A Mental Health Baseline Study
Of Men Who Have Sex With Men
In Mumbai, India

Executive Summary

Mumbai,India

The Fenway Institute

Boston, Massachusetts

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EXECUTIVE SUMMARY

Introduction

Men who have sex with men (MSM) are an identified risk group for HIV in India. In addition to the HIV risk, this population faces multiple and complex challenges which should be accounted for in HIV prevention and treatment interventions. Little to no research exists on the mental health of MSM in India. Challenges that this population face include stigmatization, family pressures to get married, homophobia of the society, hate crimes, criminalization, and discrimination. These stressors can lead to mental health problems such as depression, anxiety and suicidality.

The purpose of the present study was to document the prevalence of mental health problems and related behavioral and psychosocial risk factors for HIV, and to examine the relationship between these variables.

Study Methodology

To establish mental health baseline information about MSM, a one-time, confidential quantitative and diagnostic interview was conducted among 150 MSM in Mumbai, India at the Humsafar Trust, a non-governmental organization dedicated to the sexual health and human rights of MSM and gender minorities. Because it was a one-time interview, no identifying information of individuals was linked to study data. The interviewers reviewed a consent form with participants and confirmed that participants understood all aspects of the study, including the protection of study-related information. The interviewers then signed the consent form confirming participation. Interviews were conducted by trained counselors at the Humsafar Trust clinic site in Vakola Market, Santa Cruz East, Mumbai.

Sample Characteristics

150 MSM were recruited by Humsafar staff and through word-of-mouth from various venues in Mumbai. Individuals were eligible to participate if they were 18-50 years of age, able to provide informed consent, and identified as a man who has sex with men. Transgender individuals (for example, those who identified as hijra, ali or arivani) were not included in the study because they do not identify as men and they represent different life experiences.

Examples of MSM identities included in the study were:

1) Kothi: Kothi typically show feminine characteristics, remain biologically male, and mainly engage in anal receptive and oral receptive sex. Sometimes these individuals get married to women but continue to engage in sex with other men.

2) Panthi: These men mainly are insertive partners when they engage in MSM behavior. Panthi typically have sex with either Hijra/Ali or Kothi but do not necessarily identify as homosexual. These men typically may be married to a woman or are expected to get married, and also continues to engage in sex with other men.

3) Double-decker: An MSM who engages in both insertive and receptive anal sex. These men also typically get married to a woman.

4) Bisexual: An individual who enjoys having sex with both men and women.

5) Self-identified gay man: This is most common to the identity of “out” gay men in the U.S. Self-identified gay men appear to be less common in India, however this may be growing, especially in urban cities such as Mumbai.

Study Assessment Procedures

After completing the informed consent process, the interviewer administered the assessment battery in either English or Hindi. The assessment consisted of the following sections:

Demographics. A brief questionnaire surveyed participants' age, MSM identity, income, occupation, education level, marital status, living situation (self, parents, friends, partner, spouse), and whether or not they were currently under treatment for a psychiatric disorder.

MINI. The Mini International Neuropsychiatric Interview (MINI; Sheehan et al., 2003) is a validated, brief, structured interview that assessed the following psychiatric disorders: major depressive episode, dysthymia, suicidality (measured and scored using 6 internationally-recognized diagnostic criteria), manic and hypomanic episode, agoraphobia, social phobia, obsessive-compulsive disorder, posttraumatic stress disorder, alcohol dependence and abuse, substance dependence and abuse, psychotic disorders, and generalized anxiety disorder.

HIV Risk. A brief assessment asked about episodes of sexual risk with different types of partners over the past month, focusing on the number of anal receptive partners, number of anal insertive partners, number of vaginal insertive partners, and whether or not a condom was used.

Distress level. The Brief Symptom Inventory-18 (BSI-18; Derogatis, 2005) is a validated measure used with community populations to screen for psychological distress, including anxiety, depression, and somatization (physiological symptoms such as chest pain, nausea and trouble breathing). Participants were asked how much they were distressed by 18 items that characterized anxiety, depression and somatization on a scale of 0 ("not at all") to 4 ("extremely"). Additive raw scores were then averaged for the sample and compared to scores reflecting community norms.

Self Esteem. Participants answered questions about their self-esteem using the Rosenberg Self-Esteem Scale (Rosenberg, 1965), a validated measure that asks participants to rank statements such as "I take a positive attitude towards myself" on a scale from 1 ("strongly disagree") to 4 ("strongly agree"). An average score for the sample was then compared to a total highest possible score of 36.

