

# A Description of Common Mental Disorders in Men Who Have Sex with Men (MSM) Referred for Assessment and Intervention at an MSM Clinic in Cape Town, South Africa

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**Abstract** Men who have sex with men (MSM) have a higher prevalence of common mental disorders (CMD), as compared with heterosexual men. HIV infection is independently associated with higher rates of CMD. Given this context, and the high background community prevalence of HIV in South Africa, MSM are at even greater risk of developing CMD. The aim of this research was to investigate neuropsychiatric symptoms and disorders in MSM who were referred for assessment and management of mental health problems, in an MSM Clinic in urban Cape Town, South Africa. Twenty-five men were screened using the MINI, AUDIT, DUDIT, and IPDE Screener. Depression, suicidality, as well as alcohol and drug use disorders were highly prevalent in this group (44, 56, 48, and 56 % respectively). The personality disorder screening was suggestive of a high prevalence of personality disorders. The high prevalence of neuropsychiatric disorders in this sample supports the idea that integrated mental health services are needed to address the complex needs of this population. Adequate input into the mental health needs of this population

could reduce the potential for HIV acquisition and transmission, improve adherence to treatment and care, and ensure the provision a comprehensive health service for MSM.

**Keywords** MSM · HIV/AIDS · South Africa · Mental health · DUDIT · MINI · AUDIT · IPDE

## Introduction

In several studies internationally, the prevalence of common mental disorders (including mood, anxiety, and substance use disorders) has been shown to be greater among MSM than in heterosexual men. Data from the National Co-morbidity Survey in the United States demonstrated higher 12-month prevalences of anxiety disorders, mood disorders and substance use disorders, as well as of suicidal thoughts and plans in people with same-sex partners [1]. Sandfort et al. [2] in a Dutch study found increased 12-month prevalences of mood and anxiety disorders in MSM. Herrel et al. [3] found an increased lifetime prevalence of suicidal behaviours in MSM in a study using data collected from a twin registry. A meta-analysis by Meyer [4] confirmed these findings.

HIV is highly prevalent in Southern Africa. Some studies indicate even higher seroprevalence among MSM in the region (between 10.4 and 33.9 %) [5, 6]. It is also well-documented that common mental disorders are also highly prevalent in people living with HIV (PLWHA) [7, 8]. The consequences of untreated mental disorders on HIV are numerous, include delayed initiation of ART, higher all-cause morbidity and mortality, adverse immunological outcomes, and decreased adherence to medication [9–13].

Given that MSM in general are reported to have higher rates of CMDs, and that the HIV prevalence in this group is higher than the general population, MSM in Cape Town

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may be at an even greater risk for the development of CMD's. Specific MSM factors may contribute to this, including the consequences of living in a heteronormative stigmatizing society, which leads to discrimination, isolation, and distress and high levels of internalised homophobia [14]. Furthermore, PLWHA internalize AIDS stigmas which leads to higher levels of depression [15].

There is little local South African data on the prevalence of mental disorders in our MSM population.

It has been the experience of clinicians working at the Ivan Toms Centre for Men's Health (ITCMH) in Cape Town, an MSM-targeted primary health care HIV and sexually transmitted diseases clinic, that men with the triad of MSM-specific relational and personality issues, HIV seropositivity, and substance abuse constitute the most challenging and difficult to treat patients.

In this study, we aimed to describe the psychopathology in MSM who were referred to the mental health clinic at the ITCMH. A working knowledge of mental disorders in this group is needed to inform the development of appropriate mental health services, allocation of resources and the development of interventions and referral pathways. The importance of assessment and treatment of mental disorders is integral to a comprehensive health plan. Not only do depression, anxiety disorders and substance use disorders contribute a significant disease burden, but in themselves impair quality of life.

## Methods

### Setting and Participants

This descriptive study was performed at ITCMH, which provides sexual health, HIV and mental health services for MSM in Cape Town, South Africa. Participants were recruited from new referrals to the mental health clinic between September 2010, and June 2011, and were referred by medical staff at the clinic, as well as by external healthcare providers. Participants were excluded from the analysis if they were heterosexual, or if they had been assessed previously in this clinic (Tables 1, 2).

A total of 25 participants were screened in clinical interviews, which were 90 min in duration, by the attending psychiatrist. The study formed part of the Mental Health Screening Project, a larger project aimed at establishing a screening protocol for common mental disorders in PLWHA, and was approved by the Human Research Ethics Committee of the Health Sciences Faculty of the University of Cape Town.

