



Psychiatric Morbidity Responsible for Predisposing Individual for HIV Infection

KEYWORDS

HIV patients, Psychiatric morbidity, Substance abuse, Risk behavior

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ABSTRACT *Background:* The prevalence of HIV among people who are having psychiatric morbidity is higher than general population rates worldwide. Many risk behavior among individual with psychiatric morbidity has been identified in studies from both developed and developing countries, though sampling limitation restrict the generalizability of their result. *Objective:* The purpose of the current study is to investigate the prevalence and correlates of risk behavior among patients with psychiatric disorder and patients with alcohol or drug abuse problem in India. *Method:* To obtain a representative sample, we screened 107 newly diagnosed HIV individuals from Integrated counseling and testing center (ICTC) for information regarding risk behavior as well as its demographic, psychiatric, personality and substance use correlates. *Result:* In males substance abuse (23.36 %) was found to be most common psychiatric morbidity followed by substance abuse comorbid with axis I psychiatric diagnosis (17.75 %). Among the individual having psychiatric morbidity, 70.9 % of them having history of multiple sex partner, 22.42 % of them never use barrier method while having sexual activity, 32.71 % of them having history of sexual exposure with commercial sex worker. *Discussion:* Individuals with psychiatric morbidity are known to indulge in risk taking behavior due to impulsivity, inability to delay gratification and diminished judgment and insight. This may affect various area of life including substance use, sexual behavior and relational problems. Therefore these individuals may indulge in unsafe sexual practices leading to the sexually transmitted infection and contracting HIV infection. Study revealed that substance abuse and mood disorder were most common axis I psychiatric diagnosis among males in present study.

Introduction

HIV infection/AIDS is a global pandemic, with cases reported from virtually every country.¹ In India, HIV disease is expanding at an alarming rate. According to NACO report (2010-2011)² India has the third largest number of people living with HIV/AIDS. As per HIV estimates 2008-09, there are an estimated 23.9 lakh people living with HIV/AIDS in India with an adult prevalence of 0.31 percent in 2009.²

Research on HIV often focuses on those who are most vulnerable, including men who have sex with men, injection drug users, and commercial sex workers.³ In many countries, substance abusers engage disproportionately in sexual behaviours associated with increased risk for HIV. For example, data from the U.S. general population indicate that participants classified as "heavy drinkers" were more likely to report multiple sex partners and sex trading (i.e., exchanging sex for money, drugs, or lodging) when they were compared to "non heavy drinkers"⁴. Other data from the U.S. indicate that problem drinking is associated with greater likelihood of being infected with sexually transmitted disease (STD)^{5,6} and that alcoholics in treatment are more likely to engage in risky sexual behaviours than the general population.⁷

A less but well-recognized risk group are men and women living with a mental illnesses, such as schizophrenia, bipolar disorder, and other mood disorders⁸. The research that has been conducted in both Europe⁹ and United States (USA)¹⁰ suggests that persons living with a mental illness are disproportionately vulnerable to HIV infection, with infection rates ranging from 4% to 23%, rates that are much higher than those reported for the general population.

Outside of Western Europe and the USA, little is known about HIV risk in psychiatric patients. Information regarding HIV and psychiatric patients in India is very limited. A study investigated the prevalence of HIV infection among

psychiatric patients in India, and found that 3.4% of 2,139 inpatients were infected.¹¹ Another study investigated 59 patients admitted to a state psychiatric hospital to investigate the characteristics of risk behaviour. The most common risk behaviour was unprotected heterosexual intercourse with a high-risk partner.¹²

Investigation of the prevalence, patterns, and correlates of HIV-related risk behaviours in the Indian context is needed to guide the development of behavioural risk reduction and prevention programs. The purpose of the current study is to investigate the prevalence and correlates of risk behaviour among patients with psychiatric disorder, personality disorder and patients with alcohol or drug abuse problem in India. By identifying these risk characteristic, it may be possible to develop better educational and prevention approaches for this population.

Material and Method

The individuals, who were newly diagnosed as HIV positive, were referred by counselor in Integrated Counseling and Testing Centre (ICTC) to the department of psychiatry. To obtain a representative sample, we screened newly diagnosed HIV individuals for information regarding risk behavior as well as its demographic, psychiatric, personality and substance use correlates.

The individuals and their relatives were explained the nature of the study. An informed consent was taken from the individual and relatives.

The following materials were used for assessment of selected individuals

1. A special proforma was prepared to collect the data like demographic details, sexual history, awareness of HIV and its spread, family history, premorbid personality, mental status examination and clinical impression.

2. Mini –international Neuropsychiatry interview English Version 6.0.0¹³The M.I.N.I. was designed as a brief structured interview for the major Axis I psychiatric disorders in DSM-IV and ICD-10. Validation and reliability studies have been done comparing the M.I.N.I. to the SCID-P for DSM-III-R and the CIDI (a structured interview developed by the World Health Organization for lay interviewers for ICD-10). The results of these studies show that the M.I.N.I. has acceptably high validation and reliability scores.