Social Support. To measure social support, participants were asked 1 question each about how satisfied they were with the overall support they received from family and friends. Participants were asked to rank responses from 1 ("not at all satisfied") to 5 ("very much satisfied"). An average score for the sample was then compared to a total highest possible score of 5 for each question.

Life events. This measure assessed 40 specific stressful life events over the past 6 moths, including pressure of marriage, pressure to have children, fear of having your sexual orientation known to others, discrimination and harassment. The average number of stressful life events was calculated, along with the 5 most frequently reported among the sample.

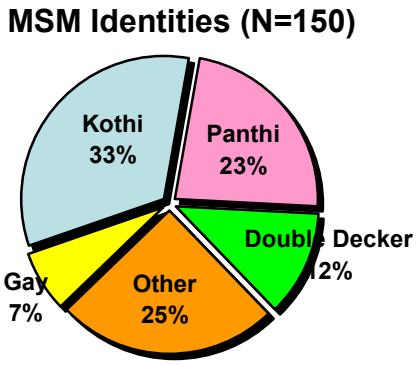
If the researchers learned of participant mental health problems while conducting interviews, referrals and assistance with accessing appropriate services was provided.

Study data was stored with no identifying information under lock and key with access limited to trained study staff. The data was maintained at The Humsafar Trust and analyzed jointly by Humsafar Trust and U.S. investigators.

Results

Socio-Economic Profile of MSM participants

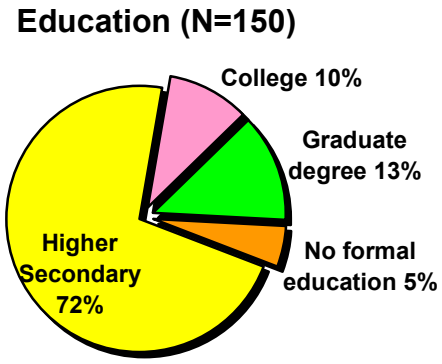
1. MSM described themselves as Kothi (33%), Panthi (23%), Double-decker (12%), gay (7%), and other (25%).



2. 70% of respondents were born in Mumbai.

3. Respondents ranged in age from 18 to 42 years. Average age of respondents was 25 years [standard deviation (SD) = 5.1 years].

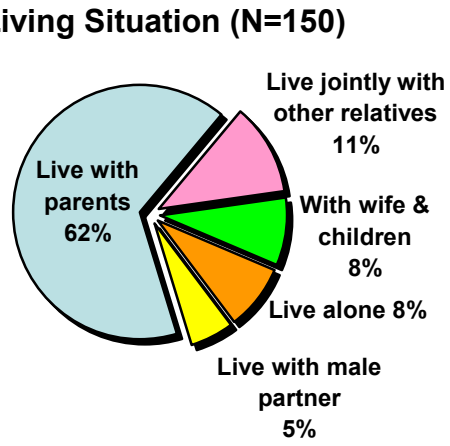
4. 72% of respondents had attained a higher secondary education, 10% had completed college, 13% had attained a graduate degree or above; 5% had no formal education.



5. Most (87%) of respondents were employed. Respondents contributed approximately 40% to their household income, with a monthly average individual income of Rs 5700 and a monthly average household income of Rs 14,140.

6. Regarding marital status, 77% of respondents were unmarried, 21% were married to a woman, 2% were divorced or widowed.

7. Most (62%) respondents lived with parents; an additional 11% lived jointly with other relatives. 8% lived with their wife and children and another 8% lived alone. 5% lived with their male partner.



Mental Health of Study Sample

Psychosocial characteristics

1. Social support

On average, study participants reported ***moderate satisfaction*** with the overall social support they receive from family and friends, scoring 3.5 (SD = 1.2) out of 5 for family and 3.7 (SD = 1.0) out of 5 for friends, with 1 = "not satisfied at all" to 5 = "very much satisfied".

2. Self-esteem

Respondents averaged 27 (SD = 5) out of 36 on the Rosenberg scale. Scores between 18-30 are within the normal range, suggesting ***moderate self-esteem*** for this sample.

3. Life experiences

Respondents reported an average **12 stressful life events** (SD = 7) over the past 6 months. The 5 most commonly reported events were 1) financial problems (76.0%), 2) anxiety or guilt about sex life (62.7%), 3) fear of having sexual orientation known to others (60%), 4) work pressure (60%), and 5) other stressful life events (54.0%).

