermore, the HIV prevalence among MSM in the state of Maharashtra was as high as 9.6% (NACO, 2011)¹. Given this scenario, the MSM population has been an important target group for various public health interventions in India. Indeed, the National AIDS Control Organisation (NACO) of India has initiated behavioural and sentinel HIV surveillance in the MSM groups across various cities and supports many Targeted Interventions (TI) among MSM and male-to-female transgendered persons in the country.

Despite all these initiatives, the population below the age of 18 years is often left out from most of these intervention programmes. The nationwide health services and targeted interventions looking at same sex behaviour are all directed towards adults. Indian state defines adolescents as protected citizens whose rights are guarded through parents, guardians or state. The adolescent population in India is estimated to be more than 21.4 percent (between 10 to 19 years of age) of its general population². Although there is a prominence of young adults in the HIV epidemic, prevention research regarding adolescents has been very limited. Adolescence (10–19 years) is a phase marked by physical and psychological development. This is a period of exploration and experimentation, risk taking that may include early sexual debut, and may be prone to sexual coercion and violence, trafficking, and substance abuse. Apart from these age-borne and socio-cultural factors, other factors such as the lack of knowledge about HIV/AIDS, inaccessibility to health care services, lack of education and life skills, and early marriage often increases their vulnerability to HIV/AIDS.³

¹National AIDS Control Organization – National Sentinel Surveillance 2010-11: A Technical Brief http://naco.gov.in/upload/Surveillance/Reports%20&%20Publication/HSS%202010-11_Technical%20Brief_30%20Nov%202012.pdf accessed on 31st January 2013.

² Adolescents in India. A Profile : UNFPA For UN System in INDIA. <http://web.unfpa.org/focus/india/facetoface/docs/adolescentsprofile.pdf> accessed on 30th January 2013.

³ World Health Organization, “Preventing HIV/AIDS in young people—a systematic review of the evidence from developing countries,” WHO Technical Report Series 938, 2006, http://whqlibdoc.who.int/trs/WHO_TRS_938_eng.pdf. accessed on 31st January 2013.

A large number of males have experienced pre marital sex, which is often unsafe. Due to lack of skills and experience, young adolescents are especially vulnerable to risky sexual practices. This vulnerability could be due to coercive or abusive situations, and the reproductive health risks that are associated with such situations. This vulnerability may be further enhanced in out of schools adolescents, due to the fact that programmes designed to give skills training and reproductive health information to adolescents often overlook them. These out of school adolescents are marginalised from mainstream services and society. Moreover, poverty increases their risk because they may have to endure situations including discrimination, exploitation, and social isolation. These factors put them at high-risk for unprotected sex, and alcohol and drug use. Young people also have the additional hurdle of not having proper access to sexual and reproductive health services. Contraceptives offered under various programmes focus on women and condoms are rarely promoted for young unmarried men. The limited access to information is a major factor in HIV and AIDS disproportionately affecting young people.

Adolescents in India find themselves subjected to a dichotomy of expectations. While on one hand, moral policing and strict norms subject them to suppression of any expression of sex or sexual feelings, on the other hand same sex grouping is an accepted phenomenon and is encouraged. The physical and physiological changes that come with puberty put these adolescents in the risk of engaging in risk sexual practices. Even though same sex grouping is accepted in the society, same sex behaviour is not. Same sex behaviour is not only met with ridicule but is also discriminated against in various areas of life. This may impact the self-perception of a same-sex desiring adolescent.

There is an urgent need to understand the sexual behaviours of adolescents, particularly same sex desiring adolescents. Such information will be useful to develop further research and intervention programmes for same sex desiring youth and adolescents. Thus through this study, we aim to understand the sexual behaviours – particularly same sex behaviour, knowledge and attitudes about HIV among adolescents and compare it with adults in population of MSM in Mumbai.

Objectives

The objectives of this study are to:

- 1) Compare the sexual behaviours, and knowledge and attitudes about HIV, and HIV prevalence among MSM younger than 19 years with those who are more than 19 years of age.
- 2) Compare the sexual behaviours, and knowledge and attitudes about HIV, and HIV prevalence among MSM who report first sex act before the age of 19 with those who report it after the age of 19 years.

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Methodology

The study has two components: 1) Quantitative analysis of three data sets forms the major component; and 2) Qualitative data analysis of in-depth interviews with MSM and focus group discussions with counsellors form the other component.

A) Quantitative analysis

Data from three existing data sets were used for quantitative analysis. The details of the three datasets are provided in the subsequent paragraphs.

1. Understanding Social and Sexual Networks of Married MSM: Data collected as part of the collaborative research study between Humsafar Trust and Fenway Community health centre (2009-2010) were analysed. The study was conducted to evaluate the social and sexual networks of high risk MSM who are married to women in Mumbai, India. As part of this study, HIV/STI knowledge, risk perceptions, sexual risk behaviour, health-seeking behaviours, mental health, HIV and VDRL tests results were assessed among 307 MSM in Mumbai. We used the age at first sex (aggregated as 10-14, 15, 16, 17, 18, 19, and 19+ years) as the explanatory variable from this dataset. We compared the following characteristics across these aggregated age groups: 1) **socio-demographics:** current age, education, occupation, income, and sexual identity; 2) **Sexual behaviour:** first sexual experience, current sexual behaviours, condom use, and substance use during sexual acts; 3) **Health care access;** 4) **Mental Health:** Stigma and Internalised Homophobia; 5) **HIV knowledge and STI symptoms;** and 5) **Biological outcomes:** HIV seropositivity and VDRL reactivity.

2. Clinical data: We used data collected from January 2011 to December 2011 at the Humsafar STI clinic for analysis. As with the first data set, age at first sex (aggregated as 10-14, 15, 16, 17, 18, 19, 19+ years) was the primary variable. We compared the following characteristics across these aggregated age groups: 1) **socio-demographics:** age, education, employment status, income; 2) **Sexual behaviours:** first sexual experience, current sexual behaviours, condom use; 3) **HIV awareness and health seeking behaviour;** and 4) **Biological outcomes:** HIV seropositivity and RPR reactivity.

3. Knowledge, Attitude, Behaviour and Practices (KABP): KABP studies are the integral part of the research studies at Humsafar Trust. This community based survey has been conducted since 1999 and is repeated after every 18 months years to understand the impact of interventions on field. For the purpose of this study, data from Wave V (2007) and Wave VI (2010) were combined together and analysed. Since age at first sex was not asked in the questionnaire, we used current age (aggregated as 18-19 and 19+ years) as the explanatory variable for this analysis. We compared the following characteristics across these aggregated age groups: 1) **socio-demographics:** education, occupation,

income, migration status, living status, and sexual identity); 2) **Sexual behaviours**; current sexual behaviours, condom use, and substance use during sex; 3) **HIV awareness and health seeking behaviour**: knowledge of HIV and STIs and HIV testing.

All the quantitative data were analysed using Stata Version 11 (© StataCorp, College Station, TX, USA). We calculated frequencies for categorical variables, and means and standard deviations (SDs) for continuous variables. We used chi square tests to compare the differences in categorical variables.

B) Qualitative data

Qualitative data from 'Understanding Social and Sexual Networks of Married MSM' from forty interviews (already existing) were analysed to understand the first sexual experience and associated feelings among MSM.

Additionally, we conducted two focus group discussions (FGDs) with counsellors from MSM organisations in Mumbai. The FGDs focussed on issues related to sexual needs of adolescents who have sexual experience with men at an early age. The interviews were transcribed and translated in English. We analysed the transcripts for emerging themes and codes.

The main focus was to have an in-depth analysis of the profile of the participants, sexual behaviours and risk factors, health seeking behaviour, sexual health needs, and other emerging themes.

Results

We have presented the results of the quantitative and the qualitative analysis in this section.

A) Quantitative data analysis

We have presented the results from the three data sources.

I) Understanding Social and Sexual Networks of Married MSM:

Data from 282 MSM, who reported having their first sexual exposure after the age of 10 years, were analysed in this dataset. Of these, 108 (38%) reported that they have had their first sexual experience between 10 and 14 years, 43 (15%) in 15 years, 33 (12%) in 16 years, 32 (11%) in 17 years, 33 (12%) at the age of 18, 8 (3%) in 19 years, and 25 (9%) above 20 years of age.

a) Socio-demographics

The mean age (SD) of the participants was 25.8 (6.9) years. Majority of the participants (24%) had completed their secondary level education; 77% of them were employed with an average personal monthly income up to INR 5000 (44%).

We found that MSM who reported their first sexual act between 10 to 14 years were more likely to identify themselves as *kothis* (47%), whereas those who had their first sexual later in life were more likely to identify themselves as double-deckers (36%) or bisexuals (14%) (Table 1).

