Assessment of somatic and affective-cognitive symptoms of people living with HIV/AIDS

Avaliação dos sintomas depressivos somáticos e afetivo-cognitivos de pessoas vivendo com HIV/AIDS

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Abstract

Objective: To analyze the somatic and affective-cognitive symptoms of depression according to the sex of people living with HIV/AIDS.

Methods: Analytic study developed at specialized care services in Ribeirão Preto-SP, including a sample of 331 participants. To collect the data, a sociodemographic characterization tool and Beck's Depression Inventory (BDI) were used.

Results: Among the interviewees, 50.4% were male, 52.1% of whom in the age range between 20 and 35 years. Higher education ($p=0.001$) and lower income (<0.001) were found for the women and more comorbidities ($p=0.004$) for the men. It was identified that the women presented higher mean depression scores in the somatic ($p<0.001$) as well as in the affective/cognitive domains ($p<0.001$).

Conclusion: These study results appoint that the women present higher depressive symptom scores than the man, in the somatic as well as in the affective/cognitive domains of the BDI subscales.

Resumo

Objetivo: Analisar os sintomas somáticos e afetivo-cognitivos de depressão segundo o sexo de pessoas que vivem com HIV/AIDS.

Métodos: Estudo analítico realizado em serviços de atendimento especializado em Ribeirão Preto-SP, com amostra de 331 participantes. Para coleta de dados foram utilizados instrumento de caracterização sociodemográfica e o Inventário de Depressão de *Beck* (BDI).

Resultados: Dos entrevistados, 50,4% eram do sexo masculino e destes, 52,1% estavam na faixa etária de 20 a 35 anos. As mulheres apresentaram maior escolaridade ($p=0,001$) e menor renda ($<0,001$), e os homens apresentaram mais comorbidades ($p=0,004$). Identificou-se que as mulheres apresentaram maiores médias de escores de depressão, tanto no domínio somático ($p<0,001$) quanto no afetivo/cognitivo ($p<0,001$).

Conclusão: Os resultados deste estudo apontam que as mulheres apresentam maiores escores de sintomatologia depressiva do que os homens, tanto no domínio somático quanto no afetivo/cognitivo das subescalas do IDB.

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Introduction

The introduction of Combined Antiretroviral Therapy (cART) and the universal access to these drugs represent a landmark of changes in the treatment and progression of HIV infection. The cART has resulted in more effective infection control, restoring the immunity and reducing the mortality,[1] being currently considered a chronic condition.

In that perspective, it is highlighted that People Living with HIV/AIDS (PLHA) still face many challenges, ranging from the intense clinical monitoring to drug treatment compliance,[2] lack of social support[3] and stigma, which can have implications for their mental health.

Particularly among the mental disorders, depression is the most common psychiatric complications associated with HIV.[4] In PLHA, it is known for being negatively associated with worse compliance with antiretroviral treatment,[5] therapeutic outcomes and risk behaviors,[6] besides its considerable impact in the treatment and social relationships[7] and in the more rapid progression to Aids and death.[1] Hence, the importance of measuring and understanding the influence of depression in this population is highlighted.

In recently published studies, high depression levels have been reported among PLHA around the world.[8,9] In a study developed in the interior of the State of São Paulo, Brazil, it was identified that 63 (27.6%) individuals presented symptoms of depression, being 13 (5.7%) with mild, 29 (12.7%) with moderate and 21 (9.2%) severe, as measured by the Beck Depression Inventory (BDI-I).[10]

In addition, in other studies, it has been reported that the prevalence of depression among PLHA is two to three times higher when compared to the general population.[11,12] Nevertheless, the population living with HIV/Aids consists of several groups with socioeconomic differences and peculiar behavioral characteristics.[8] Therefore, these differences need to be understood.

These studies[11,12] appointed variations between men and women with major depressive disorder in terms of perceived depressive symptoms, as measured by the Beck Depression Inventory.

In Brazil, various studies have been found that assessed depression in PLHA,[13-15] but none of them assessed the somatic and affective-cognitive symptoms among men and women living with HIV/AIDS. The pertinence of assessed sex-related particularities is highlighted with a view to understanding the differences and supporting qualified care. Thus, the objective in this study is to analyze the somatic and affective-cognitive symptoms of depression and to compare the differences according to sex among PLHA.