4. Distress Level

Respondents averaged 11 (SD = 10) on the BSI-18, indicating that respondents fell within the 79th percentile of the norm.

For depression, the sample averaged a score of 6 (SD = 5), indicating respondents fell within the 88th percentile of the norm.

For anxiety, the sample averaged a score of 3 (SD = 3), indicating respondents fell within the 50th percentile of the norm.

For somatization, the sample averaged a score of 2 (SD = 3), indicating respondents also fell within the 50th percentile of the norm.

Mental Health Diagnoses

1. Strikingly, 45% of the sample (n = 67) reported some level of suicidal ideation at the time of their interview. Of these individuals with current suicidality, 66% were at low risk, 19% at moderate risk, and 15% at high risk.

   To determine current suicidality, participants were asked 6 questions that represent internationally-recognized criteria for suicidal ideation, including “In the past month did you think that you would be better off dead or wish you were dead?” and “In the past month did you attempt suicide?” Each question was scored and ranked as low, moderate and high risk for current suicidality based on internationally-validated norms.

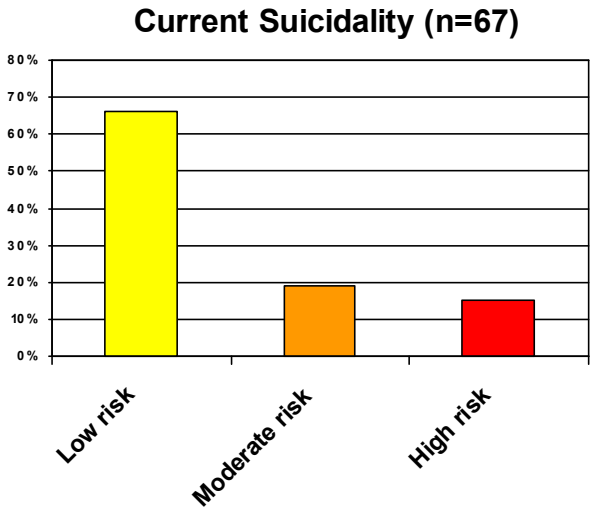


Table 1. Mini International Neuropsychiatric Interview (DSM-IV) diagnoses among MSM in Mumbai, India (N=150).

Diagnostic Categories	N (%)
Suicidality Current	
Yes	67 (44.97)
No	82 (55.03)
Suicidality Risk	
Low	44 (65.70)
Medium	13 (19.40)
High	10 (14.90)
Major Depression Current	
Yes	43 (29.05)
No	105 (70.95)
Dysthymia Current	
Yes	4 (2.68)
No	145 (97.32)
Any Anxiety Disorder Current	
Yes	36 (24.00)
No	114 (76.00)
Alcohol Dependence Current	
Yes	23 (15.65)
No	124 (84.35)
Hypomanic Episode Current/Past	
Yes	14 (9.46)
No	134 (90.54)
Manic Episode Current/Past	
Yes	5 (3.40)
No	142 (96.60)
Psychotic Disorders Current	
Yes	8 (5.37)
No	141 (94.63)
Psychotic Disorders Lifetime	
Yes	11 (7.38)
No	138 (92.62)
Mood Disorder with Psychotic Features Current	
Yes	8 (5.37)
No	141 (94.63)

2. Participants screened positive for a variety of mental health disorders, including current major depression (29%) and any anxiety-related disorder (24%).

3. Additional, but less common mental health diagnoses included hypomanic episode current/past (9.5%), psychotic disorder lifetime (7.4%), psychotic disorder current (5.4%), mood disorder with psychotic features current (5.4%), manic episode current/past (3.4%), and dysthymia current (2.7%).

4. Current major depression ($r=0.62$, $p<.0001$) and any anxiety-related disorder ($r=0.20$, $p<.03$) were both significantly, positively correlated with the related subscales of the Brief Symptom Inventory-18.

5. With respect to substance use, over 15% had current alcohol dependence. No one screened positive for having drug dependence of any kind.

6. No respondents reported any current treatment for any psychiatric disorder.

Predictors of suicidality, major depression and any anxiety-related disorder

1. Current suicidality

MSM with higher levels of ***social support*** (OR = 0.76; 95% CI: 0.63, 0.91) and ***self-esteem*** (OR = 0.86; 95% CI: 0.80, 0.94) were ***less likely*** to have a clinical diagnosis of current suicidality.