Table 1: Table showing socio-demographics and sexual identity of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 Years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25 (9)	
Socio-demographics									
Current age Mean (SD)	25.8 (6.9)	26.1 (6.4)	25.9 (7.2)	26.7 (8.2)	22.6 (4.2)	22.9 (4.9)	22.9 (2.0)	31.5 (8.2)	<0.01
Sexual Identity									
Kothi	84 (36)	47 (47)	12(36)	10 (36)	5 (22)	5(24)	0 (0)	5 (23)	0.01
Panthi	27 (12)	8 (8)	3 (9)	2 (7)	6 (26)	4 (19)	3 (60)	1 (5)	
Double Decker	64 (28)	26 (26)	10 (30)	10 (36)	3 (13)	6 (29)	1(20)	8 (36)	
Gay	15 (6)	9 (9)	1(3)	1(4)	2 (9)	0 (0)	0 (0)	2 (9)	
Bisexual	24 (10)	7 (7)	2 (6)	4 (14)	4 (17)	3 14)	1 (20)	3 (14)	
Others	17 (7)	2 (2)	5 (15)	1 (4)	3 (13)	3 (14)	0 (0)	3 (14)	

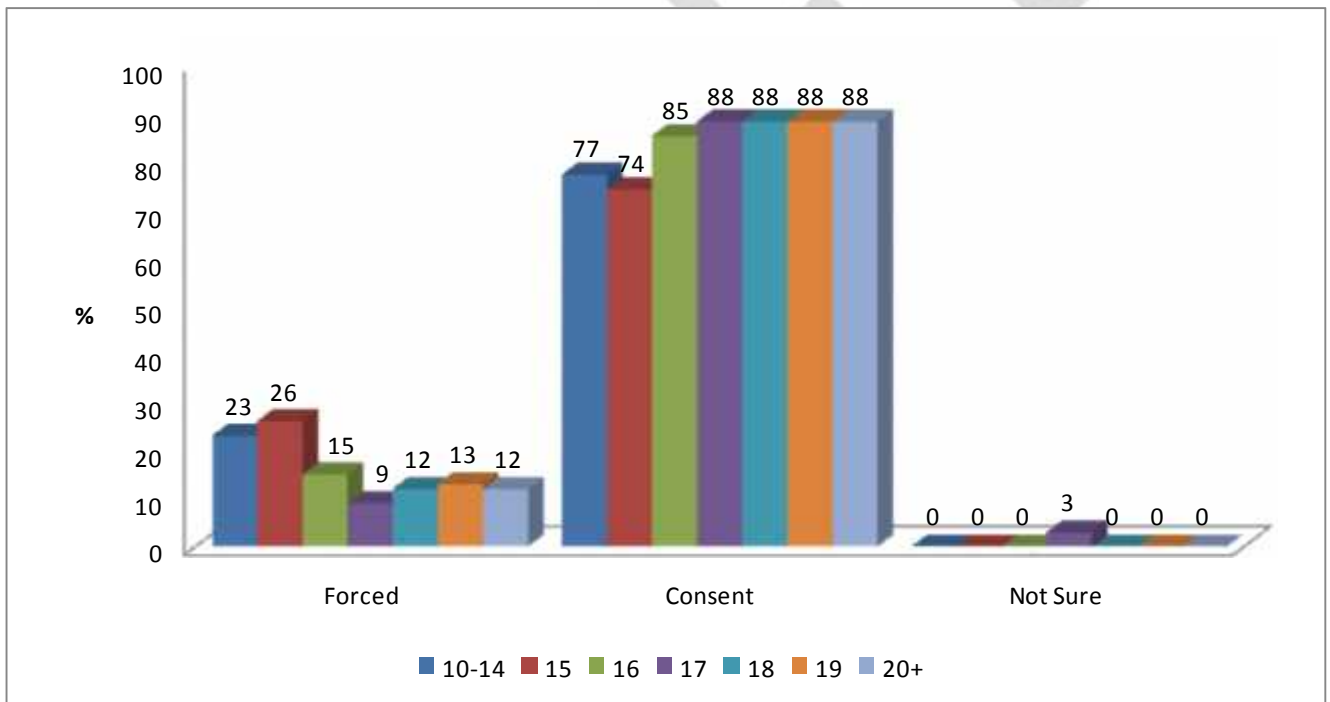
* Some columns may not add to the total due to missing data

b) Sexual behaviours

i) First sexual experience

About 88% of the MSM reported that the first sexual exposure was with their consent. Though, the proportion was slightly higher among MSM who had their first sexual exposure after the age of 17 years (88%) compared with those who had it between 10 and 14 years (77%), the proportions were not significantly different across various categories of age-of-first sex (Figure 1). Participants who reported their first sexual experience at the age of 10 to 14 were more likely (65%) to have sex with their peers. (defined as those ± 3 years of their age).

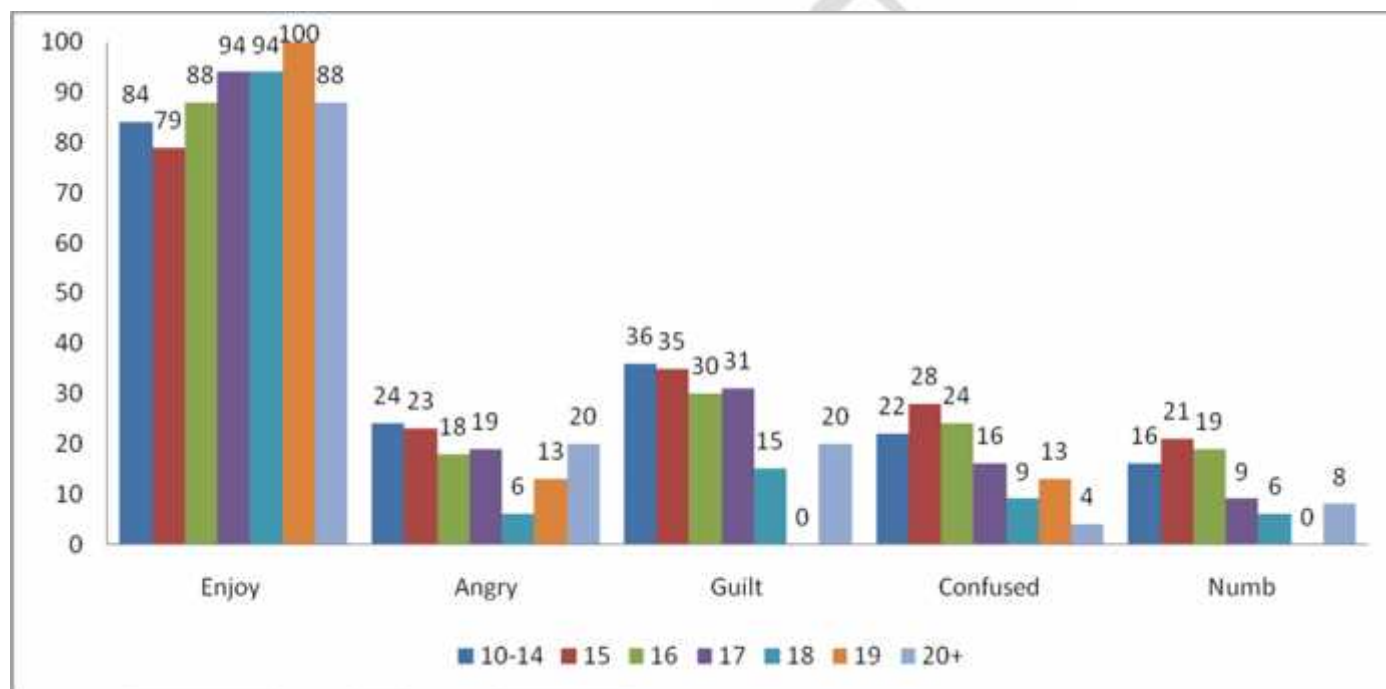
Figure 1: Graph showing nature of the first sex act grouped according to various categories of 'age of first sex' in 282 MSM, Mumbai



ii) Feelings after first sex

More than 80% of the respondents across all the age categories reported that enjoyed their first sexual encounter. Other feelings reported were: felt guilty, felt angry, felt confused, and felt numb.