### Study Procedure

Consecutive new referrals were invited to participate in the study, and participants provided written informed consent.

**Table 1** Summary of demographic information

Home language ( <i>N</i> = 25)	
English	14 (56 %)
Afrikaans	7 (28 %)
Xhosa	2 (8 %)
Zulu	1 (4 %)
Employment status	
Employed	11 (44 %)
Unemployed	13 (52 %)
Level of education	
Primary	2 (8 %)
Secondary	6 (24 %)
Tertiary	17 (68 %)
Marital status	
Single	16 (64 %)
Married	1 (4 %)
Common-law	3 (12 %)
Divorce	2 (8 %)
Widowed	2 (8 %)
Age	
18–35	12 (48 %)
36–50	9 (36 %)
51–65	4 (16 %)

**Table 2** Prevalence of mental disorders (M.I.N.I.)

Current suicidality	14 (56 %)
Major depressive disorder, current	11 (44 %)
Agarophobia	5 (20 %)
Generalized anxiety disorder	3 (12 %)
Social phobia	3 (12 %)
Anti-social personality disorder	2 (8 %)
Post traumatic stress disorder	2 (8 %)
Obsessive compulsive disorder	1 (4 %)
Bipolar disorder, type 2, current mood episode	1 (4 %)

The initial part of the interview consisted of recording basic demographic information, and the administration of screening instruments, which was followed by a more problem-focused, free-style interview process. Participants were either treated by the attending psychiatrist, and followed up if necessary, or were referred to external agencies.

### Instruments

The psychiatrists were trained in the use of the mental health screening protocol. This consisted of four screening instruments:

The Mini-International Neuropsychiatric Interview (M.I.N.I.), which is a short structured diagnostic interview,

developed jointly by psychiatrists and clinicians in the United States and Europe, for DSM-IV and ICD-10 psychiatric disorders, by Sheehan et al. [16], and validated in several studies in low to middle income countries (LMICs).

The Alcohol Use Disorders Identification Test (AUDIT), which was developed by the World Health Organization (WHO) as a simple method of screening for excessive drinking, which has been validated in Sub-Saharan Africa [17]. It can help in identifying excessive drinking as the cause of the presenting illness. The AUDIT was developed and evaluated over a period of two decades, and it has been found to provide an accurate measure of risk across gender, age, and cultures (1.2, 10). It is a self-administered questionnaire, and total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence.

The Drug Use Disorders Identification Test (DUDIT), was developed as a parallel instrument to the AUDIT for identification of individuals with drug-related problems.

International Personality Disorder Examination (IPDE) screener is a self-administered screening instrument for personality pathology [18]. The IPDE Screening Questionnaire is a carbonless form that contains 77 DSM-IV or 59 ICD-10 items written at a 9 years of age reading level. The patient responds either true or false to each item and can complete the questionnaire in 15 min or less. The clinician can quickly score the questionnaire and identify those patients whose scores suggest the presence of a personality disorder. For the screen positives, the IPDE semi-structured clinical interview can be administered, in order to make a diagnosis.

In addition to these screening instruments, a brief sociodemographic questionnaire was administered. Variables such as age, employment status, marital status, home language, level of education, and HIV status were obtained.

## Analysis

Data was initially captured in paper format, then entered into Microsoft EXCEL<sup>®</sup>.

Data exploration took place to establish the current diagnoses as recorded by the M.I.N.I., and the prevalence of individual disorders was reported. Drug and alcohol use was established by examining scores on both the AUDIT and the DUDIT, and the prevalence of alcohol or drug-related problems was then calculated, using the internationally accepted cut-offs of 6 (DUDIT), and 8 (AUDIT).

The prevalence of suspected personality disorder was established by using a cut-off of 3 for each personality disorder, as is recommended in the IPDE scoring manual. The most prevalent personality disorder was then calculated.

## Results

The participants were mostly English-speaking (56 %), single (64 %), and unemployed (52 %). The majority of participants (68 %) had had tertiary education. Their mean age was 37 years (range 18–64). Thirteen participants were HIV positive (52 %).

### Prevalence of Neuropsychiatric Disorders as Measured by the M.I.N.I.

The alcohol and drug modules were omitted from the M.I.N.I. for the purpose of this study, and alcohol and drug use disorders were examined by the AUDIT and DUDIT.

