SOCIAL FACTORS AND MICROBIOLOGICAL PROFILE OF MEN HAVING SEX WITH MEN ATTENDING STI CLINIC OF TERTIARY CARE CENTRE IN SOUTH INDIA

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ABSTRACT

BACKGROUND

Men having sex with men are recognised as high-risk group in view of STI/HIV (sexually transmitted infection/human deficiency virus) transmission. In India, HIV estimations of the year 2015, reaffirm the country's success story in responding to HIV/AIDS (acquired immunodeficiency syndrome) epidemic. India has successfully achieved the 6th Millennium Development Goal of Halting and Reversing the HIV epidemic. As per National AIDS Control Organization Technical Report at national level, the adult HIV prevalence has continued to show a steady decline, the same scenario in MSM also. Reduction of HIV new infections is testimony of impact of prevention programs.

The aim of the study is to know the social factors influencing behavioural pattern and prevalence of HIV/STI among MSM attending STI clinic in a tertiary care hospital.

MATERIALS AND METHODS

A prospective study was conducted in a STI Clinic attached to a tertiary care hospital of South India. MSM attending the STI Clinic between October 2015-December 2016, who have consented were included in this study. This includes direct walk-in MSM clients who disclose their behaviour on routine counseling done at STI Clinic and line listed MSMs brought by TI NGO (targeted intervention, non-governmental organization). After getting consent, a detailed history taking clinical examination and serological tests for HIV and STI were done.

RESULTS

Most of the participants are unmarried (72%) with school level education (65.5%), half of the participants are skilled workers and professionals. Practicing unsafe sex remains the same among educated and uneducated persons of study group, only 34% of participants practice safe sex. 21.8% of participants presented with clinical manifestations of significance. Among STI, syphilis was common.

CONCLUSION

MSM are important in the context of STI/HIV prevention. Prevalence of STI and inconsistent condom use among MSM of this study group indicates the need of strengthening of prevention programs. Information and motivation for risk reduction cannot be an one time effort for prevention. Continuous interventionary models will help them for risk reduction. The percentage of partner screening was less in this study. The stigma associated with MSM behaviour and STI maybe a reason. MSMs use social media to meet their clients. Newer preventive programs via social media in the area of STI/HIV prevention maybe of help in future.

KEYWORDS

MSM, STI, Serology, Social Factors, Behavioural Patterns.

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BACKGROUND

Men having Sex with Men (MSM) are at high risk in acquiring and transmitting sexually transmitted infections and HIV. In a country like India with rich cultural values, the concept of MSM is still stigmatising. There is still reluctance in open discussions and questioning about the behaviour. But, same sex behaviour among Indian men is prevalent and it ranges from 3% to 54% from the data of various surveys across the country.[1] The exact prevalence of same sex behaviour is unknown because of several known reasons. It varies between population surveyed, place of survey, another important bias is underreporting because of the stigma associated with the behaviour. There are about 3.1 million MSM in India as per the UN general assembly special session on HIV/AIDS report.[2] The adult HIV prevalence at national level shows a steady decline from an estimated peak of 0.38% in 2000-2003 to 0.26% in 2015. Similar consistent declines are noted both in males and females. India continues to portray concentrated epidemic. HIV prevalence

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among FSW (female sex workers) is 2.2% and among MSM is 4.3%.[3]

In view of HIV and STI prevention strategies, MSM are recognised as high-risk groups and they are covered under targeted intervention program implemented by NACO, imparting HIV education, condom distribution, periodic medical checkup and screening for STI and HIV. Among this same sex group, according to the sexual identity and sexual role they perform, there are various subgroups like Kothis, Panthis, double duckers and gay men. MSM with bisexual behaviour with homosexual as well as heterosexual contacts act as bridge population transmitting HIV/STI from risky male partners to females.[4,5] Though there are studies on sexual behaviour and studies on prevalence of STI/HIV among MSM from India, there are only few studies, which give insight into both aspects.[6] This study was conducted with an aim to analyse both behavioural as well as STI/HIV prevalence of MSM.

Objective- The aim of this study is to investigate the sexual behaviour pattern, demographic factors and the prevalence of STI and HIV among MSM.