Figure 2: Graph showing feelings after the first sexual act grouped according to 'age of first sex' categories in 282 MSM, Mumbai



iii) Current sexual practices

The mean number of lifetime partners was significantly higher in participants who reported their first sexual experience at the age of 10 to 14 compared with others. Similarly, the mean number of casual partners in the past three months was highest among MSM who had their first sexual exposure at the age of 10 to 14 (Table 2). A significantly higher proportion of them also reported having anal receptive sex (69%) and oral receptive anal sex (66%) ($p < 0.01$) compared with others. Condom use was low during the last receptive anal sex across all the 'age of first sex' categories (Table 3). About one-third of the respondents who reported their first sex in the age of 10 to 14 reported having sex in exchange for money or goods.

Table 2: Table showing mean no of sex life and no of casual partners of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25 (9)	
Mean (SD): duration of sex life	10.5 (7.5)	14.0 (6.6)	10.9 (7.2)	10.7 (8.2)	5.6 (4.2)	4.9 (4.9)	3.9 (2.0)	10.5 (8.4)	<0.01
Casual Partners Mean (SD)	10 (15)	12.9 (14.7)	11.5 (22.3)	11.4 (19.0)	6.8 (11.4)	4.1 (3.9)	4.4 (3.6)	6.0 (7.9)	0.03

**Some of the columns may not add to 100 due to missing information or multiple responses on these variables.*

Table 3: Table showing current sexual behaviours of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25 (9)	
Sexual practices									
Receptive oral sex	130 (50)	65 (66)	19 (49)	15 (48)	6 (22)	10 (31)	1 (14)	14 (61)	< 0.01
Receptive anal sex	136 (53)	68 (69)	17 (44)	21 (68)	8 (30)	8 (26)	1 (14)	13 (57)	<0.01
Insertive anal sex	125 (48)	27 (27)	22 (57)	14 (45)	21 (75)	22 (69)	7 (88)	12 (55)	<0.01
Condom use**									
Last receptive oral sex	22 (17)	8 (12)	6 (32)	2 (13)	0 (0)	2 (20)	0 (0)	4 (29)	0.3
Last receptive anal sex	74 (54)	39 (57)	9(53)	9 (43)	4 (50)	4 (50)	0 (0)	9 (64)	0.9
Last insertive anal sex	51 (40)	10 (36)	8 (36)	5 (36)	6 (29)	10 (45)	6 (86)	6 (50)	0.3

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables.

**The n of condom use is the total number of respondents who agreed for a particular sexual activity.

iv) Place of Meeting Partners

Sex partners were sought friends, at public toilets and trains in addition to parties and internet. A higher proportion of respondents who had their first sexual experience in the age group of 10-14 years reported that they have met their partners at some of the traditional cruising spots (such as parks/gardens, trains, toilets, and through friends) (Table 4).

Table 4: Table showing place of meeting partners according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25 (9)	
Place of Meeting Sexual partners									
Public toilets	185 (66)	74 (69)	26 (62)	25 (76)	21 (65)	19 (58)	4 (50)	16 (67)	0.6
Parks/Gardens	104 (37)	49 (45)	12 (29)	13 (39)	8 (25)	9 (27)	3 (38)	10 (42)	0.2
Trains	201 (72)	80 (74)	33 (79)	26 (79)	19 (60)	23 (70)	7 (88)	13 (54)	0.1
Beach	55 (20)	28 (26)	9 (21)	8 (24)	6 (19)	3 (9)	0 (0)	1 (4)	0.08
Internet	39 (14)	19 (18)	4 (10)	7 (21)	2 (6)	2 (6)	2 (25)	3 (14)	0.2
Party	50 (18)	26 (24)	7 (17)	7 (21)	4 (13)	3 (9)	1 (13)	2 (8)	0.3
Friends	195 (70)	86 (80)	31 (74)	23 (70)	19 (59)	17 (52)	4 (50)	15 (63)	0.02

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables.

v) Places of Socialisation

MSM who reported having their first sexual exposure earlier socialised MSM friends frequently; however, they were less likely to visit gay/bisexual chat rooms (Table 5).

Table 5: Table showing socialisation and internet use of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 Years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25 (9)	
Socialise with MSM friends									
No Socialisation	34 (12)	6 (5)	4 (9)	3 (9)	8 (25)	5 (15)	3 (38)	5 (21)	<0.01
Less than a month/week	139 (50)	42 (39)	28 (65)	19 (58)	16 (50)	22 (67)	4 (50)	8 (33)	
More than once a week	108 (38)	60 (56)	11 (26)	11 (33)	8 (25)	6 (18)	1 (12)	11 (46)	
Visits Gay/Bisexual Chat rooms									
Do not visit chat rooms	229 (81)	85 (79)	36 (84)	26 (79)	28 (88)	5 (15)	3 (38)	5 (21)	0.7
Less than a month/week	30 (11)	12 (11)	6 (14)	3 (9)	3 (9)	22 (67)	4 (50)	8 (33)	
More than once a week	22 (8)	11 (10)	1 (2)	4 (12)	1 (3)	6 (18)	1 (12)	11 (46)	

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables.

c) Disclosure of sexual orientation, stigma, and discrimination

Majority of the participants had disclosed their sexual orientation to their gay friends. About 46% of MSM who reported having their first sexual exposure between 10-14 years had disclosed their sexual orientation to a doctor ($p < 0.003$).

About 58% of the participants who reported having first sex between the ages of 10 and 14 years had experienced 'being made fun of' or called names for being homosexual or effeminate; this proportion was lowest among MSM who reported having their first sexual exposure after the age of 19 years (Table 6).

Table 6: Table showing discrimination of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25(9)	
Discrimination ^a									
Heard that homosexuals are abnormal	110 (39)	44 (42)	14 (33)	13 (39)	10 (31)	15 (45)	2 (25)	12 (48)	0.07
Heard that homosexuals will be alone when they grow old	103 (37)	45 (42)	13 (30)	12 (36)	10 (31)	11 (34)	1 (13)	11 (44)	0.1
Were you made fun or called names for being homosexual or effeminate?	110 (39)	62 (58)	16 (37)	14 (42)	6 (19)	7 (21)	1 (13)	4 (16)	<0.01
Have you lost a job or career opportunity for being homosexual?	20 (7)	11 (10)	1 (2)	4 (12)	1 (3)	1 (3)	0 (0)	2 (8)	0.3

^a = Many times/a few times

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables.

d) Internalised Homophobia

The levels of internalised homophobia were higher among respondents who had their first sexual intercourse before the age of 16, with close of half of the respondents reporting trying to stop being attracted to men. Other select forms of internalised homophobia are present in Table 7.

Table 7: Table showing internalised homophobia of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25 (9)	
Internalised Homophobia ^b									
I have tried to stop being attracted to men in general	100 (35)	42 (39)	17 (40)	13 (39)	10 (31)	10 (30)	1 (13)	7 (28)	0.03
I wish I weren't a man who has sex with men	84 (30)	38 (35)	15 (35)	11 (33)	6 (19)	8 (24)	1 (13)	5 (20)	0.01
I have tried to be become more sexually attracted to women	63 (22)	23 (21)	12 (28)	9 (27)	4 (13)	7 (21)	1 (13)	7 (28)	<0.01
I wish that I could develop more erotic feelings about men	64 (23)	24 (23)	13 (30)	10 (30)	4 (13)	9 (27)	2 (25)	2 (8)	<0.01