In a multivariable model controlling for age, education, income and MSM sexual identity, participants with higher levels of ***social support*** (AOR = 0.76; 95% CI: 0.62, 0.93) and ***self-esteem*** (AOR = 0.85; 95% CI: 0.78, 0.93) were ***less likely*** to have a clinical diagnosis of current suicidality.

2. Current major depression

Similarly, MSM with higher levels of ***social support*** (OR = 0.65; 95% CI: 0.52, 0.80) and ***self-esteem*** (OR = 0.80; 95% CI: 0.73, 0.89) were ***less likely*** to have a clinical diagnosis of current major depression. Older MSM were more likely to have current major depression (OR = 1.08; 95% CI: 1.01, 1.16).

In a multivariable model controlling for age, education, income and MSM sexual identity, participants with higher levels of ***social support*** (AOR = 0.68; 95% CI: 0.54, 0.85) and ***self-esteem*** (AOR = 0.79; 95% CI: 0.71, 0.89) were ***less likely*** to have a clinical diagnosis of current major depression.

3. Any anxiety-related disorder

Participants with higher levels of ***social support*** (OR = 0.83; 95% CI: 0.68, 0.99) were ***less likely*** to have a clinical diagnosis any anxiety-related disorder.

In a multivariable model controlling for age, education, income and MSM sexual identity, participants with higher levels of ***social support*** (AOR = 0.80; 95% CI: 0.65, 0.99) were ***less likely*** to have a clinical diagnosis of any anxiety-related disorder.

Sexual Behavior and Practices

Number of male and female partners

1. In the past month, participants reported an average 3.5 (SD = 8.6, range 0-90) partners with whom they had vaginal or anal sex.

2. Of these, 15 individuals (10%) each reported anal sex with 1 male partner they consider their spouse; 2 individuals (1%) each reported anal sex with 3 male partners they consider their spouse.

3. 99 individuals (66%) reported anal sex with an average 4.5 (SD = 10.3, range 1-90) casual male partners.

4. 15 individuals (10%) reported vaginal sex with their wife in the past month.

5. 30 individuals (20%) reported vaginal sex with an average 1.7 (SD = 1.6, range 1-9) casual female partners in the past month.

Frequencies of anal and vaginal sex (protected and unprotected)

1. 6 individuals (4%) reported engaging in insertive anal sex with their male spouse an average 2.7 (SD = 2.6, range 1-6) times in the past month. Of these encounters, condoms were used an average 2.0 (SD = 2.2, range 0-6) times, with 5 of the 6 individuals (83%) reporting condom use during the most recent episode of insertive anal sex.

2. 10 individuals (7%) reported engaging in receptive anal sex with their male spouse an average 4.3 (SD = 6.0, range 1-20) times in the past month. Of these encounters, condoms were used an average 1.3 (SD = 1.7, range 0-5) times, with 5 of the 10 (50%) individuals reporting condom use during the most recent episode of receptive anal sex.

3. 63 individuals (42%) reported engaging in insertive anal sex with a casual male partner an average 2.7 (SD = 2.9, range 1-20) times in the past month. Of these encounters, condoms were used an average 1.7 (SD = 1.8, range 0-7) times, with 38 of the 63 individuals (60%) reporting condom use during the most recent episode of insertive anal sex.

4. 59 individuals (39%) reported engaging in receptive anal sex with a casual male partner an average 5.2 (SD = 13.0, range 1-90) times in the past month. Of these encounters, condoms were used an average 4.9 (SD = 13.0, range 0-90) times, with 45 of the 59 (76%) individuals reporting condom use during the most recent episode of receptive anal sex.

5. 19 individuals (13%) reported engaging in insertive vaginal sex with their female spouse an average 6.8 (SD = 9.8, range 1-40) times in the past month. Of these encounters, condoms were used an average 1.7 (SD = 2.8, range 0-10) times, with 3 of the 19 (16%) individuals reporting condom use during the most recent episode of insertive vaginal sex.

6. 29 individuals (19%) reported engaging in insertive vaginal sex with a casual female partner an average 2.2 (SD = 2.5, range 1-12) times in the past month. Of these encounters, condoms were used an average 1.9 (SD = 2.6, range 0-12) times, with 22 of the 29 (76%) individuals reporting condom use during the most recent episode of insertive vaginal sex.

Associations of sexual risk and mental health diagnoses

1) Participant with current major depression were at increased odds for engaging in unprotected anal sex with their most recent casual male sex partner, after adjusting for age and educational attainment (AOR = 2.26; 95% CI: 1.02, 5.01; p = 0.04).

