Frequency of Major Psychiatric Disorders in Patients with HIV in Health Care Centers of Rafsanjan and Kerman in 2012

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Abstract

Background: Psychiatric disorders are common in HIV-infected patients and for sure have direct impact on both prevention and management of diseases in these patients. In this research, the prevalence of major psychiatric disorders including mood, anxiety, and psychotic disorders in HIV-infected patients of Rafsanjan and Kerman health care centers were determined.

Materials and Methods: Eighty three HIV-infected patients were interviewed by a psychiatrist in above-mentioned health centers and their information was registered through a standard CIDI questionnaire (version 2.1) and was statistically analyzed. Results: In this study, Out of 83 participants, 71 cases (85.5%) were males and 12 (14.5%) were females. Their age range was from 21 to 62 years old. Sixty-nine cases (83.1%) were diagnosed with at least one major psychiatric disorder and 14 cases (16.9%) with none. Among the HIV-infected patients, 54 cases (65.1%) suffered from a mood disorder, 21 (25.3%) had psychotic and 41 (49.4%) had anxiety disorders.

Conclusion: The current study showed that major psychiatric disorders were more common in HIV-infected patients in comparison to normal communities, so on-time diagnosis and therapy and proper management of these problems could be truly a promising step in global control of HIV in this part of Iran.[GMJ. 2013;2(3):95-99]

Keywords: Mental disorders; Mood disorders; Psychotic disorders; Anxiety disorders; Human immune-deficiency virus (HIV)

Introduction

Some surveys have investigated the effects of depression and stress on function of immune system in HIV patients. Significant stress and depression symptoms are related to decline of immune system markers [1-3]. There is a linear correlation between severity of depression symptoms and markers of cellular immunity [4]. According to seasonal report of ministry of health in autumn 2010, the total registered number of HIV-infected cases is 20457, HIV suffering patients 2221, and death rate of 3543
Considering the fact that these data for the most up-looking way show the minimum rate of existing cases of each category, World Health Organization (WHO) and the joint United Nations Program on HIV/AIDS (UNAIDS), have attempted to design a computer program to estimate these rates for a more precise view. Application of this software along with a systematic review study which has been conducted in Iran, estimated 80000 HIV-infected existing cases [5]. Fortunately, there has been great progress in HIV patient management in Iran. Although all existing therapeutic approaches do not clean up the body from the virus, but they inhibit or decelerate virus proliferation, so result in better clinical status for the patients. Therapeutic goals for HIV management include achieving the maximum suppression of viral procedures, maximum maintenance of immune system functions, life quality improvement of the patients, and decline of worldwide morbidity and mortality rate of HIV infection [6].

Signs and symptoms of depression are commonly diagnosed in HIV-infected patients. In fact, depression is the most common reason for HIV patients’ referral to psychiatric care. In a study on HIV patients, 85% were reported with depression and 26% with apathy. Although apathy could be a sign for depression in HIV patients, but usually depression cause a lot more than just apathy for HIV victims [7]. Another study indicated that 8% of HIV patients represent depression signs about 17 months after diagnosis of the infection. Also other studies suggest psychiatric problems, more frequently mania syndrome and bipolar disorder, can seriously increase the risk of HIV exposure. Few studies confirm the increase of bipolar disorder (Type I & II), Cyclothymia, and hyperthymia in HIV-infected patients [8]. In an Indian study on 51 HIV-infected patients, anxiety symptoms were obviously diagnosed in 36% of patients, 4 to 6 weeks after being diagnosed as positive. Fear of death in 8.9% and fear of future in 18.9% of patients were also detected. Alcohol abuse, poor family or work relationship, suicidal thoughts, fear of disease disclosure to family and friends and society discrimination were in the next level [9].

Considering the importance of psychiatric disorders in HIV-infected patients along with lack of studies in the field, this study was designed to determine the prevalence of major psychiatric disorders in HIV-infected patients in Rafsanjan and Kerman, two major cities of Kerman province, South-East of Iran. The results of the current research may be used for a better management plans for these patients.

**Materials and Methods**

**Sampling**

This was a descriptive cross-sectional study performed on 83 HIV-infected cases, with no clinical manifestation of AIDS, who came to main health centers of Rafsanjan and Kerman. Our study protocol were explained to the participants and an informed consent was provided. Patients’ ages and the time period after being diagnosed as HIV positive were the two most important variables of our study. According to Ericsson psycho-social evolution stages, patients were divided into two categories of 20 to 40 and 40 to 65 years old [10]. Based on the time duration passed till diagnosis, the patients were divided to three categories, less than 10 years, 11 to 13 years, and over 13 years.

**Instruments**

The composite international diagnostic interview (CIDI) is a conformity questionnaire, designed by WHO in association with USA health ministration for evaluating psychiatric disorders. It provides a set of all possible differential diagnosis by considering both systems of ICD-10 and DSM-IV. It includes 14 sections, named alphabetically from A to X which covers 17 diagnostic domains. Two versions of CIDI is available, one designed as life-time period and the other as 12 months. Within this study we have used CIDI 2.1 (life-time version) which is translated to Persian by Kaviani et al and published by Mehr-E-Kaviani publication center, 2006. We used section E, F, D, G, and K, each for diagnosis of mood, psychotic, and anxiety disorders. The patients were interviewed by a psychologist to fill CIDI questionnaire and all patients’ information was documented.
Data Analyses
All collected data were analyzed by SPSS software (version 17.0) and the results were registered. P-values less than 0.05 were assigned as statistically significant.