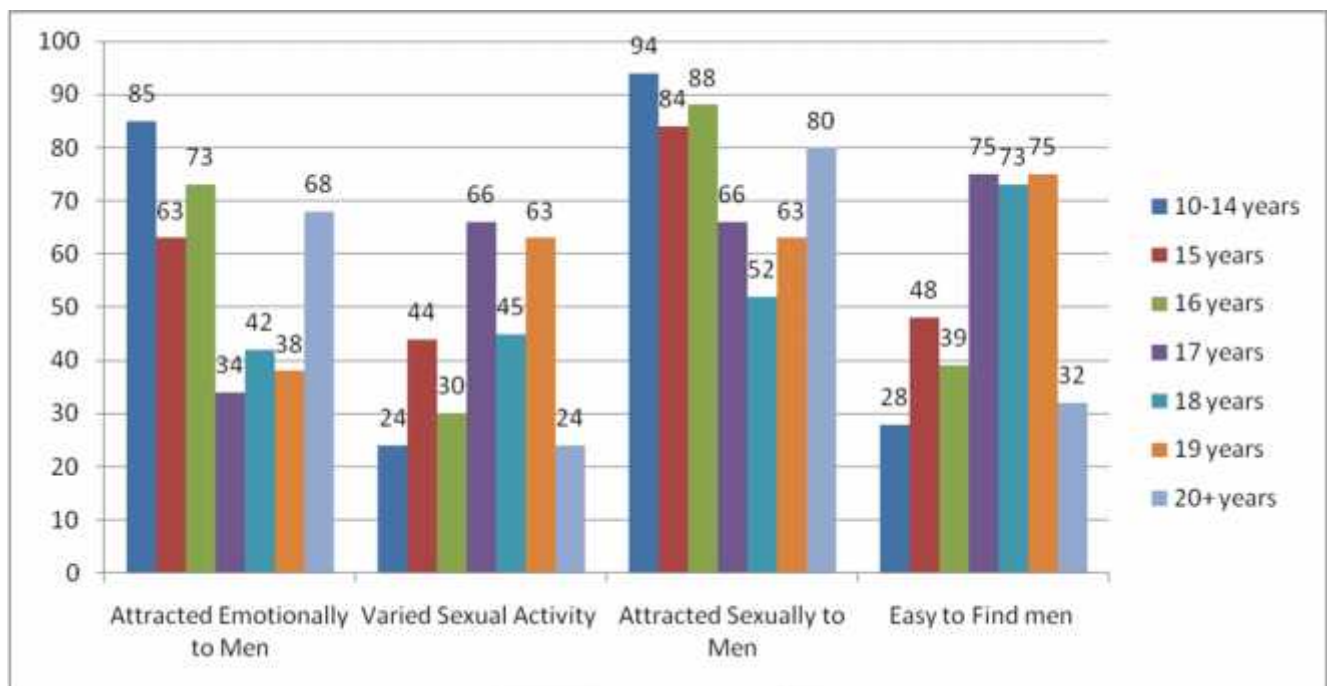
^b = Strongly agree/agree

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables.

e) Reasons for having sex with Men

A higher proportion of MSM who had first sexual exposure between the ages of 10 and 14 years reported that they had sex with men because they were emotionally (85%) or sexually (94%) attracted to men, whereas a higher proportion of MSM who had first sex at the age of 19 reported that they had sex with men because they were easier to find compared with women (75%)

Figure 3: Graph showing reasons for having sex with men grouped according to various categories of 'age of first sex' in 282 MSM, Mumbai



f) HIV knowledge

Though about 85% of the respondents knew that sex with more than one partner can increase the chance of being infected with HIV, only 28% of the respondents agreed with the statement that 'a woman can get HIV if she has anal sex with a man' (Table 8). Private clinic was the most preferred site for health care access in these respondents (20%), followed by government clinic (17%).

Table 8: Table showing HIV knowledge of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25 (9)	
HIV knowledge									
A woman can get HIV if she has anal sex with a man.	80 (28)	29 (27)	13 (30)	10 (30)	7 (22)	6 (18)	3 (38)	12 (48)	0.5
A person will not get HIV if she or he is taking antibiotics.	11 (4)	5 (5)	4 (9)	2 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0.5
Having sex with more than one partner can increase a person's chance of being infected with HIV.	234 (85)	88 (84)	38 (90)	27 (84)	27 (87)	27 (82)	7 (88)	20 (83)	0.7

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables.

g) Health care access

A significantly lower proportion of MSM who reported having their first sexual exposure at 18 or 19 years of age had ever tested for HIV. Further details of health care access are provided in Table 9.

Table 9: Table showing HIV knowledge and health care access of 282 MSM classified according the age of first sexual exposure, Mumbai, India*

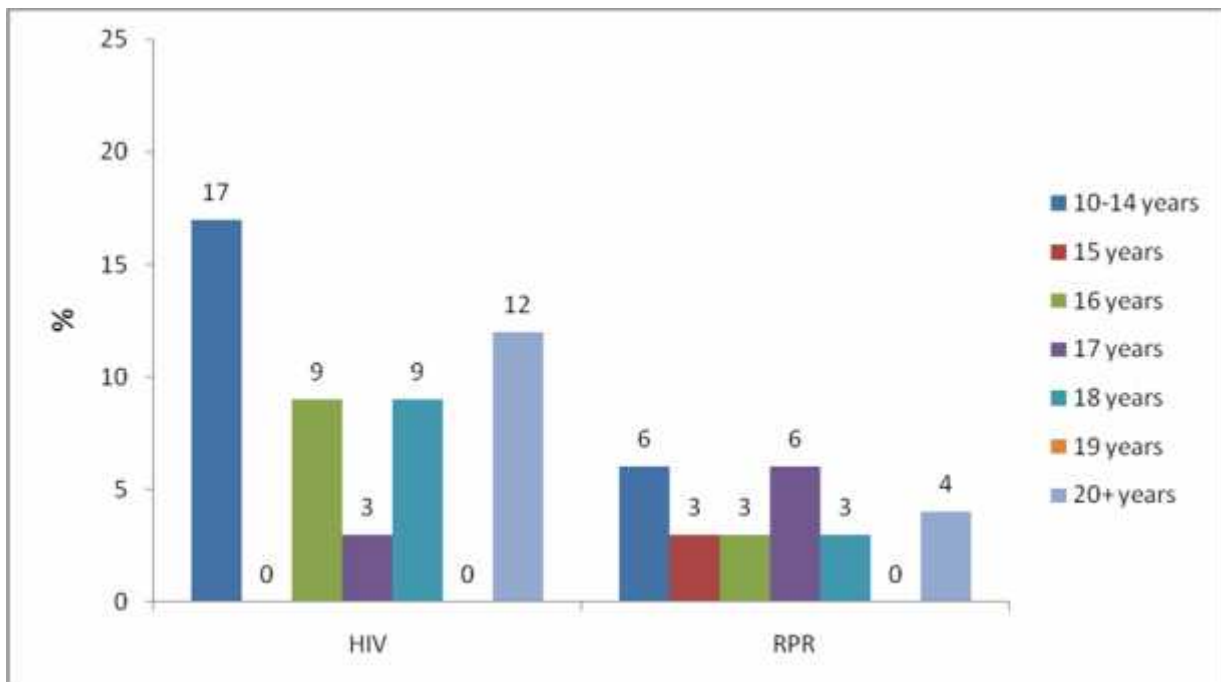
Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
	282 (100)	108 (38)	43 (15)	33 (12)	32 (11)	33 (12)	8 (3)	25(9)	
Health care access									
Govt. clinic access	48 (17)	20 (19)	12 (29)	3 (9)	6 (19)	4 (12)	1 (13)	2 (8)	0.2
Private clinic access	56 (20)	26 (24)	9 (21)	5 (15)	9 (28)	3 (9)	1 (13)	3 (12)	0.3
NGO Access	21(8)	11 (10)	3 (7)	3 (9)	3 (9)	1 (3)	0 (0)	0 (0)	0.5
Ever taken HIV test	162 (59)	74 (70)	23 (55)	20 (67)	14 (45)	12 (36)	3 (38)	16 (70)	0.01

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables.

h) HIV and syphilis test results

The overall HIV positivity in our MSM sample was 10% and VDRL reactivity was 4%. A higher proportion of MSM who reported having had their first sexual exposure between 10 and 14 years of age were HIV infected (16%) and VDRL reactive (6%). Figure 5 shows the proportion of HIV infected and VDRL reactive individuals according to various categories of 'age of first sex'.

Figure 4: Graph showing HIV positivity and VDRL reactivity according to categories of 'age at first sex' in 282 MSM, India.



DRAFT

II) Clinic and Counselling data

Data from 444 MSM attending the STI clinic at the Humsafar Trust were analysed. Of these, 141 (32%) had their first sexual experience between the ages of 10 and 14 years, 51 (11%) had their first sexual experience when they were 15, 57 (13%) at the age of 16 years, 44 (10%) had their first sexual experience when they were 17 years, 48 (11%) at the age of 18, 18 (4%) at the age of 19 and 85 (19%) had their first sexual experience when they were more than 20 years of age. The results across these various 'age-of-first-sex' categories (of first sexual exposure) are presented as follows: socio-demographics, sexual behaviours, knowledge about HIV/AIDS and health care access, HIV and syphilis serology

a) Socio-demographics

The mean age (SD) of all the participants was 27.4 (9.4) years. Majority of the participants were in the age group of 20 to 24 years of age (36%), had higher secondary education (36%), and were unskilled workers (64%). About 30% of all the MSM were married, the proportion was higher in MSM who had their first sexual exposure at or after the age of 20 years. Select socio-demographics according to groups of 'age-of-first-sex' have been presented in Table 10.