Methods

An analytic and cross-sectional study was developed at Specialized Care Services (SCS) in a city in the State of São Paulo, Brazil.

The study participants were people living with HIV/AIDS who complied with the following inclusion criteria: having been diagnosed with HIV/AIDS for more than six months, being under clinical and outpatient monitoring at the selected services, male and female and age 18 years or older. Individuals in situations of confinement, such as convicts, and institutionalized individuals, such as people living in support homes, were excluded.

The data were collected through individual interviews, using a tool to collect sociodemographic data and the Beck Depression Inventory in the version adapted to Portuguese.[16]

The BDI-I is a 21-item inventory that describes behavioral, affective, cognitive and somatic manifestations of depression. Each item comes with four alternatives progressively ranging from zero to three, in which the highest scores indicate increased severity of the symptoms. The highest total scores suggest more severe depression symptoms.[17]

According to a review[18] to categorize the affective-cognitive domains, items 1 to 10 and 12 to 14 (sadness, pessimism, feeling of failure, lack of satisfaction, feeling of guilt, feeling of punishment, self-depreciation, self-accusations, social retraction, indecision, suicidal ideas, bouts of crying, distorted body image) to calculate the subscale of cognitive-affective symptoms of the BDI-I (range from 0 to 39).

Similarly, to categorize the somatic domain, items 11 and 15 to 21 should also be added up (irritability, inhibition for work, sleep disorder, fatigue, appetite loss, weight loss, somatic concern and decreased libido) to calculate the somatic symptom subscale of the BDI-I (range from 0 to 24).[19] Higher scores on the subscales mean higher somatic and cognitive-affective disorders.[20]

To analyze the data, the software IBM SPSS version 17.0 for Windows was used. Descriptive analysis was applied to characterize the sample, Student's t-test for independent samples compared the mean domain scores of the somatic and affective/cognitive symptom subscales and the Mann-Whitney test was used to calculate the mean item scores. Significance was set at 0.05.

Approval for the study was obtained from the Research Ethics Committee at the University of São Paulo at Ribeirão Preto College of Nursing, protocol nº 0699/2006. The participants received information on the study objectives and data secrecy and anonymity were guaranteed. Data collection stated after they had given their agreement by means of the Free and Informed Consent Form.

Results

The study participants were 331 people living with HIV/Aids, being 167 (50.4%) male and 164 (49.5%) female. Ages ranged between 20 and 71 years, with an average age of 40 years.

As far as the participants' profile is concerned, 64.0% had more than eight years of education and 88.2% received between 1 and 3 minimum wages. In addition, most women (72.6%) had a higher education level (p=0.001) but a lower income (<0.001) than men, with a statistically significant difference.

Concerning the clinical characteristics, the men (61.1%) presented more comorbidities than the women (45.1%) (p=0.004), although without a statistically significant difference in CD4 cell counts (Table 1).

Table 1. Sociodemographic and clinical profile of people living with HIV/Aids according to sex (n=331)

Variables	Male (n=167) n(%)	Female (n=164) n(%)	Total 331 n(%)	p-value
Age range				0.459†
20-35	87(52.1)	95(57.9)	182(55.0)	
35-59	76(45.5)	67(40.9)	143(43.2)	
> 60	04(2.4)	02(1.2)	06(1.8)	
Education (years of study)				0.001*
≤ 8	74(44.3)	45(27.4)	119(36.0)	
> 8	93(55.7)	119(72.6)	212(64.0)	
Income (minimum wages)				<0.001†
≤ 3	133(79.6)	159(97.0)	292(88.2)	
> 3	34(20.4)	05(3.0)	39(11.8)	
Presence of comorbidities				0.004*
Yes	102(61.1)	74(45.1)	176(53.2)	
No	65(38.9)	90(54.9)	155(46.8)	
CD4 counts (cells/mm3)				0.909
> 500	69(41.3)	64(39.0)	133(40.2)	
499-200	66(39.5)	68(41.5)	134(40.5)	
< 200	32(19.2)	32(19.5)	64(19.3)	

*Chi-squared test; †Fisher's exact test

In table 2, the mean scores in the somatic and affective/cognitive domains of the BDI are compared between men and women living with HIV/Aids. It was identified that the women presented higher means with a statistically significant difference, in the somatic (p<0.001) as well as in the affective/cognitive domain (p<0.001).

