Acute psychiatric in-patients tested for HIV status: a clinical profile

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ABSTRACT
Objective: To obtain a retrospective profile of the clinical presentation, inpatient management and their initial access to HAART of service users tested for HIV status while admitted to an acute bed psychiatric unit. **Method:** A retrospective clinical audit of HIV positive service users' discharge data sets was undertaken for the year September 2003 to August 2004. Data was compared with exisiting literature. **Results:** During the study period a total of 443 service users were admitted of whom 17.4% (n=77) were tested for HIV status. Of these, 7.7% (n=34) of the total admissions tested positive. Presenting psychiatric symptoms included elevated mood, psychosis, disorganized behavior, confusion, aggression and mutism. The most common DSM IV diagnoses were mood disorder or psychosis due to general medical condition. Predominantly risperidone and haloperidol in combination with valproate were used in treatment and at relatively high dosages. **Conclusion:** Amongst HIV positive service users acute psychiatric symptoms almost exclusively consisted of associated psychosis or manic symptoms rather than depression. The clinically successful addition of valproate to antipsychotic medication in 50% of cases in this study requires further research to establish if it could also be recommended on the basis of empirical findings. Service users' capacity to adhere to strict treatment regimes might have been affected if not supervised, in view of their generally low global assessment of functioning (GAF) scores on discharge.

Keywords: HIV/AIDS; Psychiatric symptoms; Inpatient management

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Introduction

The referral of service users with acute psychiatric symptoms to psychiatric units for assessment or admission who are HIV positive has become a fairly routine experience over the past couple of years. Although a literature on the nature and treatment of acute psychiatric symptoms in relation to HIV exists (involving North American, British and European samples)[1-9], published data on the psychiatric presentation and acute management of South African HIV positive service users is lacking. Highly Active Anti-Retroviral Treatment (HAART) was made available in certain hospitals in Gauteng Province (South Africa) in April 2004 (including Helen Joseph Hospital, the site of the current study). The current study of service users tested for HIV status while admitted to the acute psychiatric unit of Helen Joseph Hospital was undertaken about six months after the initial "roll out" of HAART. The study aimed to provide both an overview of the predominant features of the clinical presentation, the acute management of HIV positive psychiatric inpatients in a typical South African acute psychiatry admission unit, as well as identify further research objectives in this group of service users.

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Method

A retrospective clinical audit of service users tested for HIV status and admitted to Ward 2 of Helen Joseph Hospital was undertaken for a one year period September 2003 to August 2004, in order to establish the demographic, clinical, management and functional profile of this group. The general clinical and management profile of these South African HIV positive service users was then compared with available literature reports on the clinical presentation and management of such service users in comparable settings.

The data available for the clinical review consisted of the case summaries completed by the attending clinician on discharge. This discharge data set was designed for the purpose of the study to reflect the minimum information required from the user file and included the following variables: (1) age, gender and race; (2) suburb/district of origin; (3) length of stay; (4) reason for admission; (5) compliance; (6) substance abuse; (7) investigations; (8) inpatient treatment; (9) DSM IV multi-axial diagnostic formulation; and (10) referral. Compliance or adherence in these case summaries was merely indicated as "yes" or "no" and referred mainly to the history of compliance to psychiatric medication prescribed immediately prior to admission. DSM IV diagnoses stated in the discharge data were regarded as the most likely "working diagnoses" made in the operational scenario of an acute psychiatric unit after routine medical and psychiatric examination and investigation during admission. No structured interview procedures were applied as part of the study to verify the criteria for diagnoses made.

Results

During this one year period, a total of 443 service users were admitted to Ward 2 for psychiatric assessment and treatment. Of these, only 17.4% (n=77) of the total number of service users' were tested for HIV status either prior to or during admission. Of these 7.7% (n=34) of the total number of service users tested positive and 43 negative.

Demographic profile of HIV positive users

Age - 10-19 years (n=1); 20-29 years (n=10); 30-39 years (n=18); 40-49 years (n=3); 50-59 years (n=2); Gender - 12 male; 22 female; Ethnicity - 30 black, 3 colored, 1 white; Average length of stay - 29.3 days; Areas of origin of users in this study included suburbs in and around Johannesburg but also two users each from Kwazulu-Natal and Lesotho.