Table 10: Table showing socio-demographics of 444 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	444 (100)	141 (100)	51 (100)	57 (100)	44 (100)	48 (100)	18 (100)	85 (100)	
Mean Age (SD)	27.4 (9.4)	25.5 (7.1)	27.3 (9.2)	25.1 (8.4)	27.8 (9.6)	27.8 (10.4)	24.6 (6.6)	32.5 (11.5)	0.23
Marital Status									
Married	121 (30)	32 (24)	11 (23)	11 (22)	14 (33)	16 (38)	3 (20)	34 (43)	0.02

* Some of the columns may not add up due to missing data or multiple responses

b) Sexual behaviours

i) Type of first partner

A higher proportion of MSM (75%) who had their first sexual exposure between the ages of 10 and 14 years reported that their first sex partner was a male. In contrast, MSM who reported having their first sex later were more likely to have it with a female partner

Table 11: Table showing the number of sexual partners and first sexual partner of 444 MSM classified according the age of first sexual exposure, Mumbai, India

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 Years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	444 (100)	141 (100)	51 (100)	57 (100)	44 (100)	48 (100)	18 (100)	85 (100)	
First Sex partner									
Male	248 (56)	104 (75)	32 (63)	34 (60)	26 (59)	15 (31)	11 (61)	26 (31)	<0.01
Female	185 (42)	35 (25)	18 (35)	20 (35)	17 (39)	33 (69)	6 (33)	56 (66)	
TG	9 (2)	0 (0)	1 (2)	3 (5)	1 (2)	0 (0)	1 (6)	3 (4)	

ii) Number of casual partners

A significantly higher proportion of MSM reporting early first sexual exposure had more than casual 15 partners in the past six months (50% in the 10-16 age group vs 16% in the ≥ 20 age group).

Table 12: Table showing number of partners in the past six months of 444 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 Years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	444 (100)	141 (100)	51 (100)	57 (100)	44 (100)	48 (100)	18 (100)	85 (100)	
Number of partners in past 6 months.									
None	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	1 (1)	<0.01
Single	95 (23)	16 (12)	5 (10)	12 (22)	11 (26)	14 (32)	3 (19)	34 (47)	
Less than 5	133 (32)	41 (31)	17 (35)	14 (26)	15 (36)	17 (39)	6 (38)	23 (32)	
5 to 10	22 (5)	8 (6)	4 (8)	2 (4)	2 (5)	3 (7)	1 (7)	2 (3)	
10 -15	7 (2)	2 (1)	1 (2)	1 (2)	2 (5)	0 (0)	0 (0)	1 (1)	
More than 15	153 (37)	67 (50)	22 (45)	25 (46)	12 (29)	9 (20)	6 (38)	12 (16)	

iii) Sexual practices

The sexual behaviours (oral, anal, and vaginal) also significantly differed across various 'age-of-first-sex' categories. MSM who reported having their first sexual act between the ages of 10-14 years were more likely to report oral receptive (47%) and anal receptive (44%) sex, whereas MSM who had their first sex act later were more likely to report anal insertive sex, oral insertive sex, and vaginal sex.

Table 13: Table showing sexual behaviours of 444 MSM classified according the age of first sexual exposure, Mumbai, India*

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 Years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
	444 (100)	141 (100)	51 (100)	57 (100)	44 (100)	48 (100)	18 (100)	85 (100)	
Types of sexual behaviours									
Oral receptive	146 (33)	64 (45)	20 (39)	21(37)	12 (27)	11 (23)	3 (17)	15 (18)	<0.01
Oral Insertive	240 (54)	79 (56)	29 (57)	30 (53)	28 (64)	24 (50)	11 (61)	39 (46)	0.5
Anal receptive	137 (31)	60 (43)	22 (43)	22 (39)	13 (30)	9 (19)	3 (17)	8 (9)	<0.01
Anal Insertive	258 (58)	84 (60)	35 (69)	34 (60)	28 (64)	30 (63)	12 (67)	35 (41)	<0.03
Vaginal	149 (34)	36 (26)	15 (29)	16 (28)	15 (34)	20 (42)	6 (33)	41 (48)	<0.02

* Some of the columns may not add up due to missing data or multiple responses

iv) Condom use

Condom use was similar across various categories of age-of-first-sex. However, a higher proportion of MSM (28%) who had their first sex act between the ages of 10 and 14 years reported 'refusal by the partner' as one of the reasons for non-usage of condoms, whereas only 11% of those having first sex at 20 years or later reported this to be the reason for non-usage of condoms. Respondents who had their first sex at the age of 10 to 14 years also were more likely to feel that using condoms was not necessary during sex with their casual partners($p<0.02$) compared with others.

Table 14: Table showing condom usage of 444 MSM classified according the age of first sexual exposure, Mumbai, India*.

Age categories of first sexual exposure	All	10-14 years	15 years	16 years	17 years	18 years	19 Years	≥ 20 years	p value
	N (%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	
Total	444 (100)	141 (100)	51 (100)	57 (100)	44 (100)	48 (100)	18 (100)	85 (100)	
Condom Usage									
Anal	91 (36)	31 (32)	15 (43)	14 (35)	8 (31)	7 (32)	3 (25)	13 (57)	0.6
Oral	23 (9)	5 (5)	5 (15)	4 (11)	2 (8)	1 (5)	0 (0)	6 (21)	0.1
Vaginal	18 (30)	5 (31)	1 (20)	1 (11)	2 (40)	3 (30)	0 (0)	6 (50)	0.08

* Some of the columns may not add up due to missing data or multiple responses

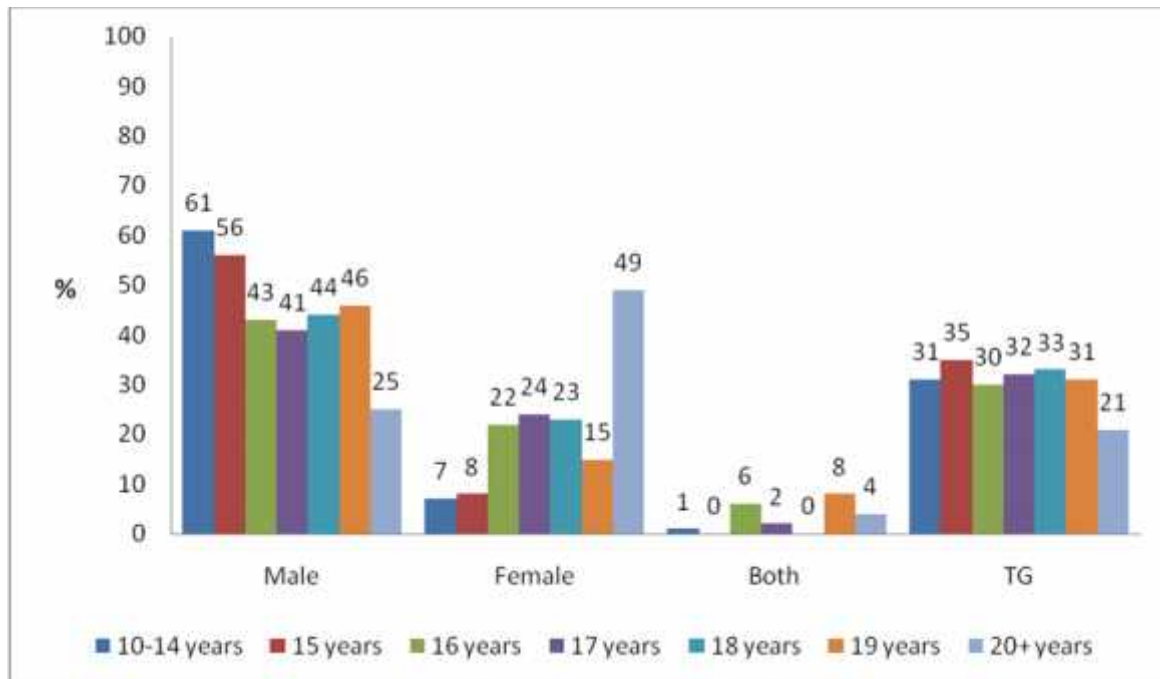
v) Socialising

Majority of the MSM found their sex partners in trains (39%), at stations (38%), or through friends (34%).

vi) Preference of Partner

A similar proportion of respondents reported preference towards transgender across all the age categories. We also found that a higher proportion of MSM who had their first sex act early in life reported a preference for male partners, whereas those who had their first sex act later in life reported a preference for female partners as shown in the figure above (Figure 5).

Figure 5: Graph showing preference of the type of partner grouped according to various categories of 'age of first sex' in 444 MSM, Mumbai



c) Knowledge about HIV/AIDS and risk perception

About 97% of the MSM had heard about HIV and about 95% of them had heard about STIs. The proportion of MSM reporting different modes of transmission were as follows: unsafe sex – 89%; blood transfusion – 72%; infected needles – 44%; and mother-to-child – 55%. The proportion of MSM who reported various prevention methods were as follows: using condoms – 85%; using sterile needles – 83%; testing blood – 44%; and reducing partners – 30%. There were no significant differences in awareness about transmission and prevention methods of HIV across various age categories.

