



LETTER TO THE EDITOR

Psychiatry and HIV infection: what changed?

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Abstract

Background: The human immunodeficiency virus (HIV) infection is a chronic disease with significant comorbidity with mental disorders. Patients with mental health problems are at an increased risk of contracting HIV and infected patients are also at an increased risk of developing mental health problems, both cases contributing to a worse global prognosis. This cross-sectional study intends to characterize a sample of patients followed in a psychiatric department in order to understand the crucial role of Liaison Psychiatry in this area.

Methods: Retrospective review of clinical records of patients followed between June and December of 2016 and assessment of multiple clinical and sociodemographic variables.

Results: There were 117 psychiatric appointments for 69 HIV-infected patients. The average age was 51.6 (± 9.86) years and the gender distribution was balanced. We found that 69.5% of HIV-infected patients presented affective or neurotic disorders (ICD-10), 73.9% were under antidepressant treatment and 72.1% under psychotherapy. Comparing HIV-infected patients with and without antidepressant therapy, we found that patients under antidepressant treatment had a longer duration of HIV infection ($p=0.038$). All patients presented stable immunological status.

Conclusions: The paradigm shift of HIV infection—the transition to a chronic disease model—required an adaptation by healthcare providers. As depression is the most prevalent psychiatric condition in this population, its early detection is crucial in order to improve disease outcome and quality of life.

Keywords: Psychiatry, HIV, Liaison Psychiatry, Depression.

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Citation: Souto Braz et al. Psychiatry and HIV infection: what changed?. International Journal of Clinical Neurosciences and Mental Health 2017; 4:6

DOI: <https://doi.org/10.21035/ijcnmh.2017.4.6>

Received: 11 Jul 2017; Accepted: 21 Nov 2017; Published: 06 Dec 2017

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Open Access Publication Available at <http://ijcnmh.arc-publishing.org>

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Introduction

Human immunodeficiency virus (HIV) infection is a chronic disease with significant comorbidity with mental disorders [1]. HIV infection remains an noteworthy issue in the Portuguese public health sector, where 990 new cases were notified in 2015. At the end of 2015, 54,297 cases were registered cumulatively, where 21,177 were in the AIDS stage. Although the rate of HIV infection has been consistently reduced since 2008, Portugal still has one of the highest incidence rates in the European Union [2].

Patients with mental health problems are at an increased risk of contracting HIV, and infected patients are also at an increased risk of developing mental health problems [3]. The simultaneous presence of a mental disorder and HIV infection has a negative impact on the course of the medical condition, including therapeutic adherence and risk behaviors, and contributes to a worse global prognosis [3,4].

The early diagnosis and treatment of mental disorders in the HIV-infected population improves their quality of life, particularly in social skills and professional activity [5]. The main goals of Liaison Psychiatry in this context are to treat psychiatric comorbidities, to increase HAART adherence and reduce risk behaviors.

The most prevalent psychiatric disorder in HIV-infected patients is depression. Compared to non-infected individuals, they have twice the risk of developing depressive symptomatology [6]. Suicide risk is also higher, both compared to the general population and patients with other chronic diseases [7]. Feelings of shame, stigma and discrimination are important issues in the HIV-infected population and can be considered as a worsening clinical factor to the psychiatric status [8,9].

Furthermore, in the general population, the prevalence of personality disorders is approximately 10% [10]. Comparatively, in HIV-infected population this proportion increases to 19–36% [11,12]. In this category, the most frequent personality disorders are antisocial and borderline [12–14].

In the context of an ambulatory psychiatric consultation/liaison service, started in 1989 and actively functioning until today, we intend to present a characterization of the patients attending this service during a period of six months.

Methods

A retrospective cross-sectional study was designed, with a convenience sample based on the review of clinical records of patients followed between June and December of 2016 in the psychiatric consultation of the Department of Infectious Diseases, Hospital Santa Maria in Lisbon, weekly performed by a resident of Psychiatry. The anonymity and confidentiality of patients and data were respected.