Clinical profile of HIV positive users

Reasons for admission stated in the discharge summaries included psychosis, confusion, restlessness, aggression, inappropriate or disruptive or disorganized behavior, previous post partum psychosis, elevated mood, relapse, neuro-syphilis and depressed mood. Substance abuse was confirmed to play a role in the admission of 40% of service users. Adherence – Ten service users were regarded as compliant on their psychiatric treatment prior to and during their stay, eleven were regarded as non compliant with the notion that it contributed to their admission, while adherence or compliance was unknown or not indicated in 13 of the 34 cases. Investigations - CD4 counts obtained ranged from 10 to 674 million/l and the general medical work-up did not include a routine brain scan, LP or EEG. Routine multi-axial diagnoses formulated on discharge included AXIS I - mood disorder due to general medical condition (n=4), psychosis and mood disorder due to general medical condition (n=3), psychosis due to general medical condition (n=23), bipolar mood disorder (n=1), delirium (n=1) and schizophrenia (n-2). Co-morbidity on AXIS I included dementia (n=7); cannabis abuse (n=1); bipolar mood disorder (n=1) and major depressive disorder (n=1). AXIS III diagnoses included epilepsy (n=2), tuberculosis (n=5), meningo-encephalitis (n=1), chickenpox (n=1), upper respiratory tract infection (n=2) and neuro-syphilis (n=1).

Management profile of HIV positive users

Treatment choices included antipsychotics such as risperidone (n=8), haloperidol (n=19), trifluoperazine (n=3) fluopenthixol deconoate (n=4) and mood stabilizers, specifically sodium valproate (n=17, in 50% of the service users). The most frequent combinations used were valproate and haloperidol or valproate and risperidone. Antipsychotics were usually administered at a somewhat higher dosage range, at the equivalent of haloperidol 7.5mg per day. The clinical impression from the case discharge data was that once the mood stabilizer was added, service users tended to settle sooner and that valproate was added to patients who did not show an initial response to antipsychotic medication alone. Follow-up arrangements included referrals to community psychiatry clinics (n=12) and Helen Joseph Hospital out patients (n=13) for review of their continued psychiatric management, while seven users were referred for extended inpatient care to Tara, Sterkfontein and Life Esidimeni hospitals. Two service users did not return after leave of absence.

Functional profile of HIV positive users

The Global Assessment of Functioning (GAF) scale reflected on Axis V of the multi-axial formulation, remained low to moderate in most patients, even on discharge. Some patients were severely compromised due to concomitant dementia and required ongoing full-time care and supervision.

Discussion

The relatively low figure of 17.4 % (n=77) of hospitalised users tested for HIV status during the period of study was mainly due to existing ethical concerns about obtaining consent for testing in this population of service users. This given that their capacity to consent was regarded to be compromised in terms of their understanding of the benefit of testing. To obtain a more comprehensive picture of HIV positive users presenting with acute psychiatric symptoms, this obstacle in any study design will have to be resolved.

However, studies reviewed on the psychiatric features of the acute presentation of HIV positive service users, mostly reported on even smaller study populations.[1-9] These studies included those by Vogel-Scibilia et al[1], Buhrich et al[2] Halstead et al[3], Harris at al[4], Sewell et al[5] and Alciati et al[6]. The first group reported in 1988 on 13 cases of HIV infection presenting as psychosis in a literature review of HIV and psychiatry.[1] The clinical features, with which these patients presented, included paranoid delusions, acute mania, auditory hallucinations and catatonia. Diagnoses made included schizophreniform illness, organic hallucinosis and/or organic delusional syndrome, as well as organic affective syndrome and organic mental syndrome (unspecified). Most of these cases also had some finding consistent with an incipient dementing process. Buhrich et al (1988) reported on three psychotic patients, one with AIDS and two with AIDS-related complex (ARC).[2] From these cases they concluded that HIV may produce symptoms indistinguishable from those seen in the functional psychoses. These three cases did not demonstrate any impaired cognition during their psychosis.

