

HIV RELATED ADMISSIONS IN A PSYCHIATRIC HOSPITAL A FIVE YEAR PROFILE

P.S. CHANDRA, V.A.S. KRISHNA, V. RAVI,
A. DESAI & S. PUTTARAM

ABSTRACT

Recent reports have indicated an increasing prevalence of HIV infection in the mentally ill. Reports have also emphasised the etiological role of HIV infection in psychiatric illness. The aim of this study was to assess the clinical and risk profile of psychiatric inpatients found seropositive for HIV infection. All psychiatric inpatients from a psychiatric hospital who tested positive for HIV infection over a five year period were assessed. The assessments included a detailed clinical history, psychiatric assessment and risk behaviour evaluation. Of the 2283 psychiatric patients tested, 51 were found to be seropositive. 43 patients were included in the study. 30 (69.7%) had a diagnosis of alcohol dependence, of which, 11 patients had comorbid psychiatric diagnosis in the form of affective disorders (23%) and psychosis (14%). Personality disorders were seen in 9 patients. In 19% the clinical manifestation was considered to be etiologically related to HIV infection. The predominant risk behaviour was in the form of multiple partner heterosexual contacts. In several patients the risk behaviour had occurred during an episode of mental illness or under the influence of alcohol. The study demonstrates the importance of detecting and describing HIV infection and its manifestation among psychiatric patients.

Key words : HIV, psychiatric illness, AIDS, organic brain syndromes

As the prevalence of HIV infection in the general population increases it is important to gain information regarding special populations who are at risk for acquiring HIV infection. Mentally ill individuals are one such group, who require special attention and study. In hospitals, HIV related psychiatric admissions might be due to two reasons. Firstly, there is increasing evidence to suggest that psychiatric patients may be at a high risk for acquiring HIV infection (Carey et al., 1997a; Kelly et al., 1995; Chopra et al., 1998). Risk behaviour among the mentally ill has been reported by several workers and includes factors such as IV drug use, sexual abuse and unprotected sex with multiple partners (Cournos et al., 1994; Carey et al., 1997b; Kalichman et al., 1994). In a study from a

psychiatric inpatient population in India, the major risk factors were found to be multiple heterosexual partners among men and risk factors in the spouse among women (Chopra et al., 1998), compared to Western studies, where the major risk factors among mentally ill were intravenous drug use and multiple sexual partners both homosexual and heterosexual (Sacks et al., 1992; Stewart et al., 1994). Several factors such as sexual abuse, homelessness and impaired judgement regarding relationships make psychiatric patients increasingly at risk for HIV. In addition, alcohol use among psychiatric patients also makes them vulnerable to enter into casual or coercive relationships.

The other important association of psychiatric illness and HIV infection is the myriad

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number of neuropsychiatric manifestations which occur in HIV infection. Acute psychosis, mania and dementia frequently occur in conjunction with HIV infection and may present to a psychiatric inpatient setting (Sacks et al., 1995; Sabheshan et al., 1998; Edwin et al., 1999).

Data on HIV infection among psychiatric patients is predominantly from the West (Carey et al., 1997a, 1997b; Menon et al., 1994; Stewart et al., 1994; Kalichman et al., 1994; Kelly et al., 1995). Information regarding this from other parts of the world, including India is completely lacking. The present paper describes the HIV seroprevalence patterns among psychiatric patients tested over a five year period and analyses the profile of HIV seropositive cases admitted in a psychiatric inpatient setting.