HIV-infected patients in our study were followed by the psychiatric team as they presented relevant psycho-

pathological symptoms or non-adherence to antiretroviral treatment, impairing their global status.

Statistical analysis (descriptive, frequencies and mean comparisons) was performed using Statistical Package for Social Sciences (SPSS, version 18). A significance level of 0.05 was considered.

We assessed clinical and sociodemographic variables as follows: (1) age, gender and nationality; (2) time since diagnosis; (3) psychiatric diagnosis according to ICD-10; (4) personality disorder and toxic abuse comorbidities; (5) antidepressant, antiretroviral and psychotherapy treatment; (6) risk behavior; (7) HCV co-infection; (8) disease staging, viral load (copies/mL) and CD4 count (cell/mm³).

Results

There were 117 psychiatric appointments for 69 HIV-infected patients. The average age was 51.6 (± 9.86) years, with greater representation of ages between 30–50 years. The gender distribution was mostly balanced (33 men and 36 women), 92.8% were Portuguese. In terms of transmission, 16 patients (23.5%) contracted HIV via intravenous pathway and 52 patients (76.5%) via sexual risk behaviors, mostly heterosexual ($n=35$; 67.3%).

We found that 69.5% of HIV-infected patients presented affective or neurotic disorders according to ICD-10 (Figure 1). In these two categories, the most prevalent disorders were recurrent depressive disorder ($n=13$; 18.8%), mixed anxious and depressive disorder ($n=7$; 10.1%), generalized anxiety disorder ($n=6$; 8.7%) and adjustment disorder ($n=6$; 8.7%). A total of 5 patients presented HIV encephalopathy or HIV-associated dementia (3 as main diagnosis and 2 as comorbidity).

Personality disorders were identified in 15 patients (21.7%): 6 as the main diagnosis and 9 as a comorbidity. In terms of psychoactive substance use, we found active consumption in 11 patients (15.9%) and past drug abuse in 7 patients (10.1%) (Table 1).

All patients observed were under antiretroviral therapy and 73.9% were under antidepressant treatment. Simultaneously, 72.1% ($n=49$) were under psychotherapy.

Comparing HIV-infected patients with and without antidepressant therapy, we found that patients under antidepressant treatment had a longer duration of HIV infection ($p=0.038$). Casuistic data of the psychiatric consultation can be found on Table 2.

More than half of all patients ($n=40$; 58%) started their follow-up in Infectious Diseases Department 10–20 years ago and 81.2% ($n=56$) have been infected more than 10 years ago. Only 7 patients had their HIV infection confirmation in the last 5 years. In what concerns viral load and CD4+ cells count, 88.4% of patients had undetectable viral load (<40 copies/mL) and 63.2% patients presented CD4+ cells between 500–1000 cell/mm³. In summary, the majority of patients had a stable immunological status, represented by low viral loads and high CD4+ cells count.