Halstead et al (1988) reported on another 5 cases of psychiatric illness presenting as functional psychosis in male subjects with HIV infection.[3] They argued that sufficient evidence did not exist that HIV may itself cause symptoms of functional psychosis, especially in view of the low incidence of psychosis observed in their health district's HIV positive population at the time. The fourth review examined the clinical information of 124 HIV-infected patients followed up over a 6-year period.[4] Fifty seven of them were referred for psychiatric assessment and twelve had acute or sub-acute symptoms of psychosis such as delusions, hallucinations, bizarre behavior, mood and affective disturbances. On admission some of these patients received a primary psychiatric diagnosis, but the diagnoses were later revised to AIDS encephalitis, cryptococcal meningitis and "organic psychosis". Sewell et al (1994) evaluated 20 HIV-infected men who presented with new onset psychosis, which were regarded, at least in part, as a manifestation of an HIV-associated encephalopathy.[5] Alciati's group (2001) assessed the relationship between HIV-associated psychotic symptoms and demographic, psychopathological and medical variables by comparing 26 patients with cerebral opportunistic infections or metabolic encephalopathy, with patients without it.[6] They concluded that "organic" symptoms of psychosis in those infected with HIV are related to the systemic and cerebral complications of HIV infection rather than to the psychotic process itself.

According to the literature, in the presence of subsequent widespread use of HAART in European and North American countries, antidepressant medication rather than anti-psychotic medication seems to have become the norm. This being for the treatment of associated depressive conditions rather than psychosis which appears to be a less common clinical presentation in these regions. In a large North American study, 20.9% of patients were on antidepressant medication and only 4.7% on antipsychotics. With 61.9% of patients in this study on HAART, similar proportions of those treated with antidepressants or antipsychotics were found for both those on or off HAART.[7] Although no empirical evidence can be drawn from the current study, the clinical impression exists that our local acute psychiatric inpatient HIV positive study population responded more favorably to a combination of treatment of haloperidol or risperidone with valproate, rather than on one of these agents alone. Such treatments were against a background of predominantly psychotic presentations. With regard to the use of valproate in the management of these users, Rachbeisel and Weintraub reported on the successful treatment with valproic acid of manic symptoms in two patients with HIV infection as opposed to lithium - where side effects at therapeutic doses was a concern, and as opposed to carbamazepine - where induction of liver enzymes with decreased effectiveness of HAART was a concern.[8] Another retrospective chart review study of patients treated from 1994 to 1998 found no evidence of an increased viral load in eleven patients on valproate although observations in vitro indicated that valproate may stimulate replication of HIV-1 and cytomegaloviruses.[9] No adverse effect on viral load was seen in nine out of these eleven patients who were on valproate and HAART.

Confirmation of service users' HIV status in the current study did clarify available treatment options including access to HAART. According to hospital policy at the time of the study, the only objective factor determining access to HAART was the CD4 count, which had to be less than 200 million/l. In our study group, CD4 values ranged from 10 to 647 million/l and 11 of our users had a count of less than 200 million/l. These users therefore qualified for access and were referred to the local HAART clinic. Although the majority of inpatient service users in this study were regarded by attending clinicians to have a possible reduced capacity to comply with their medical and psychiatric treatment, policy on access to anti-retroviral treatment did not exclude them as long as a responsible treatment partner was able to partake in the supervision of treatment.

Conclusions

The clinical experience at Helen Joseph Hospital with HIV positive service users who presented with acute psychiatric symptoms was still almost exclusively that of associated psychosis or manic symptoms rather than depression, as was more commonly reported in the North American context.

In our experience, an anti-psychotic in combination with valproate was most often used in the acute treatment of elevated mood and psychotic symptoms. Some support for the use of valproic acid on its own or in combination with antipsychotics was forthcoming from the reviewed literature.

In view of the expected ongoing burden of HIV positive users presenting with acute psychiatric symptoms, further study of these clinical impressions should be conducted to achieve empiric clarity on the presentation and appropriate treatment of HIV associated psychosis in a South African context. Further research is also necessary on the outcome of HAART in psychiatric service users in relation to their longer-term adherence.

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