Sexually transmitted diseases among men who have sex with men: A retrospective analysis from Suraksha clinic in a tertiary care hospital

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Abstract

Background: Men who have sex with men (MSMs) are a vulnerable population for spread of sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV). Apart from being important for HIV transmission, they tend to have a different distribution patterns of STDs. Few Indian studies have looked into this aspect. Objective: We retrospectively analyzed the available data on MSM from Suraksha clinic of a tertiary care hospital in a metropolitan city from 2004 to 2010. Materials and Methods: A total of 75 MSM constituting 11.4% of the total 660 patients visited our Suraksha clinic in these 6 years. The clinical and behavioral profile of each patient along with the pattern of STDs was evaluated. Observations and Results: 75% of the MSMs were promiscuous; one-third of them indulging in only homosexual activities. Syphilis was the most common STD, followed by condyloma acuminata, herpes genitalis, and gonorrhea. On comparing the data on the STD profiles of the heterosexual males, predisposition toward bacterial STDs among MSMs was observed. Conclusion: Identification of MSMs is important as most of them are bisexual and promiscuous, thereby playing a role in spread of STDs in vast number of partners. The profile of STDs also differs in MSM, which makes it all the more important to identify them.

Key words: Men who have sex with men, male sex workers, sexually transmitted diseases

INTRODUCTION

Homosexuality is rarely discussed publically as it is considered a taboo subject by both Indian civil society and the government. However, the term MSM is not new to dermatologists. Since the decriminalization of homosexual intercourse between consenting adults, there has been an increased acceptance of homosexuality and MSMs have come out more openly with their problems.[1]

MSMs are one of the risk group targeted by National AIDS Control Organization (NACO) to reduce human immunodeficiency virus (HIV) transmission. NACO estimates that India is home to 2.5 million MSMs of which 100,000 are at high risk of contracting HIV due to multipartner and commercial sexual practices. Already, 15% of this community is infected with this disease.[2]

Their importance has also been stressed upon by the fact that former health minister Dr. Ramdoss advocated legalizing homosexuality in India. “MSMs are our major concern. We have to contain the epidemic within this community. The number of targeted interventions especially for this community is being scaled up tremendously.” The minister also called for a relook into the impending bill to amend the Immoral Trafficking (Prevention) Act.[2]
Interestingly, in most of the cases, it is bisexual behavior, which is commoner than isolated homosexual behavior.\[3\] This bisexual behavior makes MSM a bridge population for spread of sexually transmitted diseases (STDs) and HIV.\[4\] An interesting classification was given by Humsafar trust, working for this community, where MSM are classified into different categories based on identity, gender, behavior, and profession. Based on identity they are categorized as “gay,” “bisexuals,” “Kothis,” (receptive partner) or “Panthis” (insertive partners). Transgender are those who are born males, but believe themselves to be females, also referred as “Hijras” or third gender in south Asia. There are MSM who do not identify with queer labels but are homosexual or bisexual behaviorally. Lastly, there are men who indulge in sex with men for cash or kind. Male sex workers (MSWs) encompass all these four broad areas.\[3\]

Apart from being important for HIV transmission, other issue is the pattern of STDs in this group. There have been a few hurdles in this analysis. First, few Indian studies have looked into this aspect. These are either community-based studies or from clinics catering specifically to high-risk population.\[5-8\] Second, most of the present studies deal with their high-risk sexual behaviors and assessment of risks for developing STDs due to such behavior.\[9,10\] In contrast, large numbers of studies on STD profile of MSM are present from the western world. However, these cannot be applied for Indian population because of the difference in social and cultural behavior. Henceforth, we carried out this study to delineate the clinical patterns of STDs in MSM coming to our Suraksha clinic.

**MATERIALS AND METHODS**

The study was carried out in the Suraksha clinic of a tertiary care hospital in a metropolitan city of India. We retrospectively analyzed the available data on MSM who visited the Suraksha clinic from 2004 to 2010. The male patients were identified as MSM either if they self reported to have homosexual or bisexual behavior or it was elicited after careful history taking. The clinical and behavioral profile of each patient was evaluated.

The diagnosis of the various types of STDs was made clinically, substantiated by investigations. HIV screening and venereal disease research laboratory tests were carried out in all the patients. Additional investigations, such as dark ground microscopy, Tzanck smear, gram staining, and KOH smears, were carried out wherever required.

All the patients were treated in accordance with the NACO guidelines.

**OBSERVATION AND RESULTS**

A total of 75 MSM visited our Suraksha clinic in six years from 2004 to 2010. They constituted 11.4% of the total 660 patients visiting our Suraksha clinic in these six years. The average age of the patients was 23 years, the youngest patient being 14 years of age and the oldest 49 years. The professions of the patients varied from manual laborers, salaried jobs, and businessmen. None of the patients reported themselves as sex workers. Most of the patients (72%) were unmarried and nearly 75% gave a history of promiscuous behavior. One-third MSM admitted of indulging in only homosexual activities, whereas the other two-third indulged in bisexual acts. The type of predominant practice (being an active or a passive partner) and the prevalence of condom use could not be assessed in all the patients from the available records.