Table 2. Comparison of mean domain scores in Beck Depression Inventory according to sex (n=331)

BDI*	Woman (n=164)	Man (n=167)	Woman/Man (n=331)	p-value
Somatic BDI				
$\bar{X}$ (SD)[a]	5.9(5.1)	4.1(3.9)	5.06 (4.6)	<0.001**
Mean	4.0	3.0		
Affective/cognitive BDI				
$\bar{X}$ (SD)[a]	8.7 (9.4)	5.4 (6.5)	7.07 (8.2)	<0.001**
Mean	5.0	3.0		

[a] $\bar{X}$ (SD): mean (standard deviation); *Beck Depression Inventory; **Student's *t*

In table 3, it was verified that women present higher scores with a statistically significant difference in 14 BDI items when compared to men.

Table 3. Distribution of mean items scores in the domains of the Beck Depression Inventory according to sex (n=331)

Variables	Women (n=164) $\bar{X}$ (SD)[a]	Men (n=167) $\bar{X}$ (SD)[a]	p-value[b]
Affective/cognitive BDI			
Sadness	0.75(1.0)	0.47(0.8)	0.003
Pessimism	0.71(1.1)	0.34(0.9)	0.001
Feelings of failure	0.45(0.9)	0.25(0.8)	0.001
Lack of satisfaction	0.81(1.0)	0.41(0.9)	0.001
Feeling of guilt	0.71(0.8)	0.53(0.8)	0.001
Feeling of punishment	0.91(1.0)	0.95(1.1)	0.983
Self-depreciation	0.48(0.7)	0.27(0.6)	0.005
Self-accusations	0.65(1.1)	0.56(1.0)	0.706
Suicidal ideas	0.36(0.5)	0.14(0.4)	0.001
Bouts of crying	0.80(1.1)	0.47(0.9)	0.001
Indecision	0.63(1.1)	0.35(0.9)	0.008
Distorted body image	0.73(0.9)	0.44(0.8)	0.014
Social retraction	0.71(0.9)	0.29(0.7)	0.001
Somatic BDI	0,97(1.1)	0.29(1.1)	0.001
Irritability			
Inhibition for work	0.60(1.1)	0.38(1.1)	0.018
Sleep disorder	0.80(1.3)	0.61(1.2)	0.286
Fatigue	0.74(1.0)	0.53(1.0)	0.053
Appetite loss	0.48(0.9)	0.35(0.75)	0.172
Weight loss	0.38(0.8)	0.43(0.8)	0.571
Somatic disorder	0,74(1.1)	0.68(1.1)	0.681
Decreased libido	1.24(1.3)	0.41(0.9)	0.001

[a](SD): mean (standard deviation) *Beck Depression Inventory [b]Mann-Whitney Test

Discussion

As a limitation in this study, we can highlight the cross-sectional study design, which does not permit highlighting the causal relations among the research variables, nor appointing whether the individuals already presented depressive symptoms before the diagnosis of the HIV/Aids infection. In addition, being a self-assessed measure, the use of the BDI can be related with a response bias.

The sociodemographic and economic characteristics of the people living with HIV/Aids evidenced in this study support other background studies developed in Brazil[15,20] and around the world.[10,19,21]

In the United States, depression is very common and, according to one study,[11] the overall prevalence rate was estimated at 6.6%, while ranging between 5 and 10% in PLHA. Similarly, in a Brazilian study, a higher prevalence rate of depressive symptoms was found in PLHA, equivalent to 27.6%, measured by the BDI.[10]

Some authors present a high prevalence of depression in PLHA, exerting a significant impact in the development of diseases and being registered as one of the main causes of suicide and psychiatric appointments.[6]

Despite the high depression rates identified in this population, however, knowledge gaps about depression remain among PLHA in low and middle-income countries.[4] And the difference in the depressive symptoms of men and women living with HIV in Brazil according to the BDI domains is not understood yet, which made it difficult to compare these results with other studies developed in the country.