MATERIALS AND METHODS

A prospective study was conducted in a STI Clinic attached to a tertiary care hospital of South India. MSM attending the STI Clinic between October 2015-December 2016 who have consented were included in the study. This includes direct walk-in MSM clients who disclose their behaviour on routine counselling done at STI Clinic and line listed MSMs brought by TI NGO (targeted intervention, non-governmental organization). After one to one counseling session by the counsellor, a detailed history taking was done by the doctor with a well-structured questionnaire regarding the demographic profile and the sexual behaviour like age of sexual debut, duration of high-risk behaviour, last sexual exposure whether with known partners or unknown partners and about the condom use and substance use. Clinical examination appropriate bedside tests like Gram stain, KOH mount for symptomatic patients were done. For all participants, rapid plasma regain test, HBsAg, HIV antibody test at VCTC were done. TPHA was done for RPR reactive patients. Syndromic management was given for all clients. All cases of syphilis confirmed with RPR and TPHA were admitted as inpatient and Inj. Benzathine penicillin was given according to the clinical stage of the disease. All participants were asked to come for followup within a week to collect results of blood tests. Next followup was scheduled once in 3 months for asymptomatic patients and those with STI/HIV according to the clinical condition, follow up was scheduled. Partner screening was stressed for all clients in the first visit and all clients were informed to come with their partners during their follow-up visits.

RESULTS

A total of 133 MSM included in the study, 44% of them are young adults less than 25 years of age. Most of the participants (72%) are unmarried. 15% of them are married and living with wives. 35% of them identify themselves as Kothis; 34% as Panthis and 30% were DDs. Among Kothis, 20% of them live with known partners assuming that they are in a relationship (marriage), but unclear about the monogamous state of their partners. Regarding occupation 45% of participants are skilled workers, 11% are students pursuing college level education, 2% are peer educators of NGO, 3% are professionals, 1.5% are unemployed, 19.5% are unskilled workers and 2% practice commercial sex work as profession and the rest are semiskilled workers. Most of the study group are from urban areas.

Education- 65.5% of participants have school level education, 32% of study participants have college level education and 1.5% are illiterate.

Sexual Behaviour

More than 60% of participants gave long history of high-risk behaviour initiated at their teens. 8.2% of participants were practicing high-risk behaviour for more than 10 years. Last exposure was within a week for 19.5% of participants. 13% of individuals did not bother about the anonymity of the sexual partner, 46% of participants had sex with both known and unknown partners and 41% of participants had sex with only known partners. Unknown partners had introduction with the clients in public places mainly in cinema theatres, public transports and through social media and cell phones. The participants of the study group who had contact with the unknown partners are totally unaware about the name, identity, residence, occupation and serological status of the partners. Regarding sexual practices, oral sex, anal sex, both oral and anal sex by 31%, 6.7%, 61% of study participants. Non-penetrative sex was practiced by only one person. Knowledge about condom and its role in STI/HIV prevention is known to all of the study participants. All of them knew about the places of availability of condom and also the method of application. But, only 34% of study group have consistent condom use. About 34% had unsafe sex at all their encounters and 32% had inconsistent condom use. The reasons they give for unsafe sex are many. 40% of study participants said condom was not available at the time of sex, stigma of carrying a condom with them always was the main reason for non-availability. 35% have the idea that safe sex is not needed for sex with regular partners. Kothis practice unsafe sex with known partners. Marital status of the MSM does not preclude safe sex. Among those who use condom, 70% of them get it from condom outlets of government hospitals and from NGOs. 29% of them purchase from shops. Two individuals told that they purchase it online.

Habits- Addiction to alcoholism was found among 61% of participants.

Characteristics of MSM population like age, education, marital status, location and addiction was studied separately between MSM practicing safe sex and unsafe sex (Table 1), clear pattern was seen, but it was not statistically significant.

	Total (n=133) n (%)	Safe Sex (n=46) n (%)	Unsafe Sex # (n=87) n (%)	p value*
Age (years): Median (range) 18-25 yrs. 26-35 yrs. 36-49 yrs.	27 (18-49) 59 (44) 63 (47) 11 (9)	19 (41) 25 (54) 2 (5)	40 (46) 38 (44) 9 (10)	2.180
Education: Illiterate and school education College education and above	91 (68) 42 (32)	35 (76) 11 (24)	56 (64) 31 (36)	1.913
Marital status: Married Unmarried	24 (18) 109 (72)	7 (15) 39 (85)	17 (20) 70 (80)	0.308
Location: Urban Rural	123 (92) 10 (8)	43 (93) 3 (7)	80 (91) 7 (9)	0.101
Sexual Partners: Known Anonymous/Both (Known/Ano)	54 (41) 79 (59)	23 (50) 23 (50)	31 (36) 56 (64)	2.576
Addiction: Present Absent	81 (61) 52 (39)	31 (67) 15 (33)	50 (57) 37 (43)	1.240

Table 1. Characteristics of MSM Study Population

*- data compared between safe sex and unsafe sex using Chi-square test for categorical variables.

- Patient having occasional safe sex also grouped under unsafe sexual practices.

Clinical Profile- History of previous STD is found only in 3.7% of participants. Rest of them gave negative history regarding past STD (Figure 1). Among viral STD, genital warts was common, found in 3.75% of them; among the bacterial STI, syphilis was common and it is found in 8%. All the syphilis cases were early syphilis implying the infective nature of disease. None of the study group had gonorrhoea. Nongonococcal urethritis was present in one participant. Scabies was present in 1.5%. In serology, RPR reactivity in 9.7%, HIV reactivity in 3%, HBsAg reactivity was present in one study participant.