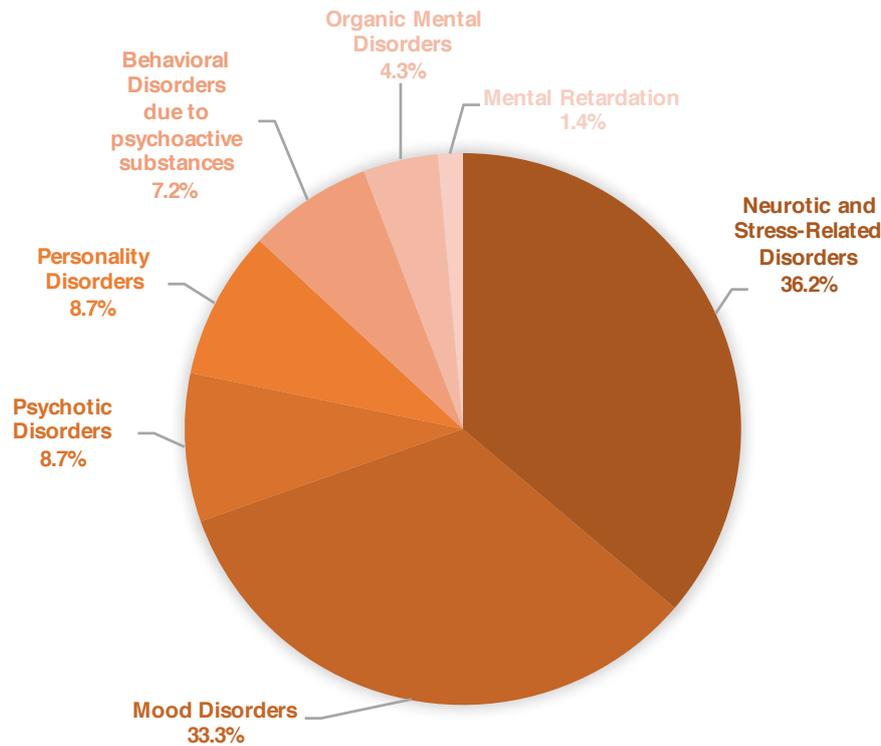


Figure 1. Major diagnostic categories (in %) of patients followed in the study centre.

Discussion

Health care services were forced to change their approach due to the paradigmatic shift of HIV infection to a chronic disease model. This new reality changed the focus of intervention to the treatment of comorbid conditions associated to HIV, in order to diminish risk behaviors and to promote antiretroviral therapy adherence [15].

Our sample is mostly composed by chronic patients. Although the exact role of mental health disorders on chronic HIV infection is not fully understood, the literature suggests that depressive symptoms are recurrent during the course of this medical condition [16]. Psychiatric symptomatology has negative consequences on HIV infection prognosis, namely on antiretroviral therapy adherence and on control of risk behaviors (unprotected sex, numerous sexual partners and psychoactive substances use) [16-18]. The role of Psychiatry became essential on the management of this chronic disease and the multidisciplinary approach including Psychiatry, Psychology and

Infectious Diseases Specialists became an example of an important model for public health interventions.

If depressed, HIV infected patients treated with antidepressants show higher levels of antiretroviral treatment adherence compared to those who remain untreated. Antidepressant drugs are useful in the treatment of somatic symptoms and in pathological changes in sleep and appetite patterns [19]. The clinical stabilization of this population is also a clinical challenge, as HIV infected patients are more sensible to the adverse effects of psychotropic drugs [20].

In our sample HIV-infected patients under antidepressant medication had a superior duration of infection. It is not possible to assume that this difference implies a causal relationship between these two variables, but we can hypothesize that in the natural history of the HIV infection the need of a psychopharmacological intervention will increase according to the duration of the medical disease.

Contrary to what is documented in the literature, where antisocial and borderline personality disorders are described as more prevalent in the HIV-infected population [12-14], we found that the most prevalent personality disorder in our group was histrionic (n=5).

More than half of the total HIV-infected patients of this sample contracted HIV infection sexually (76.5%), which is in agreement with the national statistics [2]. A recent study with HIV-infected patients admitted in an hospital in Oporto shows the opposite trend, in which the most frequent way of transmission was injecting drug use (77.6%), followed by heterosexual risk behaviors (16.8%) and homosexual risk behaviors (5.6%) [21].

Table 1. Personality Disorders in comorbidity in patients followed in Infectious Diseases Department.

Personality Disorders	n=9
F60.2 Dissocial personality disorder	1
F60.3 Emotionally unstable personality disorder	1
F60.4 Histrionic personality disorder	5
F60.6 Anxious [avoidant] personality disorder	1
F60.7 Dependent personality disorder	1

Table 2. Casuistic data of Psychiatric Consultation in Infectious Diseases Department.