When comparing the occurrence of depressive symptoms among the sexes, a higher proportion was found for women than for men, according to other background studies in the same population.[12,13]

In the same perspective, there are studies that suggest that female vulnerability to depression is also associated with socioeconomic disadvantages[4] and lack of social support.[7] In addition, other authors argue that women are more prone to experiencing negative social determinants, assuming a disproportional load in care delivery, and mostly correspond to a low and middle-income population, besides the accumulation of housework and child raising activities.[13,22]

These study result appoint that women present higher means in the two domains, with the highest mean score for the affective/cognitive symptoms subscale. This result is similar to a study that assessed somatic and cognitive-affective depression symptoms in cardiac patients.[19]

The affective-cognitive symptoms present subjective elements that can be characterized by pessimism, feeling of guilt and punishment. Therefore, some behavioral practices need to be adopted to minimize this situation, such as cognitive-behavioral treatment to reduce the person's suffering.[23]

Irritability, reduced libido and disposition for work were the most prevalent and significant somatic symptoms for women. This decrease in sexual desire in women can be explained by a coping strat-

egy of PLHA who, in the attempt to protect their serum status and the health of third parties, avoid sexual relationships or even affective relationships, which can aggravate the effect of depressive symptoms even further.[4]

The lack of disposition for work, as well as other symptoms (fatigue and social isolation) were appointed as important predictors for the development of depression and associated with the use of antiretroviral drugs.[24]

People living with HIV generally present a form of coping through isolation (elusion, self-blame, confrontation, distancing) instead of active coping (problem solving, search for social support, acceptance of responsibility, positive reappraisal).[24]

We agree with other researchers that the separate use of the BDI subscales entails implications for clinical practice,[19] as it permits identifying the type and severity of the depression symptoms, which can contribute to the health team's interventions. Depression is a complex disease with multiple symptoms that affect the health and quality of life of the patients in a very particular way.

In the Brazilian context, a great power disequilibrium remains between the roles men and women play in society, which continues to deny women's access to their sexuality and at the same time blames her for prevention and health care.

Women with depressive symptoms whose family and friends deny them social support in view of the HIV/Aids diagnosis turn to health professionals in search of support and understanding.[18,25] The results also indicate that PLHA are victims of depressive symptoms and that health professionals should take this into account in the clinical management of their patients. An in-depth understanding of this relation contributes to a better care practice for people living with HIV/Aids.

These symptoms can be mixed up with adverse effects of the cART, being undervalued by professionals or even by the patients. In our results, these changes can be grouped under Somatic Symptoms of the BDI, demonstrating how the use of validated tools can be applied in the daily work of health professionals and guidelines for their clinical practice.

In that sense, it is fundamental for physicians, nurses and other health professionals to understand and identify the depressive symptoms and their severity, as these are manifested differently between men and women.

In addition, the relevance of this study for nursing care for the sake of support is appointed, allowing these professionals to identify depressive signs and symptoms early and to make interventions to reduce the symptoms and prevent the complications, thus guaranteeing qualified comprehensive care.

Identifying the symptoms of depression in the population living with HIV/Aids is an important step to develop therapeutic interventions and psychosocial support for this population, aiming not only for appropriate treatment, but also for the prevention of depressive episodes, in view of the high prevalence of depression and the different manifestation of its symptoms in the population living with HIV/Aids.

Conclusion

These study results appoint that the women present higher depressive symptom scores than the men, in the somatic as well as in the affective/cognitive domain of the BDI subscales. Understanding these differences is fundamental to propose effective interventions. Assessing the manifestation of depressive symptoms among people living with HIV/Aids should be part of the monitoring for this population, as manifestations differ between men and women. The identification and appropriate screening for psychiatric comorbidities, particularly for depressive symptoms, is fundamental in health care for PLHA, who can benefit from the treatment with improved compliance and quality of life. Screening for depressive symptoms is recommended at the start of the treatment and monitoring is due in the course of health care monitoring.

Collaborations

Reis RK, Castrighini CC, Melo ES, Jesus GJ, Queiroz AAFL and Gir E declare that they contributed to the conception of the project, analysis and interpretation of the data, writing of the article, relevant critical review of the intellectual content and final approval of the version for publication.

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