The most prevalent disorder in the sample was major depressive disorder (MDD), and was present in 11 participants (44 %). Only participants who were currently depressed received this diagnosis, while lifetime MDD was not reported.

Suicidality was present in the past month in 14 participants (56 %), and in some cases this was not associated with a current MDD.

Of the anxiety disorders, agoraphobia was present in five participants (20 %), generalized anxiety disorder was present in three participants (12 %), social phobia in three participants (12 %), post-traumatic stress disorder in two participants (8 %), and obsessive–compulsive disorder in one participant (4 %).

Anti-social personality disorder was present in two participants (8 %).

### Prevalence of Alcohol and Drug Use Disorders

Using the recommended cut-off of 8 on the AUDIT, 48 % of participants were identified as having an alcohol use disorder. The mean AUDIT score was 9.16 (SD 9.026). On the DUDIT, 56 % of participants were identified as having a drug use disorder, using the recommended cut-off of 6. The mean DUDIT score was 12.15 (SD 12.945).

### Personality Disorder Screening

All participants interviewed screened positive for at least one personality disorder. The most prevalent positive screens were for narcissistic (20 or 80 %), borderline (19 or 76 %), and avoidant (19 or 76 %) personality disorders.

## Discussion

In this investigation of mental disorders in MSM in Cape Town, we found high rates of depression, nearing 50 % of the sample. A significant number of participants had recently experienced suicidality. Rates of anxiety disorders

were lower. Around half of participants reported significant alcohol and substance use symptoms. All participants screened positive for at least one personality disorder. Collectively the high prevalence of these disorders could have substantial implications for the care and management of MSM in Cape Town.

The high prevalence of common mental disorders in this sample is consistent with the findings reviewed in the meta-analysis by Meyer [4] in 2003, where she reported higher rates of depression, anxiety and substance abuse among MSM than in the heterosexual population.

While the results of this descriptive study are by no means generalizable to the greater MSM population, the high prevalence of depression, suicidality, and substance use disorders, illustrates the clinical challenges in the provision of a comprehensive and holistic health service in this population. While no clear inferences can be made from the descriptive data pertaining to personality, as the IPDE Screener was used (which may have produced false positives), the suggestion that the prevalence of maladaptive personality styles may be high in this group supports what we have suspected clinically.

Given the high HIV prevalence in the MSM population in Cape Town, the relationship between mental disorders and HIV needs to be considered and understood. The presence of these disorders in PLWHA adds substantially to the burden of disease, and exerts many adverse effects on health-related outcomes. These include delayed initiation of ART, higher all-cause morbidity and mortality, adverse immunological outcomes, and decreased adherence to medication [9–13]. Substance and alcohol use disorders have a particularly negative impact on adherence to ART [19, 20]. Furthermore, some data suggest that mental disorders in PLWHA are associated with increased risky sexual behaviour, and consequent increased rate of forward transmission of HIV [21–23].

These complex, interacting and overlapping risk factors constitute a compelling argument for the need for co-located HIV, MSM and mental health services, as this model facilitates the required multidisciplinary team approach to the provision of comprehensive, cost-effective health services.