Data Analysis

Descriptive analysis was carried out and chi-square test was performed for analysis of categorical data. The magnitude of association between putative risk factors and unsafe sexual behaviors was estimated by the odds ratio (OR) with 95 % confidence interval. The level of significance was 0.05. The independent effect of potential exposure variable was assessed by multivariate analysis using logistic regression. Statistical Analysis was done using the SPSS Software Package for window version 11.5 (Nourusis, 1993)

RESULTS

Table 1: Descriptive analysis of participant

Characteristics	Total (n)
Age group	
20-29(yrs)	31
30-39(yrs)	62
Gender	
Male	68
Female	39
Occupation	
Skilled	75
Unskilled	32
Awareness about HIV	
Yes	84
No	23
Marital status	
Married	82
Unmarried	16
Separated/widow/ divorcee	9
Multiple sex partner	
Yes	75
No	32
Sex with CSW	
Yes	45
No	62
Use of barrier method	
Yes	73
No	34

*CSW-Commercial sex worker

In our study, majority of the sample belonged to the age group of 30 to 39 years i.e. 57.9 %. In age group of 30-39 years 30.84 % were having at least one psychiatric diagnosis. It was found that the psychiatric morbidity was not present significantly high in any particular age group. In age group of 30 to 39 years out of total individuals with mood disorder, substance abuse comorbid with bipolar affective disorder (34.78 %) was more common. In males substance abuse i.e. 23.36 % was found to be most common followed by substance abuse comorbid with axis I psychiatric diagnosis i.e. 17.75 %. In females mood disorder was found to be more common i.e. 6.54 % followed by anxiety disorder i.e. 0.98 %. It was found that the axis I psychiatric diagnosis was present significantly high in males.

It was found that 70.9 % were having history of multiple sex partners, while 29.90 did not have similar history. Individuals giving history of multiple sex partners 48.59 % were having at least one axis I psychiatric diagnosis.

Among these individuals substance abuse was most common i.e. 23.36 % followed by substance abuse comorbid with axis I psychiatric diagnosis i.e. 17.75 % and mood disorder i.e. 7.47 %. It was found that the psychiatric morbidity was present significantly high in individuals with history of multiple sex partners. 95% of individuals with mood disorder were having history of multiple sex partners. Among them bipolar affective disorder with comorbid substance abuse (43.47 %) was most common.

Those individuals who never used barrier method during sexual activity 22.42 % were having at least one axis I psychiatric diagnosis. Among these individuals substance abuse comorbid with axis I was most common psychiatric diagnosis i.e. 10.28 %. It was found that the psychiatric morbidity was present significantly high in individuals who never use any barrier method during sexual activity. Out of total individuals with mood disorder 65.51 % were never used barrier during sexual activity. Among them 34.78 % were bipolar affective disorder comorbid with substance abuse followed by bipolar affective disorder (i.e. 17.39 %) and depression (i.e. 8.6 %).

Those individuals who gave history of sexual activity with commercial sex workers, 32.71 of them were having at least one psychiatric diagnosis. Among these individuals, substance abuse was most common axis I psychiatric diagnosis i.e. 17.75 % followed by substance abuse comorbid with axis I psychiatric diagnosis i.e. 14.01 %. Out of total substance abuse individuals 76% individuals were having history sexual activity with commercial sex workers. Among this individual 56 % were alcohol abuse and 20 % were both alcohol and cannabis abuse. It was found that the psychiatric morbidity was present significantly high in individuals with history of sexual activity with commercial sex workers. 52.17 % of individuals with mood disorder had history of sex with commercial sex workers. Among them 34.78 % were having bipolar affective disorder with comorbid substance abuse followed by depression with comorbid substance abuse.

Discussion

Psychiatric diagnosis was present significantly high in males in the present study. Substance abuse and mood disorder were most common psychiatric morbidity. P Tharyan et.al⁸⁹ reported that males were eight times more likely to be get infected with HIV infection than females. Psychiatric morbidity was present significantly high in married individuals. This could be because - a) marriage is norm in Indian setting and b) marriage is considered as remedy for mental and other problems in India.² The psychiatric morbidity was present significantly high in individuals with history of multiple sex partners, who never used any barrier method during sexual activity and individuals who never used any barrier method during sexual activity. This could be part of impulsivity and inability to delay gratification and diminished judgment and insight in individuals with Axis I psychiatric disorder.

Guimaraes MD et.al.¹⁴ reported that the overall prevalence of lifetime unprotected sex among psychiatric patients is higher than general population.

Summary

Individuals with psychiatric morbidity are known to indulge in risk taking behavior due to impulsivity, inability to delay gratification and diminished judgment and insight. This may affect various area of life including substance use, sexual behavior and relational problems.

Therefore these individuals may indulge in unsafe sexual practices leading to the sexually transmitted infection and contracting HIV infection. The correlation of psychiatric morbidity and risk of HIV has been emphasized in the past but never adequately investigated. The main purpose of this study was to find out underlying the psychiatric morbidity and associated epidemiological and behavioral factors in the recently diagnosed HIV positive individuals.

Good mental health care lead to alteration in life style, disease prevalence and outcome. Hence good mental health care will have beneficial impact on sexual practices and spread of HIV.

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