Conclusion and Recommendations

Overview of psychosocial distress and HIV risk among Indian MSM

The frequency of psychosocial and mental health problems among MSM in Mumbai is high, and should be addressed in prevention and treatment interventions for this population in need.

Research investigating the mental health of men who have sex with men in India is at a very early stage, with a handful of studies and reports describing pervasive experiences of stigma, harassment and discrimination which may contribute to psychological distress. For example, in a formative, qualitative study of MSM HIV prevention outreach workers in Chennai, participants reported high levels of perceived stigma, including harassment from police and "thugs" and negative interactions with health care providers (Safren, Martin, et al., 2006). Another study of 210 MSM in Chennai documented that over half (55%) of the sample screened positive for depressive symptoms, which was associated with unprotected anal sex and a higher number of male partners (Safren, Thomas, et al., 2010).

The counseling division at The Humsafar Trust routinely addresses client issues such as coming out to one's self and others, discomfort with one's own sexual orientation, HIV status, leading a "double life" (i.e. being married to a woman due to societal and family pressures but having a same-sex sexual orientation), and relationship problems with other male sexual partners. Further, because of these pressures, finding sexual partners can be a difficult and challenging task which can lead to high-risk behaviors. One common scenario is that because of these pressures, when an individual does find a sex partner, negotiating safe sex can be difficult because of fears that the partner will reject them if they want to use a condom. Same-sex sexual behavior remains technically illegal in most Indian states (Indian Penal Code, Section 377) and discussing same–sex sexual behavior with others is culturally taboo (Venkatesan & Sekar, 2001). As a result, MSM in India are often hidden and/or silent (Dandona et al., 2005; Go et al., 2004), while they remain a "core risk group" for HIV infection (NACO, 2006).

The present study contributes to this growing body of knowledge by documenting the prevalence of mental health problems and related risk factors for HIV among a sample of MSM in Mumbai.

Key findings include:

1. Representing a variety of MSM identities, participants were young (average age 25 years), currently employed with a higher secondary education or higher, born in Mumbai, unmarried, and mostly living with parents or jointly with other relatives.
2. Study participants possessed moderate levels of self-esteem and reported moderate satisfaction with the social support they receive from their family and friends.
3. Participants reported an average 12 stressful life events, including financial problems, anxiety or guilt about sex life, and fear of having sexual orientation known to others. Reported distress levels were within community norms.
4. Strikingly, 45% of the sample reported current suicidality. Of these individuals, 66% were at low risk, 19% at medium risk, and 15% at high risk for suicide.
5. Participants screened positive for a variety of other mental health disorders, including current major depression (29%) and any anxiety-related disorder (24%). Over 15% had current alcohol dependence.
6. No respondents reported any current treatment for any psychiatric disorder.
7. Participants with higher levels of self-esteem and social support were less likely to have clinical diagnoses for current suicidality and current major depression. Those with higher levels of social support were less likely to have a clinical diagnosis of any anxiety-related disorder.
8. In the past month, participants reported an average 3.5 (SD = 8.6, range 0-90) partners with whom they had vaginal or anal sex.
9. Sixty-six percent reported anal sex with an average 4.5 (SD = 10.3, range 1-90) casual male partners:

a. 42% reported engaging in insertive anal sex with a casual male partner an average 2.7 (SD = 2.9, range 1-20) times in the past month with condoms used 63% of the time.

b. 39% reported engaging in receptive anal sex with a casual male partner an average 5.2 (SD = 13.0, range 1-90) times in the past month with condoms used 94% of the time.

10. Thirteen percent reported engaging in insertive vaginal sex with their female spouse an average 6.8 (SD = 9.8, range 1-40) times in the past month with condoms used 25% of the time. Nineteen percent reported engaging in insertive vaginal sex with a casual female partner an average 2.2 (SD = 2.5, range 1-12) times with condoms used 86% of the time.

Recommendations

This study clearly demonstrates that MSM in Mumbai are in need of psychosocial services, most notably for the prevention and treatment of suicidality, depression, anxiety, and alcohol dependence. MSM who reported higher levels of self-esteem and social support were less likely to suffer from these psychological symptoms, suggesting that programs that provide opportunities to improve self-esteem and social support would improve these mental health outcomes.

Additionally, as a substantial number of men reported anal and vaginal sex with both men and women, including their wives, it is important that HIV risk reduction that is sensitive to diverse sexualities accompany services to improve the mental health functioning of these populations.