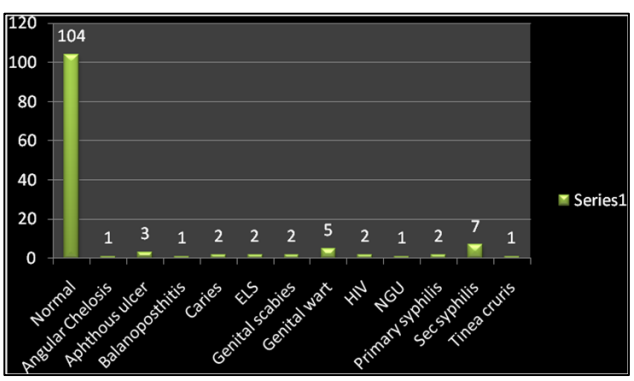

Figure 1. Clinical Profile of MSM Subjects

Follow up percentage was 60%. Partner screening is very meagre. Only 12 persons (9%) totally brought their partner for screening.

DISCUSSION

MSM of this study are mostly young adults with fairly long duration of high-risk behaviour started early in their life. About sexual preferences, 1/3 of the study population are bisexuals with heterosexual contacts. Married bisexuals practice unsafe sex with wives. On the contrary unmarried bisexuals of this study group had unsafe sex with male partners and inconsistent condom use with their heterosexual contacts. In all these instances, partner-based inconsistent condom use put them at risk and eventually STI/HIV risk for heterosexual population, MSM acting as a bridge population. Sexual risk taking behaviour in terms of inconsistent condom use was also seen in other studies.[4-6] Knowledge about condom is present in majority of the study group. In a study from Chennai by Thomas et al, the respondents had high degree of knowledge about HIV prevention program.[7]

Most of the MSM of study group are educated. College students, professionals, skilled workers of this study group collectively comprise 60%. But, unfortunately education and occupation has no role in sexual practices. Behavioural risk taking was present at all social strata and educational levels. Education, occupation and knowledge about prevention do not preclude safe sex. Many countries have reported increasing rates of HIV/STI among gay men.[8] Engaging sex with anonymous partners is an important risk factor in terms of STI/HIV acquisition and transmission and problems in partner tracing and partner management. Overall, 61% of study population engages with anonymous partners fuelling the STI/HIV risk.

The common STI in our study group is syphilis also seen in similar studies in India.[9-11] All of them were in early infective stage of syphilis. Most of these MSM with syphilis (81%) were of young age (20-30 years) with college level education (63%). HIV prevalence in our study group is 3%

while the national prevalence of HIV among MSM is 4.3%. Nongonococcal urethritis was found in one person.

CONCLUSION

MSM are important in the context of HIV/STI prevention. Presence of STI specifically syphilis, inconsistent condom use among MSM of this study group indicates the need of strengthening of prevention programs. Information and motivation for risk reduction cannot be an one time effort for prevention. Continuous interventional models will help them for risk reduction. Partner screening is one area where there is difficulty. It is observed for both NGO clients and direct walk-in clients. The stigma associated with MSM behaviour and STI maybe a reason.

In the present study, the behaviour started early in their teens, unsafe sex practiced by most of them in the earlier years. Age appropriate sex education is important, which should be included in school curriculum. A well-integrated and comprehensive adolescent friendly health services in hospitals, schools and colleges and in common venues where there is chance of gathering of adolescents are expected to reduce high-risk behaviour among adolescents. Utilisation of health services by MSM like periodic medical checkup has definitely improved after targeted intervention by NGOs. But still, there is inconsistent condom use. Risk taking behaviour occurs irrespective of education and occupation. Newer interventional tools to include this upper class MSM in prevention strategies should be evolved.

Many MSM use social networking to get and meet their clients. The same social media can be used for prevention strategies also.[12]

This study has its limitations. The study period is only for 15 months, which is insufficient to look for risk reduction behaviour of the study group. Proctoscopy is done only if the person gives consent. Most of them denied, thereby limiting the chance of screening for STI like gonorrhoea or chlamydia. Since the study is conducted at hospital setting, the responses given by the study group regarding the sexual behaviour may not be fully dependable. Most of the study population were from urban areas. The behaviour pattern and disease prevalence maybe different from that of MSM from rural areas.

Mutual monogamous relation with HIV/STI negative partner, avoidance of anonymous partners, consistent condom use, practicing more of non-penetrative sex are some of the important messages to be imparted to the MSM. These information and motivation on risk reduction and assessment of the same should be a continuous process.

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