MATERIAL AND METHOD

This study was prospective in design and included all patients admitted between 1993 and 1997 to the psychiatry wards of NIMHANS who were detected to have HIV infection. The diagnosis of HIV infection was made on the basis of antibody testing for HIV and was carried out in those patients who gave a history of sexual risk behaviour or who had clinical symptoms suggestive of HIV infection. Testing was carried out as per the current guidelines of the National AIDS Control Organisation, New Delhi under supervised pre and post test counselling. All serum samples were subjected to an initial ELISA test and those that were reactive were reconfirmed and designated positive if they yielded positive results in two or more immunoassays (ELISA and/or rapid immunoassays) as per NACO guidelines. All HIV positive patients were referred to the HIV Counselling and Care Clinic at NIMHANS, where a detailed assessment of risk factors, neuropsychiatric evaluation and psychosocial assessment of the seropositive patient was done. During the period 1993 to 1997, 51 patients with HIV infection were detected among patients admitted in the psychiatric wards and referred to the clinic. Amongst them, the clinic had

complete clinical information only on 43 patients and the remaining eight patients were either discharged from the hospital early, before their referral to the clinic or the patient left the hospital against medical advice. Psychiatric diagnosis was made based on the ICD-10 criteria and assessment at the clinic focused on the relationship between the HIV infection and the psychiatric illness and the possible risk factors involved in transmission.

Data was collected by in depth interviews with the patients and their families. Psychiatric records were used to supplement information whenever necessary. The interviewer assessed in detail the following areas :

Association of psychiatric illness with risk behaviour - The context and reasons for risk behaviour were examined which included factors such as impaired judgement, sexual abuse, association with substance use and risk behaviour occurring exclusively during a psychotic or affective episode.

Etiological association of HIV with psychiatric disorders - This was done using the following criteria :

1. Psychiatric disturbance occurring for the first time in life.
2. Presence of fever, headache or signs of neurological infection prior to the onset of psychiatric disorder or occurring in association with the psychiatric disturbance.
3. Psychopathology indicative of an organic disorder such as confusion, multimodality hallucinations or cognitive disturbances.

Possible methods of transmission - A detailed history regarding sexual behaviour, IV drug use with sharing of needles and history of blood transfusion was taken.

RESULTS

Of the 22,549 admission from January 1993 to December 1997, a total number of 2283 patients were tested for HIV infection and 2.11%

of those tested were found to be seropositive. According to our results, the seroprevalence among those tested was found to gradually increase from 0.47% in 1993 to 5.33% in 1997.

Of the 43 cases described, none of them had been detected to be seropositive prior to admission at this centre. The age range of these patients was 18-51 years (mean age 32.1 years). Of these 14% were women and 86% were men.

Analysis of the cases revealed that 8/43 patients (18.6%) could be classified as having a psychiatric problem etiologically linked to HIV infection (organic psychiatric syndrome), based on our criteria. Among these, two presented with manifestations of acute psychosis, while four had organic psychiatric syndromes in the form of AIDS dementia and HIV related delirium. In two patients, delirium occurred on the background of a primary psychiatric disorder (Table). One of

TABLE
PSYCHIATRIC DIAGNOSIS OF THE
HIV PATIENTS

Diagnosis	Frequency	%
HIV RELATED ORGANIC PSYCHIATRIC DISORDERS (n=8)		18.6
Acute psychosis	2	
Dementia	3	
Delirium	1	
Delirium superimposed on BPAD	2	
OTHER PSYCHIATRIC DIAGNOSIS (n=35)		81.4
Psychosis	6	14.0
Schizophrenia + ADS	2	
Psychosis nos. + ADS	3	
INH induced psychosis	1	
BPAD	4	9.3
BPAD + ADS	2	
BPAD	2	
Depression	6	
Depression	2	
Depression + ADS	4	
Substance abuse	19	44.1
ADS	19	
Total	43	100

BPAD - Bipolar Affective Disorder
ADS - Alcohol Dependence Syndrome

the patients who presented with psychosis was diagnosed as a case of cryptococcal meningitis after a few weeks of admission.

In the other group (n=35), six patients had affective disorders which included two women with depression following the death of their spouse due to AIDS. Four patients had bipolar affective disorder. Six patients (14%) had psychosis, of whom, two had schizophrenia, three had alcohol related psychosis and one woman who also had Pulmonary Tuberculosis was admitted with INH induced psychosis.

