PSYCHIATRIC EVALUATION OF HUMAN IMMUNODEFICIENCY VIRUS SEROPOSITIVES IN ARMED FORCES

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ABSTRACT

Fifty five Armed Forces personnel detected to be seropositives for human immunodeficiency virus were the subjects of the study. After baseline clinical evaluation, laboratory investigations and Centre for Disease Control classification, through a semistructured interview, their sexual orientation, behaviour and psychiatric morbidity were assessed. Sixty nine percent had another sexually transmitted disease as comorbidity. Heterosexual contact was responsible for the infection in 54 out of 55 subjects. Seven patients were freshly diagnosed to have psychiatric illness.

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KEY WORDS : Human immunodeficiency virus; Psychiatric morbidity; Sexual orientation.

Introduction

The physical consequences of HIV infection are well documented [1]. The psychosocial and neuropsychological reactions of HIV infection have drawn the attention of researchers in recent years [2-5]. HIV infection has the predilection to affect the brain. The psychiatric symptoms that develop during the course of HIV infection are similar to those of life threatening illnesses like cancer [6]. Apart from the direct invasion of the central nervous system (CNS) even in the early stages of infection, the social stigma, bleak prognosis with the onset of AIDS have been blamed for the psychiatric impairment. This descriptive study aimed at assessing the psychiatric morbidity among the Armed Forces personnel who were confirmed seropositives for HIV infection.

Material and Methods

The study was conducted at Command Hospital (Southern Command), Pune from

Jun 1991 to Jun 1993. The source of the sample consisted of men admitted to the HIV serosurveillance centre of the hospital for evaluation. Fifty five patients who were sequentially admitted and were seropositives for HIV were included in the study. The seropositivity was confirmed both by enzyme linked immunosorbent assay (ELISA) test and Western blot (WB) test. Initial clinical assessment done prior to the psychiatric referral included a detailed recording of history, physical examination and laboratory investigations including haemogram, urinalysis, liver function tests, blood test for VDRL and HBsAg. The diagnostic classification of the seropositives was done based on the Centre for Disease Control (CDC) criteria of 1986 [7].

In the psychiatric centre, the sociodemographic data of the subjects were collected on a standard proforma. This was followed by a semistructured interview of each individual aimed at knowing his sexual orientation and behaviour. The awareness about HIV

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infection and AIDS was then found out with the help of a questionnaire. A psychiatric interview based on Diagnostic and Statistical manual 3rd edition, revised (DSM III R) of American Psychiatric Association [8] was used to assess the psychiatric morbidity of the sample.

Results

All the 55 men went through all aspects of the study and there were no dropouts. Mean age of the study sample was 27.2 years (range 20-46 years). These subjects were from all the three services, however, majority of them belonged to Army and Navy, 29 and 24 respectively. All were literate. Majority had studied upto secondary level (6 to 10th standard) and only three had acquired graduation. There were no officers and JCOs in the study sample and sepoy and equivalent were over represented compared to NCOs (37 and 18 respectively). There were 29 married and 26 unmarried individuals. There was no widower or divorcee in the study sample.

Time gap between the detection of HIV seropositivity and psychiatric assessment had a wide variation; maximum duration being 690 days and minimum 5 days. The delay in psychiatric assessment was due to the fact that the study started in June 1993 when a sizable number of people who were detected to have HIV seropositivity in 1992 were included in the study.

A large number of subjects (74%) in the study sample were found to be suffering from other diseases but comorbidity with sexually transmitted diseases (STD) was found to be particularly high (69%). Details of comorbidity with STDs and the corresponding CDC staging of HIV infection are shown in Table 1.

Twenty six subjects were HIV positive but asymptomatic (CDC group II) while 28 had persistent generalised lymphadenopathy (PGL) (CDC group III). One subject had disseminated tuberculosis and satisfied the criteria for full blown AIDS (CDC Group IV).

Sexual orientation and behaviour : Average age at gaining knowledge of sex was 16.23

TABLE 1

Comorbidity with sexually transmitted diseases (n=55)

Comorbidity	Asymptomatic	PGL	AIDS
Chancroid	7	7	—
Syphilis	3	6	—
LGV	2	—	—
Gonorrhoea	1	—	—
Fungal infection in genital skin	1	1	—
Scabies	1	—	—
Genital warts	—	1	—
HBsAg positivity	—	2	—
Multiple STDs*	2	3	—
NIL	9	8	1
Total	26	28	1

* These subjects had combination of two or three STDs

years, while mean age at first heterosexual experience was 19.91 years. All but one of the subjects had their sexual exposure within the previous one year. There were no bisexuals or homosexuals. Among the unmarried, 25 out of 26 had sexual contact with a professional and the one who had no sexual experience was a known mainline heroin addict. Each one of the married subjects had sex with a female partner other than the wife in the previous one year. Twenty subjects (36%) had a single sexual contact while other had multiple contacts. As many as 23 subjects (42%) had a single sexual partner while 8 (15%) had multiple partners. Majority of the subjects (65%) had not used condoms during sex.