Even though knowledge about transmission and prevention of HIV was high, risk perception was very low. Only 4% of the total MSM population perceived themselves to be at risk for HIV. None of the MSM who reported having first sex between the ages of 10 to 14 years perceived that they were at risk for HIV; however, about 5% of the MSM who reported having first sex at 20 years or later perceived themselves to be at risk for HIV.

III) Knowledge, Attitudes, Behaviour and Practices of Men having sex with Men in Mumbai and Thane Metro (2007 and 2010):

a) Socio- demographics

A total of 654 male respondents were analyzed as part of this dataset. Majority of the respondents (97%) were more than 19 years of age, while 3% of the respondents were in the 18-19 years age group. Majority of the respondents (44%) had completed secondary level education. About 25% of the participants had migrated to Mumbai from other parts of the country.

Almost one-third of the respondents self-identified themselves as Kothis, which was highest in this sample followed by bisexual men. Respondents more than 19 years old were more likely to identify themselves as *kothis* and bisexual; whereas, a majority of the respondents from the age of 18-19 years did not identify themselves as *kothi*, *panthi*, gay, bisexual, or MSM. ($P < 0.01$). About two-third of the respondents stayed with their parents and 29% of the 20 years and older respondents were married to a woman (Table 15).

Table 15: Table showing sexual identity and marital status of 654 MSM classified according the current age, Mumbai, India*

Age categories of the current age of the participants	All	18-19 Years	≥ 20 years	P Value
	N(%)	n (%)	n (%)	
Total	654 (100)	21(100)	633(100)	
Sexual Identity				
Kothi	125 (29)	3 (19)	122 (29)	<0.01
Panthi	49 (11)	2 (13)	27 (11)	
Bi-sexual	121 (28)	4 (25)	117 (28)	
Gay	65 (15)	1 (6)	64 (15)	
MSM	24 (6)	24 (6)	0 (0)	
Others	46 (11)	6 (38)	40 (10)	
Marital status with a female partner	185 (28)	0 (0)	185 (29)	0.03

*Some columns may not add to the total due to missing data

b) Sexual behaviour

i) Sexual risk behaviour with male partners

The mean number of casual partners in the past one month in the whole population was 6 partners

We found that 18-19 year old MSM reported more insertive anal sex in the past one month compared with older MSM. However, they were significantly less likely to report receptive anal sex compared with those more than 19 year old MSM. In general, however, condom use (last time and consistent) was lower by 18-19 year old MSM compared with those more than 19 years of age (Table 16).

About 30% of 18-19 year old respondents reported forced sex in the last six months., whereas about 15% of 20 year old and above respondents reported having sex in exchange of cash.

Table 16: Table showing sexual risk behaviour and condom usage of 654 MSM classified according the current age, Mumbai, India*

Age categories of the current age of the participants	All	18-19 years	≥ 20 years	P Value
	N(%)	n (%)	n (%)	
Total	654 (100)	21 (100)	633(100)	
Type of sexual practices with casual partner in the last one month				
Anal Sex	458 (70)	11 (52)	447 (70)	0.07
Insertive Anal Sex	391 (85)	10 (91)	381 (85)	0.60
Receptive Anal Sex	305 (67)	3 (27)	302 (68)	<0.01
Condom use				
Last time condom used during insertive anal sex**	344 (88)	6 (60)	338 (89)	0.01
Consistent condom used during insertive anal sex**	215 (55)	3 (30)	212 (56)	0.03
Last time condom used during receptive anal sex**	278 (91)	2 (67)	276 (91)	0.1
Consistent condom use during receptive anal sex**	195 (64)	2 (67)	193 (64)	0.2

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables

**The n of condom use is the total number of respondents who agreed for a particular sexual activity.

ii) Sexual risk behavior with female partner

A significantly higher proportion of MSM aged 20 years and above reported sex with a female partner in the past one month compared with 18 and 19 year old MSM (77% vs 46%, p=0.01). Though none of the MSM in the 18 -19 year old group were married, about 46% of them reported sex with a female. A little less than half of the respondents reported that had used condom the last time they had vaginal sex with a female partner.

Table 17: Table showing sexual risk behaviour and condom use with female partners among 654 MSM, Mumbai, India*

Age categories of the current age of the participants	All	18-19 years	≥ 20 years	P Value
	N(%)	n (%)	n (%)	
Total	654 (100)	21 (100)	633(100)	
Had sex with a female partner	243 (76)	6 (46)	237 (77)	0.01
Condom use with female partners				
Condom used during the last vaginal sex**	116 (48)	3 (50)	113 (48)	0.9
Consistent condom use during vaginal sex **	63 (26)	3 (50)	60 (26)	0.4
Alcohol consumption before sex	219 (33)	2 (10)	217 (34)	<0.01

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables

**The n of condom use is the total number of respondents who agreed for a particular sexual activity.

b) Potential partners

i) Source for meeting potential partners

Majority of the MSM met their sexual partners at cruising sites (Table 18). Friends and internet were the next preferred source for meeting potential partners. An important finding over here is that younger MSM meet their partners at cruising sites whereas the older ones meet through friends.

Table 18: Table showing modes of meeting potential sexual partners of 654 MSM classified according to the current age, Mumbai, India*

Age categories of the current age of the participants	All	18-19 Years	≥ 20 years	p value
	N(%)	n(%)	n(%)	
Total	654 (100)	21 (100)	633(100)	
Mode of meeting partner				
Internet	178 (27)	5 (24)	173 (27)	0.71
Newspaper	7 (1)	0 (0)	7 (1)	1.00
Friends	396 (60)	8 (38)	388 (61)	0.03
Cruising	519 (79)	20 (95)	499 (79)	0.09

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables

ii) Physical space for meeting partners

Local railway stations, toilets and parks were among the most preferred places to meet partners (Table 19). It was evident that younger MSM are most likely to meet their partners at local railway station whereas the older access many more sites. For instance, older MSM were significantly more likely to meet their partners in toilets compared with younger MSM (65% vs 38%, p=0.01).

Table 19: Table showing place of meeting partners of 654 MSM classified according the current age, Mumbai, India*

Age categories of the current age of the participants	All	18-19 Years	≥ 20 years	p value
	N(%)	n(%)	n(%)	
Total	654 (100)	21 (100)	633(100)	
Place of meeting partner				
Toilet	421 (64)	8 (38)	413 (65)	0.01
Parks	240 (37)	5 (24)	235 (37)	0.21
Public Transport	236 (36)	6 (29)	230 (36)	0.47
Local Railway Station	465 (71)	15 (71)	450 (71)	0.97
Beach	123 (19)	6 (29)	117 (18)	0.24

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables

iii) Place of Sex

Though meeting took place at public place, sexual acts were usually done in a private space such as own home or friend's house (Table 20). A few respondents reported that they sex in the toilets and parks. MSM who 20 years or older were significantly more likely to have sex at the friend's house compared with younger MSM (64% vs 33%, $p < 0.01$).

Table 20: Table showing place sex of 654 MSM classified according the current age, Mumbai, India*

Age categories of the current age of the participants	All	18-19 Years	≥ 20 years	p value
	N(%)	n(%)	n(%)	
Total	654 (100)	21 (100)	633(100)	
Place of Sex				
Home	425 (69)	9 (43)	416 (66)	0.03
Toilets	260 (42)	7 (33)	253 (40)	0.54
Parks	69 (11)	0 (0)	69 (12)	0.15
Friend's house	414 (67)	7 (33)	407 (64)	<0.01
Lodge	217 (35)	4 (27)	213 (36)	0.16

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables

c) HIV knowledge and awareness

Of the 654 respondents, only 47% knew that HIV is a virus that causes AIDS. There were some interesting differences in levels of awareness about HIV and AIDS in MSM aged 18 and 19 years, and those who were older. For instance knowledge about HIV prevention was definitely higher in the older MSM compared with younger MSM (Table 21). Though, the knowledge about transmission by sexual route similar, knowledge about transmission from mother to child was higher in older MSM. Furthermore, knowledge about prevention of transmission by using condoms was significantly lower in younger MSM compared with older MSM (80% vs 95%, $p=0.03$).