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## References

- Gillman SE, Cochrane SD, Mays VM, Hughes M, Ostrow DG, Kessler RC. Risks of psychiatric disorders among individuals reporting same-sex sexual partners in the National Comorbidity Survey. *Am J Public Health*. 2001;91:933.
- Sandfort TG, de Graaf R, Bijl RV, Schnabel P. Same-sex sexual behavior and psychiatric disorders: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Arch Gen Psychiatry*. 2001;58:85–91.
- Herrel R, Goldberg J, Ramakrishnam V, Lyons M, Eisen S, Tsuang MT. Sexual orientation and suicidality: a co-twin control study in adult men. *Arch Gen Psychiatry*. 1999;56:867–74.
- Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychol Bull*. 2003;129(5):674–97.
- Lane T, Raymond F, Dladla S, Raseth J, Struthers H, McFarland W, et al. High HIV prevalence among men who have sex with men in Soweto, South Africa: results from the Soweto Men's Study. *AIDS Behav*. 2009;15(3):626–34.
- Burrell E, Mark D, Grant R, Wood R, Bekker LG. Sexual risk behaviours and HIV-1 prevalence among urban men who have sex with men in Cape Town, South Africa. *Sex Health*. 2010;7(2):149–53.
- Bing EG, Burnam MA, Longshaw D, Fleishman JA, Sherbourne CD, London AS. Psychiatric disorders and drug use among human immunodeficiency virus-infected adults in the United States. *Arch Gen Psychiatry*. 2001;58(8):721–8.
- Ciesla JA, Roberts JE. Meta-analysis of the relationship between HIV infection and risk for depressive disorders. *Am J Psychiatry*. 2001;158(5):725–30.
- Fairfield KM, Libman H, Davis RB, Eisenberg DM. Delays in protease inhibitor use in clinical practice. *J Gen Intern Med*. 1999;14(7):395–401.
- Ickovics JR, Hamburger ME, Vlahov D, Schoenbaum EE, Schuman P, Boland RJ. Mortality, CD4 cell count decline, and depressive symptoms among HIV-seropositive women: longitudinal analysis from the HIV Epidemiology Research Study. *JAMA*. 2001;285(11):1466–74.
- Ironson G, Balbin E, Stuetzler R, Fletcher MA, O'Cleirigh C, Laurenceau JP. Dispositional optimism and the mechanisms by which it predicts slower HIV: proactive behaviour, avoidant coping, and depression. *J Behav Med*. 2005;12(2):86–97.
- Ammassari A, Trotta MP, Murri R, Castelli F, Narciso P, Noto P. Correlates and predictors of adherence to highly active anti-retroviral therapy: overview of published literature. *J Acquir Immune Defic Syndr*. 2002;31(S3):123–7.
- Nakimuli-Mpungu E, Mutamba B, Othengo M, Musisi S. Psychological Distress and adherence to highly active anti-retroviral therapy (HAART) in Uganda: a pilot study. *Afr Health Sci*. 2009;9(S1):S2–7.
- Vu L, Tun W, Sheehy M, Nel D. Levels and correlates of internalized homophobia among men who have sex with men in Pretoria, South Africa. *AIDS Behav*. 2011;16(3):717–23.
- Simbayi LC, Kalichman SC, Strebel A, Cloete A, Henda N, Mqeketo A. Internalized stigma, discrimination, and depression among men and women living with HIV/AIDS in Cape Town, South Africa. *Soc Sci Med*. 2007;64:1823–31.
- Sheehan DV, Lecrubier Y, Sheehan KH, Amorim P, Janavs J, Weiller E, et al. The Mini-International Neuropsychiatric Interview (M.I.N.I.): the development and validation of a structured diagnostic psychiatric interview for DSM-4 and ICD-10. *J Clin Psychiatry*. 1998;59(S20):S22–33.
- Myer L, Smit J, Roux LL, Parker S, Stein DJ, Seedat S. Common mental disorders among HIV-infected individuals in South Africa: prevalence, predictors, and validation of brief psychiatric rating scales. *AIDS Patient Care and STDS*. 2008;22(2):147–58.
- Loranger AW, Sartorius N, Andreoli A, Berger P, Bucheim P, Channabasavanna SM, et al. The International Personality Disorder Examination. The World Health Organization/Alcohol,

- Drug Abuse, and Mental Health Administration international pilot study of personality disorders. *Arch Gen Psychiatry*. 1994; 51(3):215–24.
19. Samet JH, Horton NJ, Meli S, Freedberg KA, Palepu A. Alcohol consumption and anti-retroviral adherence among HIV-infected persons with alcohol problems. *Alcohol Clin Exp Res*. 2004; 28(4):572–577572.
  20. Lucas M, Stevenson D. Violence and abuse in psychiatric in-patient institutions: a South African Perspective. *Int J Law Psychiatry*. 2006;29(3):195–203.
  21. Kalichman SC, Simbayi LC, Cain D, Jooste S. Alcohol expectancies and risky drinking among men and women at high-risk for HIV infection in Cape Town, South Africa. *Addict Behav*. 2007; 32(10):2304–10.
  22. Kalichman SC, Simbayi LC, Kagee A, Toefy Y, Jooste S, Cain D. Associations of poverty, substance use, and HIV transmission risk behaviors in three South African communities. *Soc Sci Med*. 2006;62(7):1641–9.
  23. Simbayi LC, Kalichman SC, Jooste S, Mathirti V, Cain D, Cherry C. Alcohol use and sexual risks for HIV infection among men and women receiving sexual transmitted infection clinic services in Cape Town, South Africa. *J Stud Alcohol*. 2004;65(4):434–42.