Of the 43, nine (20.9%) cases had a comorbid personality disorder, in the form of antisocial personality disorder in eight patients and anxious avoidant personality disorder in one. 30 (69.7%) of the 43 patients had alcohol dependence. Of these, 11 (25.8%) patients had a primary psychiatric diagnosis with comorbid alcohol dependence, while 19 (44.1%) were admitted with a primary diagnosis of substance dependence with no other psychiatric problem. All patients with comorbid substance abuse or dependence had alcohol as the major substance being abused while 10% also used other substances such as cannabis and opioids.

Nature of transmission - Multiple heterosexual contact was the commonest route of transmission recorded in 65.2% (28) while 38 patients gave a history of sexually transmitted diseases. One patient had history of IV drug abuse with needle sharing, while two reported risk behaviour in the spouse. Transmission through blood transfusion accounted for only one case. In two women the risk behaviour had occurred during a psychotic or manic episode as a result of sexual disinhibition and impaired judgement. 25.6% (11/43) of the respondents denied any risk behaviour. In 44% of patients (21/43) the risk behaviour had occurred under the influence of alcohol. Sexual abuse in the form of coercive sex was reported in one female patient.

DISCUSSION

Patients with psychiatric illness who are HIV infected are a special population with specific

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needs. Firstly, they require special services which will handle the dual problem of mental illness and HIV infection including rehabilitation and risk reduction programmes. Secondly, training of staff dealing with the mentally ill in inpatient settings gains immense importance with increasing prevalence of HIV infection. Handling violence, sexual activity in psychiatric wards and dealing with blood and body fluids is important, as is being trained on all aspects of universal precautions. Finally, psychiatrists need to be alert to the various neuropsychiatric manifestations of HIV infection that may present to a psychiatric setting. There is a need to gather more descriptive data regarding the psychiatric manifestations of HIV infection. This would help clinicians to suspect and detect HIV infection among patients manifesting acute psychosis or conditions such as mania due to the effect of the virus on the brain.

The results of this study have contributed the following information about HIV infection in psychiatric patients :- (i) Our rates of 5.3% seropositivity in 1997 among those with high risk behaviour or clinical suspicion of HIV infection is still lower than rates documented in Western studies (Naber et al., 1994; Stefan & Catalan, 1995). This probably reflects the seropositivity rate in the general population which is about 20 per 1000 (NACO, 1997). (ii) A large number of the HIV seropositive patients (44%) have Alcohol Dependence Syndrome. In addition 25.8% had a comorbid problem of substance abuse in association with a primary psychiatric diagnosis. The chances of a person indulging in harmful, unprotected sex are greater when any substance is abused (Leigh, 1990; Stall, 1988; Howard et al., 1988; McEwan et al., 1992). Among HIV infected persons, those with comorbid alcohol dependence have higher possibility of psychiatric morbidity and neuropsychiatric problems owing to the effect of alcohol on the brain. Therefore this group warrants special attention, such as detailed assessment of risk behaviour and adequate provision of testing and counselling services. (iii) Patterns of risk in our sample reveal sexual abuse, impaired judgement leading to risky sexual encounters and comorbid

substance use as important factors in the mentally ill. (iv) The study also emphasises the need to look for possibility of HIV infection in individuals with acute psychosis or first episode mania. Mania and acute psychosis have been reported in literature in patients with neurological infections and in the acute seroconversion stages (Harris et al., 1991; Schmidt & Miller, 1988; Sabheshan et al., 1998). Minor cognitive disorder is another condition which may mimic depression and can present to the psychiatric settings (Chandra et al., 1997; Edwin et al., 1999).

In conclusion, despite including a small sample, this study emphasises the need to recognise the importance of HIV infection among the psychiatrically ill for both purposes of diagnosis and etiology and for evolving special methods of management for individuals having to deal with two difficult conditions.

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P.S. CHANDRA, MD, Associate Professor, V.A. S. KRISHNA, M.Phil., Research Officer, Department of Psychiatry, V. RAVI, MD, Additional Professor and Head, A. DESAI, Ph.D., Senior Scientific Officer, Department of Neurovirology & S. PUTTARAM, MD, Additional Professor, Department of Neuropathology, National Institute of Mental Health and Neuro Sciences, Bangalore-560029.

*Correspondence