Table 21: Table showing HIV knowledge and awareness of 654 MSM classified according the current age, Mumbai, India*

Age categories of the current age of the participants	All	18-19 years	≥ 20 Years	P value
	N(%)	n (%)	n (%)	
Total	654 (100)	21 (100)	633 (100)	
HIV/AIDS knowledge				
Virus that causes AIDS	309 (47)	8 (38)	301 (48)	0.39
A condition where the immune system of the body breaks down	141 (22)	0 (0)	141 (22)	0.01
Way of HIV Transmission	614 (100)	15 (100)	599 (100)	
<i>Correct information</i>				
Through sex without condoms	599 (98)	15 (100)	584 (98)	0.8
Infected mother to child	503 (82)	8 (53)	495 (83)	<0.01
Usage of infected needle	583 (95)	15 (100)	568 (95)	0.85
Transfusion of HIV infected blood	591 (96)	15 (100)	576 (96)	0.74
<i>Incorrect information</i>				
Residing with HIV infected person	50 (8)	3 (20)	47 (8)	<0.01
Hugging a HIV affected person	36 (6)	4 (27)	32 (5)	< 0.01
Prevention of HIV	614 (100)	15 (100)	599 (100)	
<i>Correct Information</i>				
By avoiding penetrative sex	440 (72)	10 (67)	430 (72)	0.84
Using condoms during penetrative sex	578 (94)	12 (80)	566 (94)	<0.03

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables

d) Health seeking behaviour

There were significant differences in knowledge and health seeking behaviours in these two groups of MSM. A significantly higher proportion of MSM aged 20 and above had heard of STI compared with 18 and 19 year old MSM. Though, a higher proportion of younger MSM reported having an STI in the past six months, a significantly lesser proportion of them had taken treatment for these complaints (Table 22). Furthermore, a significantly lower proportion of 18-19 year old MSM knew about places to obtain condoms or heard of lubricants compared with those 20 year old and above. Finally, HIV testing was significantly lower in MSM aged 18 and 19 year old compared with older MSM (6% vs 50%, $p < 0.001$).

Table 22: Table showing health seeking behaviour of 453 MSM classified according the current age, Mumbai, India*

Age categories of the current age of the participants	All	18-19 years	≥ 20 years	P value
	N(%)	n (%)	n (%)	
Total	654 (100)	21 (100)	633(100)	
Heard STI	527 (81)	11 (52)	516 (82)	<0.01
STI in the past 6 months	129 (20)	5 (24)	124 (20)	0.6
Took treatment for STI	122 (95)	3 (60)	119 (96)	<0.01
Knowledge about place of obtaining condoms.	603 (92)	15 (71)	588 (93)	<0.01
Have heard of lubricants	412 (63)	6 (29)	406 (64)	<0.01
HIV testing done	221 (49)	1 (6)	220 (50)	<0.001

*Some of the columns may not add to 100 due to missing information or multiple responses on these variables

B) Qualitative Analysis

Data from the qualitative interviews and counselors focus groups discussion were analyzed to examine the experiences of first sexual experiences among young and adult MSM.

I) First sexual experience with another man.

a) Age of first sex

The age of first sex usually ranged from 9 years to 17 years. Most of them reported having their first sexual experience with someone known. Sex was often forced in the first instance, but then the respondent enjoyed the sexual experience and continued having same sex relationships with the same person for some time.

“ The clients who come to us are above 18 years and sometime even 50 years old. But when we ask them about their first sexual act, their answer is always ‘at the age of 12years or 14 years’.. There are very few who say that their first sexual act was when they were 20 or 18 years old. There are very rare cases where they have had sex after turning 18.” (FGD1, Counsellor)

It could also be seen that sometimes it was power/force that was used to have sex with the respondents, while sometimes the participants were also enticed with money or gifts for having sex in exchange.

“Mostly MSM people, in their childhood itself they have feminine qualities, they want to stay among women but they don't know about sex. Or sometimes the area they live in, the boys in that area force them to have sex since they are younger and can't back answer the older boys. So the boys beat them and force them...” (FGD, Counsellor)

“He offered me beer first time in life I had beer, he also gave me 100/- Rs.. He asked me to come to his place.... and I stayed there for the whole night and in morning he gave me more 50/- Rs. to travel up to station.” – (Participant 1, Married MSM Study)

The first sex with a man was also reported in a later age, which was often with a stranger. These sexual acts were usually consensual in nature.

“ I must be 19 or 20. That was normal day and he met in train, and that was rainy season, I had feeling of doing sex, and I think he was also having that feeling, so he started touching me...Then we had talk, and then he told me that you should do this way etc. Then he called me to his home. We both

went to his house, and then we did sex there in his house. First I did oral sex, gave mine into his mouth, then I fucked him” – (Participant 16, Married MSM Study)

b) Types of sexual practices

The first sexual experience varied across the respondents. Few of the respondents reported having penetrative sex during their first sexual encounter, while others reported body sex, caring, fondling in their first encounter, however when the sex continued with the same person, they started indulging in oral and anal sex.

“Like I’ve seen in my experience, it begins with masturbation. The younger ones, they don’t know how to have sex or what is it... they don’t know about oral or anal sex. The only get attracted towards men, taking them in their arms, staying with them, making them masturbate etc.. it is only later that they engage in oral sex or anal sex..” (FGD2, Counsellor)

I found this professor is already sleeping there, in same bed, that time he took full charge on me and forced me to have sex with him. He took initiative and inserted me from back because I wasn’t aware of all these things, it was same like rape case, which normally happen with girls – now rape means you know what it is!”- (Participant 3, Married MSM study)

c) Feelings after sex

The first sexual encounter varied across the respondents. Most of the respondents who had their first sex as an insertive partners had expressed satisfaction after their first sex. Some of the respondents also questioned their identity and were confused at a young age and were getting clear or were able to seek information only after the age of 18 years.

“..they tell us that they’ve had their first sexual experience at 14,15,16 years, it would have happened at this age..and would have usually happened with a male relative or a friend from school, so they are unable to understand that behaviour, and they keep repeating that kind of behaviour, so till they turn 18 years old, that is when they start taking this issue seriously, that is when they want to know why are they different, and why with them, and if they are the only one who is like this or if there are other people like them, so when they (client) meet people like them , they might understand themselves, or they visit any institution or an NGO for counselling, and that’s when they find out that there are other people like them and they aren’t different in any way. (FGD 2, Counsellor)

Few of the respondents also reported being confused, scared and fearful since they received threats from their partners about not to reveal the incident to anyone.

" .. client came to me once, he was 7 years old, his neighbour would take him out to roam around..he would make him (client) sit on his lap...then gradually he (neighbour) would inform the clients family and take him home and fool around with him, later on he began maintaining a relationship with the client and then forcefully had sex....he wouldn't understand anything then later on after having sex, the neighbour would threaten him that ,*"if you tell anybody at home then I will ill-treat you.."* and started blackmailing by saying *"if you don't come home, then I will do this...."* (FGD1, Counsellor)

Most participants reported liking it and enjoying the act.

"I've noticed that when there are boys aged 14-15, who stay in the slum areas, who hang out in groups, sleep in groups, so Kothi's are also there who go to them and try to attract them. There are a lot of people who don't know anything. They only know that sex is had with girls only, they don't know about the MSM community or that sex happens among them. When some of them approach them and take their penis in their mouth, they like it and enjoy this different sexual experience" (FGD 1, Counsellor)

There were also reports of feelings of guilt and regret as reported by the counsellors,

"He feels guilty, he wonders if he has done something dirty, why did such a thought come in his mind, "am I like this only?", "am I the only one who likes boys?" He is afraid if somebody has seen him, or if anybody knows, and he is afraid that he is doing such a thing.." (FGD 2, counsellor)

"When they have their first sexual act, so they wonder if it is right or wrong..that is mostly their first question.. or 'have I done something wrong?'" (FGD 2, Counsellor)

d) Disclosure about first sexual activity to others

Disclosure of the first sexual activity to others was not done by many of the respondents, as they were not aware as to whom this incident could be reported and also afraid of the consequence of reporting the incident. However, respondents who self identified themselves as masculine were more open to share this incident with their friends with pride, which also provided them with an opportunity to assert their masculinity. Respondents who had receptive sex were feeling more guilty and ashamed to share this incident, in spite of the physical and mental harm they faced by this incident. This also reflects the stigma faced by men as they are not able to seek help or services from the existing system due to the gender norms set in the society.

"Sometimes if their friends circle is a big group, or if they are the rowdy kinds who don't care about another person's feelings, then they come and tell them that they went to a place and he got a nice

'choco' and if somebody else also wants then he should go there. They don't care as long as they keep getting sex" (FGD 2, Counsellor)

"When they have sex for the first time, they can never tell anybody what pain they are facing, whether it is oral sex or anal sex they can never tell anybody out of the fear that what people think about him that he is having sex with another man. ...so they tell the person with whom they first had sex, to stay in contact for any help they require..and even if that person doesn't care then I doubt where they can go for help.." (FGD1, Counsellor)

II) Awareness about HIV/AIDS and access to health care services: .