Syphilis was the most common STD, present in 27% of MSM. Of a total of 20 patients with syphilis infection, 8 had primary syphilis, 10 had secondary, and 2 patients were identified as latent syphilis during routine VDRL screening. Condyloma acuminata (CA) was the next common STD detected, being present in 26% (16) patients. Of the 16 patients with CA, 8 patients are presented with penile warts, 6 are presented with perianal warts, and 2 are presented had both penile and perianal warts. All 6 patients with perianal warts gave history of being passive partners at some times, and thereby recipient of unprotected anal intercourse (UAI). 19% patients (14 out of 75), presented with herpes genitalis, of which 8 patients had first episode of herpes genitalis, whereas six had recurrent herpes genitalis. Gonococcal infection was present in 12% (9 of 75) patients, while five had non-gonococcal urethritis. Three patients each had genital scabies and candidal balanoposthitis and two cases of chancroid were recorded. Eight patients visited the clinic due to their fear of STD and were found to have pearly penile papules, sentinel piles, and folliculitis. Eight of 75 patients (11%) had mixed infection at the time of presentation. Two patients had CA along with primary syphilis and herpes genitalis, one patient had CA with primary syphilis, and one had CA with nongonococcal urethritis. One patient each had herpes genitalis with latent syphilis, herpes genitalis with scabies, and chancroid with scabies.

Human Immunodeficiency Virus (HIV) positivity was present in only three cases. All the patients with
syphilis had reactive VDRL, the titres ranging from 1:8 to 1:256. Two patients with latent syphilis were identified during routine VDRL screening, one of them presented to us with herpes genitalis infection and the other was detected because of positivity in wife during routine antenatal check up.

DISCUSSION

All the patients in our study were behaviorally homosexual or bisexual. None of them identified themselves as sex worker, neither there were any transgenders in our study. The proportion of MSM who were married was low as also reported by Brahman et al.[7] Two-thirds of our patients were bisexuals. A cross-sectional survey of 4597 self-identified MSMs from four high HIV prevalence states in south India reported 19.8% MSM as bisexual, which constituted 15.9% of HIV seropositive population in that study group.[7] Bisexual MSMSMs constitute an important bridge population for transmission of HIV or STD. Thus, strategies focusing specifically on MSM for control of STDs and HIV are needed.

The most common STD recorded in our study was syphilis (27%) followed closely by CA (21%) and herpes genitalis (19%). Gonococcal infection (11%) was the fourth most common STD. Small proportions were constituted by chancroid, candidal balanoposthitis, and genital scabies. Studies from India carried out in clinics catering only MSM have shown nearly 20% of MSM to be affected by some STDs, with syphilis, herpes, and condyloma acuminata as the most common STDs affecting them.[6-8] Brahman et al.[7] also reported a high prevalence of syphilis among “Kothis” and “Hijras” (15.8 and 13.6%, respectively) but a low prevalence of syphilis among “Kothis” and “Hijras” by Truong[15] and the other was detected because of positivity in wife during routine antenatal check up.

The proportion of HIV seropositivity was not very high in our study, with only 3 patients (4%) tested positive. It was less compared to 6.6% prevalence rate of HIV seropositivity among all the STD patients visiting our Suraksha clinic. The national prevalence rate of HIV seropositivity among MSM is 7.4% and Delhi is considered a high risk state with 11.7% MSM showing HIV positivity.[15] In a facility-based survey conducted in selected geographical areas of Delhi, a HIV prevalence of 12.3% was reported.[16] Setia et al. have reported a combined estimate of HIV prevalence of 16.5% among MSM in India from five different studies.[17] Gupta et al. have reported a significant association of HIV with genital ulcer disease among MSM.[14] HIV testing in the window period might be one of the reasons for low number of HIV positive cases in our study. Second, we did not encounter any MSM who was professionally homosexual, which could also explain low HIV positivity in our study. An interesting concept of seropositioning and serosorting has been put forward by Truong et al.[14] to explain the stabilization of HIV incidence over a period of 6 years. The concept of serosorting hypothesizes that MSM are increasingly selecting seroconcordant partners when engaging in UAI. Seropositioning refers to the idea that as receptive UAI has much higher risk of HIV acquisition compared to insertive UAI; HIV negative people are chosen as insertive partner. However, this does not apply to our population, as most of the patients are unaware of the HIV status of their partners.

On comparison with the data on the STD profiles of the heterosexual males who visited our clinic during the same 6 years period, it was seen that syphilis was four times more common in MSM (6.25% in heterosexual males vs. 27% in MSM) and gonorrhea was three times more common in MSM (4.1% in heterosexual males vs. 11% in MSM). The proportions of CA and herpes genitalis were almost same in both the groups. This suggests a predisposition toward bacterial STDs among MSM. Condoms and other barrier methods are said to decrease the extent of bacterial STDs. Therefore, though the proportions of various STDs among MSM worldwide vary, a point common is the increased prevalence of gonorrhea and syphilis throughout as compared to STDs in heterosexual males. To the best of our knowledge, comparative data of STDs in MSM and heterosexual males are not available in any previous Indian studies. Brahman et al.[7] have reported significantly higher prevalence of HIV (14.5% in MSW vs. 10.8% in non-MSW) and STDs (17.5% in MSW vs. 11.2% in non-MSW) in MSM.

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A careful history and examination is a very important tool in identifying an underlying STD. Most of the MSM are socially shy in accepting their sexual behavior. But their identification is important as most of them are bisexual and promiscuous, thereby playing a role in spread of STDs in vast number of partners. The profile of STDs may also differ in MSM, which makes it all the more important to identify them. Male rectal gonorrhea is said to be a marker of UAI.[11] Therefore, it has been suggested that a rectal and pharyngeal swab should always be taken in all MSMs as these sites harbor silent infection.

As this is a retrospective study of MSM attending our Suraksha clinic, proctoscopy, rectal, and pharyngeal swabs or other investigations were not done to detect various STDs in asymptomatic patients, apart from screening done for HIV and syphilis. The diagnosis was clinically supported by limited investigations wherever indicated. In spite of this, the study highlights the profile of STDs among male homosexuals or bisexuals attending the Suraksha clinic of a tertiary care hospital and compared it with STD profile of heterosexual males.

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