Awareness about HIV and AIDS : Twenty two subjects (40%) had not heard about HIV or AIDS prior to their diagnosis. Of the remaining 33 (60%) who knew, 25 (45%) had learnt about the disease through mass media like newspapers or TV and 8 (15%) through friends or health care professionals. Following the diagnosis, an overwhelming majority (90%) had made additional efforts to know about the disease.

Psychiatric assessment : Nine subjects (16%) were found to be meeting the criteria for psychiatric diagnosis according to DSM III

R. Among these, in 2 subjects, psychiatric diagnosis had been given prior to being declared seropositive. One was a heroin dependent, a mainliner, diagnosed a year earlier and the other, a patient of Anxiety Disorder NOS.

Seven subjects were freshly diagnosed to have psychiatric illness during the study. Their diagnosis and the corresponding CDC classification are shown in Table 2.

TABLE 2
Diagnosis and CDC classification of the subjects (n=9)

DSM III R diagnosis	CDC classification
Adjustment disorder with depression	PGL (Group III)
Adjustment disorder with depression	PGL (Group III)
Generalised Anxiety Disorder	Asymptomatic (Group II)
Psychoactive substance use disorder (opioid type)	PGL (Group III)
Adjustment disorder with depression	PGL (Group III)
Anxiety disorder NOS	PGL (Group III)
Adjustment disorder with depression	PGL (Group III)
Bipolar disorder (mania)	Asymptomatic (Group II)
Adjustment disorder with depression	AIDS (Group IV)

Discussion

Consistent with the reports from Indian subcontinent and Africa, heterosexuals were maximally represented in this series of cases [9,10]. In certain parts of India like the North East spread of HIV due to shared needles during parenteral drug abuse has been well documented [11]. The only seropositive individual who was infected by a nonsexual route in this study was a parenteral drug abuser and native of a North Eastern state.

In many of the studies on HIV infected, the cohort was selected from the patients attending the STD clinics [4,5]. Promiscuous people by indulging in unprotected sex are exposed to higher risk of not only HIV infection but also other STDs. In the present study, the comorbidity with other STDs was to the ex-

tent of 69%.

HIV infection was found almost equally between the married and the single. Among the former, all had an extramarital contact in the preceding one year of testing for HIV though such contacts were admittedly few. Only 15% of the subjects had sexual partners ranging from 3 to 10 in number.

The psychiatric impairment in HIV infection has been argued to be due to early invasion of brain by HIV. Fluctuations in mood has been suggested to be an early indicator of CNS involvement of AIDS dementia complex [5]. There have been suggestions that with progress of HIV infection, one is more likely to develop psychiatric illness [12,13]. Uncertainty about the future course of illness, spectre of relentless progress of the disease and its incurability are considered sufficient to give rise to the psychological reaction as happens in various other illnesses of similar nature [6]. The dilemma of organic vis-a-vis functional is important as this will have implications for management [14].

There is increasing awareness among the general public about HIV and AIDS with the involvement of the mass media. The victims of infection are also exposed to the media reports of social ostracism and the nonavailability of an effective cure. Familiar patients reactions on becoming aware of the HIV infection include shock, withdrawal, despair, acute high-level anxiety, depressive reactions, bargaining, anger, guilt, avoidance and denial which are usually expected in the context of perceived "death sentence" [15]. In the present study 7 subjects (15%) were freshly found to have psychiatric diagnosis as per DSM III R. Of these 5 subjects had adjustment disorder with depressive mood suggesting clearly that their morbidity was related to their being declared HIV positive over the previous weeks. One had features of generalised anxiety disorder. The only patient with a psychotic breakdown had bipolar disorder mania. Rundell and Brown [16] in their study of US Air Force personnel who had tested positive for HIV had noted personality disorder

der, adjustment disorder, simple phobia, hypoactive sexual disorder and major depression as the prevalent psychiatric diagnoses in that order. Venkoba Rao *et al* [9] studied psychiatric morbidity among HIV seropositives in 85 patients and found that 51% of the subjects manifested psychiatric symptoms. Comparing HIV seropositives and patients with other STDs, the authors did not find any significantly higher morbidity among the former.

In the present study, only two subjects (4%) had a past psychiatric history. This is in contrast to many of the studies from the West [3,4] who had found that nearly one third of the subjects had such a history. Low past psychiatric morbidity in the present study could be because Armed Forces personnel are less likely to have such a history due to their strict selection procedures during recruitment. Further, most of the earlier studies were carried out among homosexual/bisexual men and it is known that homosexual men have higher psychiatric morbidity compared to heterosexuals [17].

Though being a preliminary study and having a limitation of being descriptive in nature, it does highlight the necessity of psychiatric assessment in HIV seropositives. More and more of these cases can be expected to seek psychiatric help at some stage either due to psychological reaction to life threatening and incurable illness or to the organic involvement leading to AIDS dementia complex. Anticipatory strengthening of the psychiatric services to meet the challenge is thus called for.

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