Counsellors also reported lack of provision or access to service among the young adolescents with same sex desire due to the existing legal provisions in terms of providing them sexual health services.

"I have a client who is below 18 years old. He meets me at the site. I am able to counsel him. But I cannot provide him any services. I can give him condoms, but I cannot bring him to my office or DIC" (FGD 1, Counsellor)

Also in terms of access to condoms it is difficult as they are afraid to keep it with themselves, or even go and purchase condoms from the medical shop. Most of them aren't even aware of the condoms.

" The thing about condoms is at their age..i.e teenagers don't know about it, and even if they do they call it 'Phugga' (FGD 2, Counsellor)

III) Strategies to reach out to the adolescent MSM.

Counsellors and respondents felt that it was important to talk to their parents of the children through various sensitization meetings, sensitizing school counsellors on issues of sexuality, organizing health camps in slum areas to reach out to school-drop outs many of whom may be sexually active.

"Firstly, we need parents to talk to their children and inform them about what all can happen, or school counsellors should be able to get students to have faith in them, enough for a child to come and tell them if anything physical has happened against him. There are several ways but it needs to start from home first, if a family doesn't take the effort then neither will the school" (FGD2, Counsellor)

There was also a discussion on the need for posters showing same sex relationships, promoting sexual health services through media for young adolescents (HERO project), need to lobby with different stakeholders like different NGOs working with children, setting up help lines for children.

“Like you see there are a lot of NGO’s, through them we can..in the slum areas, we can team up with the government and organize a program for the children in that area even if it is just once a month..”
(FGD1, Counsellor)

DRAFT

Discussion

The analyses of the quantitative and qualitative data provide useful information about the sexual behaviours, knowledge and awareness, and stigma and discrimination faced by MSM during their adolescent years. There were some distinct differences in the 'sexual behaviours and sexual identity' between MSM who have their sexual debut relatively early on in adolescence and those who have latter. In addition to these differences, MSM who had their first sexual act early (10-14 years) were also more likely to be HIV infected compared with those who had it later during the adolescent period. Furthermore, 18 or 19 year old MSM have less knowledge about HIV and AIDS (transmission or prevention) compared with older MSM. However, they are more likely to have practice unsafe penetrative sex compared with older MSM.

Though there are enough studies discussing the sexual behaviours and HIV among MSM in India, this is one of the first reports which provides an in-depth assessment of the same-sex behaviour during the adolescence phase. As was evident in our data, MSM who reported first sexual act between the ages of 10 and 14 years were more likely to identify themselves as *kothis* and had receptive anal sex compared with others. Furthermore, they were also more likely to say that they had sex with other men because they were emotionally or sexually attracted to other men. In contrast to these features, men who had their first sexual act at the age of 17, 18, or 19 years identified themselves as *kothis*, *panthis*, or double-deckers, and were more likely to report insertive anal sex with a male partner. Additionally, they also reported that had sex with men because they were easy to find or as a form of varied sexual activity. We also found that sexual behaviours of men who start having sex at the age of 15 or 16 were more similar to those starting at 10 to 14 years compared with those starting at from 17 to 19 years. Thus, there appears to be a distinct difference in the sexual identity and behaviours among MSM who start having sex early on in life compared with those who start later. Another interesting finding was MSM who started having sex early were most likely to have experienced humiliation for being effeminate. Though, we do not have evidence in these analyses, one potential hypothesis for this difference could be that men who start having sex early on are probably more certain about their orientation and have an identity formation. Thus, it will be important to understand 'formation of sexual orientation and identity' during the adolescence phase. It may be worthwhile to conduct qualitative research to understand this process. Furthermore, these men may also experience 'bullying' during the adolescence phase. In the absence of any interventions and resources to handle such situations, this may adversely impact the self-esteem or may lead to

other potential health concerns. ^{4,5} Thus, formative research to understand the sexual behaviour, orientation, identity formation, and experiences in the society and family will be useful to develop interventions. Such interventions should be aimed towards providing information on sexuality, sexual orientation, and identity formation in a non-discriminatory manner. Furthermore, we should also provide information on what constitutes discriminatory behaviour, sexual advances, sexual coercion, and bullying, and invest in resources to handle such situations. ⁶

Another important finding from the study was the difference in the level of awareness and risk behaviours practiced by younger (18 and 19 years) and older MSM (20 years and above). In general, younger MSM were more likely to have higher risky behaviours and low levels of awareness compared with older MSM. Furthermore, the highest proportion of HIV infected individuals were among those who had their first sexual in the age of 10 to 14 years. This potentially could be due to the longer duration of their sex-life and higher number of partners. However, as seen in our analysis, none of those who started having sex early on perceived themselves to be at risk for HIV. Limited access to information may be a major factor in HIV and AIDS disproportionately affecting young people. Indeed, it has been reported that about 73% of the youth carried misconceptions about transmission of HIV/AIDS. For instance, they believed that one can tell a person is HIV positive by the way s/he looks or many were unaware of the links of STIs to HIV or unaware about the correct way of using a condom⁷. A recent study conducted among adolescents living with HIV in India found that adolescents faced high levels of discrimination. Furthermore, adolescents in the age range of 10 to 14 years were more likely to be HIV infected compared with those who were in the age group of 15 to 19 years.⁸ In addition, Naswa and Marfatia found that HIV infected adolescents show mental illness and substance abuse as important co-morbidities. Other important concerns were disclosure of HIV status to self and family, and guilt attached with transmission of sexually transmitted infection.⁹ Thus, adolescents who have same-sex behaviour are at a high risk for HIV acquisition – they have low

⁴ Schreier A, et al Prospective study of peer victimization in childhood and psychotic symptoms in a nonclinical population at age 12 years. *Arch Gen Psychiatry*. 2009 May;66(5):527-36.

⁵ Ryan Kelly, Study: Bullying of LGBT students has long-term health effects, http://www.tucsonsentinel.com/local/report/051911_lgbt_bullying/study-bullying-lgbt-students-has-long-term-health-effects/ (accessed on 26 March 2013)

⁶ Library: LGBT Youth & Schools Resources and Links, http://www.aclu.org/lgbt-rights_hiv-aids/library (accessed on 26 March 2013)

⁷ NACO, 2001, KAP of young people (15-24 years) Disaggregated data from National Behavioral Surveillance Survey

⁸ Adolescents Living with HIV: An Indian Profile; <http://www.hindawi.com/journals/art/2012/576149/> accessed on 31st January 2013.

⁹ Adolescents HIV/AIDS: Issues and Challenges <http://www.ijstd.org/article.asp?issn=0253-7184;year=2010;volume=31;issue=1;spage=1;epage=10;aurlast=Naswa> accessed on 31st January 2013.

levels of awareness, low levels of perception of risk, and high levels of high risk behaviours. Thus, this group which often gets neglected in targeted interventions are in an urgent need for specific targeted HIV interventions.

The present analysis is not without its limitations. We used secondary data for analysis. Thus, we had limited control over the variables which could be used for analysis and the datasets were not comparable. For instance, we did not have the 'age of first sexual exposure' in the KABP data set. Thus, we could not compare it with the other datasets. Furthermore, we knew about the HIV status of the individuals in only one dataset. However, a combination of these datasets provided us information about various aspects of same-sex behaviour and HIV among MSM according to different classifications (MSM who start having sex earlier compared with those who start later, young MSM compared with older MSM). Furthermore, the qualitative analysis provided an in-depth understanding of these issues in MSM. Another potential limitation of the quantitative analysis is recall bias - we asked information about the first sexual episode much later in life. It is quite likely that some of the interpretation of the first sexual episode may have developed later and MSM may be articulating that interpretation rather than what they felt at the time of their first sex act. Thus, a study assessing the sexual behaviours (particularly same-sex behaviour) with adolescents will be more appropriate to understand the intricacies of sexual behaviour during adolescence.

In spite of the above limitations, the study is a useful contribution to the literature. It is one of the first in-depth analyses of same-sex behaviour among adolescents in India and provides useful direction for research and interventions. We did find that MSM who start having sex early have different identities and behaviours compared with those who start later - potentially indicating a greater sense of sexual desire, orientation, and identity. Furthermore, they are also subjected to 'name calling' and other 'discriminatory behaviour' in the society. We also found that younger MSM had low levels of awareness about HIV but had high risk behaviours compared with older MSM. Lack of adequate documentation of same-sex behaviour among adolescents often is a deterrent in designing appropriate targeted interventions for this population. Thus, there is an urgent need to pursue research and develop targeted interventions for same-sex desiring adolescents in India, with an aim to reduce HIV transmission in this population.