Results
This study was designed to determine prevalence of psychiatric disorders of 83 HIV-infected patients with registered medical records in Rafsanjan and Kerman health care centers. Out of all participants in our study, 71 cases (85.5%) were males and 12 cases (14.5%) were females. Their age range was from 21 to 62 (Table-1). All of the patients had CD4>200 cells/mm3, therefore, they were in stage 1. Forty-four patients had a history of a previous major psychiatric disorder and 39 patients had none (P=0.002). Thirteen patients (81.3%) had a positive familial history of a major psychiatric disorder and 56 patients (83.6%) had no such a history (P=0.82). The distribution of mood disorders among HIV patients was determined. Fifty-four cases (65.1%) were diagnosed with mood disorder against 29 cases (34.9%) with none. This 54 cases included 44 depression cases (Major depressive disorder (n=29) and Minor depressive disorder (n=11) and Dysthymia (n=4) (53%) and 10 Bipolar disorder cases, Bipolar disorder type I, n=3, and bipolar disorder type II, n=5, and cyclothymia, n= 2 (12%). Forty-one cases (49.4%) had the criteria for anxiety disorders (Simple phobia, n=8, General anxiety disorder, n=10, Panic disorder, n=7, Post traumatic stress disorder, n=5, Obsessive-Compulsive disorder, n=5, and Anxiety disorder NOS, n=5, and Social phobia, n=1, and 42 cases (50.6%) were normal in this matter (Chart-1).

Table 1. Indices in Age and the Time Period After a Participant Was Diagnosed as HIV Positive and Was Included in this Study to Be Evaluated by a Psychiatrist.

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Range</th>
<th>Mean</th>
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<td>41</td>
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<td>18</td>
<td>17</td>
<td>7.54</td>
<td>4.286</td>
</tr>
</tbody>
</table>

Chart 1. Frequency of Mood Disorders in Patients with HIV

III positive mood disorder  N negative mood disorder

50.6%

49.4%
Discussion

In our study, 69 patients (83.1%) were diagnosed with at least one psychiatric disorder and 14 (16.9%) with none. In a study by Shakeri et al in year 2001 focusing on psychiatric status of incoming HIV-infected patients to Kermanshah health centers, they reported 93.18% of all patients (96.69% of males and 63.63% of females) were dealing with at least one psychiatric disorder. As seen, the prevalence of psychiatric problems is four times greater in HIV-infected patients comparing to normal society. As Shakeri and colleagues reported, 43.18% of all HIV-infected patients were diagnosed with mood disorder, which is the most prevalent psychiatric disorder in HIV patients. They showed the prevalence of depression among HIV patients to be 80% which is again noticeably higher than normal society [11]. Lyketsos et al showed the prevalence of mania syndrome with HIV patients to be 8% which is 10 times higher than normal society [12]. As it is resulted from many close observations of HIV patients, higher rate of psychological disorders, specifically mania syndrome, makes them susceptible for a higher prevalence of high risk behaviors, considerably, it causes a risk of disease transmission more than expected. So it is necessary to consider psychiatric problems in patients with HIV.

We assessed the prevalence of psychotic disorders as well and 21 patients (25.3%) were diagnosed with at least one and 62 (74.7%) with none. In another study by Cournos et al on schizophrenic patients, 44% of them had an active sexual life over the past six month. Sixty-two percent had more than one sex partner. More high risk sexual behaviors were detected with more severe schizophrenic cases with more positive schizophrenia diagnostic criteria, so more exposed to HIV infection [13]. As it is clearly understood, management and therapy of psychiatric problems should be a priority in HIV patients.

There was also an overlook on anxiety disorders of HIV patients in this study; forty-one patients (49.4%) were diagnosed with at least one and 42 patients (50.6%) with none. In a study by Prabha et al, anxiety disorders were detected in 36% of the patients [9]. In a study by Shakeri et al, anxiety disorders were presented in 18.93% of HIV patients (19% of males and 18.8% of female patients) [11]. In a study by Ronchi et al, the prevalence of new onset psychotic disorder is estimated to be nearly 3.7% [14]. The discrepancy of our findings with the literature may be due to rural HIV patients who were not aware or could not report psychiatric disorders. However, some reasons are remained to be defined.

Distribution of major psychiatric disorders, based on patients’ sex, showed a prevalence of 58% in females and 87.3% in males, which were more noticeable in males. By considering the age as a variable, the highest prevalence of psychiatric disorders were observed in 20 to 40 years old group, comparing to the group of 41 to 65 years old (91.8% in the first and 70.6% in the second group). Based on patients’ living place, there was no difference in distribution pattern of psychiatric disorders. So, it seems that there was no consistent association between urban and rural facilities and distribution of psychiatric disorders in HIV patients according to our investigations. Distribution of major psychiatric disorders among HIV patients based on existence of a past history of the issue shows a great variance. All patients with a positive past history of a psychiatric disorder experienced disease relapse even with more severe symptoms after being diagnosed as HIV positive. There was no relationship between family history and distribution of psychiatric disorder in HIV positive patients. Therefore, a positive familial history for psychiatric disorders in a HIV positive patient was not considered as a risk factor for psychiatric disorders. There was also no significant relationship between the severity of psychiatric disorders and the time period passed after diagnosis.

Therefore, we do suggest well assessments of psychiatric problems in all time periods as well.

Conclusion

The current research showed that the major psychiatric disorders are much more prevalent in HIV-infected patients compared to normal
population, so on-time diagnosis and management of them could be an effective effort in controlling HIV infection. Although it should be further investigated whether psychiatric evaluations of these patients is necessary and how often should it be performed, we recommend monthly precise psychiatric assessment is recommended for HIV positive patients.

Acknowledgement

The authors sincerely appreciate all participants as well as all those who helped us with this research. We would also specially thank research council of Rafsanjan medical science university for their great help and corporation. This study is based on a research proposal that established in research committee of Rafsanjan university of medical sciences and it is based on a thesis for achievement of Doctorate degree in medicine.

Declaration of interest

None

References