Variables	Study population
Number of consultations	117
Number of patients	69
Average age	51.6 years (SD 9.86, Min 30, Max 76)
Age [18;30]	n=1 (1.4%)
Age]30;50]	n=36 (52.1%)
Age]50; 60]	n=21 (30.4%)
Age ≥ 60	n=11 (16.0%)
Gender	
Male	n=33 (47.8%)
Female	n=36 (52.2%)
Nationality	
Portuguese	n=64 (92.8%)
Other	n=5 (7.2%)
HIV transmission	
Endovenous	n=16 (23.5%)
Sexual	n=52 (76.5%)
Homosexual	n=17 (32.7%)
Heterosexual	n=35 (67.3%)
Under antidepressant therapy	n=51 (73.9%)
Under antiretroviral therapy	n=69 (100%)
Viral load (copies/mL)	
Undetectable	n=45 (65.2%)
<40	n=16 (23.2%)
≥40	n=7 (10.1%)
Seronegative*	n=1 (1.4%)
CD4 ⁺ count (cells/mL)	
≤200	n=4 (5.9%)
]200-500]	n=12 (17.6%)
]500-1000]	n=43 (63.2%)
>1000	n=9 (13.2%)
Follow-up in Infectiology (years)	
[30-20]	n=16 (23.2%)
]20-10]	n=40 (58.0%)
]10-5]	n=6 (8.7%)
<5	n=7 (10.1%)
Use of psychoactive substances	
Yes, with active consumptions	n=11 (15.9%)
Yes, without active consumptions	n=7 (10.1%)
No	n=51 (74.0%)
Past of HCV infection	n=15 (21.7%)
Under psychotherapy treatment	
Yes	n=49 (72.1%)
No	n=19 (27.9%)

* Only 1 patient, in 69 patients, had HCV infection exclusively.

The majority of HIV-Associated Neurocognitive Disorders (HAND) are asymptomatic neurocognitive impairment (ANI) or mild neurocognitive disease (MND), but about 5% are severe, representing HIV-associated dementia (HAD). In our sample, 7.1% (n=5) had the latter diagnosis, which represents an independent clinical entity characterized by cognitive, motor and behavioral changes, presenting in advanced HIV disease stages [22]. Mild and moderate depressive symptoms can precede the onset of dementia associated to HIV [23].

Although there are various studies that found no relation between severity of depressive symptoms and neuropsychological impairment [24,25], another suggests a significant relationship between these two variables in HIV-infected patients: with the exception of memory, the greater the severity of depression, the greater is the decline in cognitive domains [26].

The results of this study demonstrate that the most frequent psychiatric pathology in this sample of HIV-infected patients is recurrent depressive disorder, as previously described in the literature, and illustrates the paradigmatic change of HIV infection to a chronic disease model, where the comorbidity with depression has a significant impact. Being a population characterized by recurrent depressive episodes, which often need long-term antidepressant treatment, further indicates the importance of a multidisciplinary approach on HIV infection treatment.

This study has some limitations, namely the sampling method and the small sample size. Using a convenience sampling technique causes problems in terms of representativeness. Other important limitation is that we did not control the introduction of the antidepressant medication, patients could have started it before they have been infected. On the other hand, a balanced gender distribution was achieved, which is a strong point of this study.

Knowing the variable degree of reversibility for clinical situations such as ANI and MND, and that all MND situations do not progress to dementia [27, 28], an investment must be done on early detection of neurocognitive alterations associated to HIV, influenced or not by depression, in order to improve the therapeutic approaches and consequently to improve the life quality of these patients.

This study illustrates the current panorama of HIV-infected population, which now is older with all the aging implications in terms of medical comorbidities, although presenting a stable immunological status; balanced in terms of gender distribution and where the problem of intravenous drug use is less prevalent in relation to sexual risk behaviors.

Abbreviations

ANI: Asymptomatic neurocognitive impairment; HAND: HIV-Associated Neurocognitive Disorders; HIV: Human immunodeficiency virus; MND: Mild neurocognitive disease

Competing interests

The author declares no conflict of interest.

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