

Depression, Suicidal Ideation and Social Support in Patients with HIV/AIDS

Andrés Vázquez Machado*¹, Julienne Mukamutara², Renin Manuel Santos Lora³ and Raúl Michel Escalona González³

¹ Jimmy Hirzel Policlinics, Bayamo, Granma, Cuba.

² Central Hospital of Nampula, Nampula, Mozambique.

³ Efraín Benítez Popa Medical Sciences Faculty, Bayamo, Granma, Cuba.

*Corresponding Author: Dr. Andrés Vázquez Machado, Jimmy Hirzel Policlinics, Bayamo, Granma, Cuba.

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Abstract

Introduction: The most common mental disorder in patients with HIV/AIDS is depression. However, it is considered to be underdiagnosed and under-treated in HIV positive patients.

Objective: To identify the presence of depression, suicidal ideation and the perception of social support in patients with HIV/AIDS.

Methodology: Cross-sectional study with 626 HIV positive patients assisted at the Central Hospital in Nampula. Socio-demographic variables, depressive symptomatology, diagnosis of depressive disorder and social support were studied. Bivariate analyzes were performed to determine the relationship between lack of social support, the presence of depression, and suicidal ideation.

Results: The frequency of depressive symptoms and depressive disorder was 43.8% and 27.5% respectively. The most frequent nosological diagnoses were: major depressive disorder and adjustment disorders. 19.6 % of the patients had suicidal thoughts and 27.5% did not have the support of relatives, partners or other close people. Lack of social support was significantly associated with the presence of depressive symptoms, with the diagnosis of some depressive disorder and the presence of suicidal ideation.

Conclusion: Depression is frequent in HIV positive patients. Lack of support on the part of the couple, family and other close friends is significantly associated with the presence of depression and suicidal ideation.

Keywords: Depression, HIV, social support, suicidal ideation

Introduction

The most common mental disorder in patients with the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) is depression. According to published studies, 54% of patients infected with HIV present depressive symptoms (1). The estimated prevalence of depressive disorder throughout life is 22% to 45% in people with HIV (2); while 40% of HIV positive people meet criteria for depressive disorder (3) and the probability of presenting it is 2 or 3 times higher than in seronegative subjects (2,4). In women with HIV/AIDS, 4 times higher rates of depression have been found when compared to HIV negative women (3). A meta-analysis reported that the prevalence of depression in people living with HIV in eastern African countries is 38%; with an estimated of 30.9% in Uganda and 49.8% in Ethiopia (5). However, depression is considered to be underdiagnosed and under-treated (3,6) in HIV-positive patients, so more research is needed to provide evidence.

The presence of depression in these patients increases stigma, raises mortality and damages the immune system more. Rapid disease progression, poor adherence to antiretroviral therapy (ART), and poorer treatment outcomes are also evident, with increased costs for disability and mortality (2,3,5,6). Its early detection can contribute to improve the evolution of the disease and the quality of life of the individual.

Suicidal ideation is common among people infected with HIV; there is also an increase in suicide attempts and suicides when compared to the general population, although a decrease in suicide rates is observed after the advent of antiretrovirals. Some studies report frequencies of suicidal ideation between 15 % and 34.7 % in HIV-positive people. The early identification and appropriate treatment of infected patients who have suicidal thoughts help to improve their mental health, treatment adherence, and overall quality of life (4,7,8). In addition, it should contribute with the reduction of suicide death rates in this type of patient.

Social support serves to reduce psychological stress in people living with HIV. Its absence increases the presence of psychopathology, worsens the quality of life and has unfavorable effects on the treatment results. The support provided by family members (emotional, company, acceptance, financial assistance) is vital to provide an environment of psychological well-being, reduce the appearance of complications and promote therapeutic adherence; their presence is more important than the one provided by social support networks (community, governmental and non-governmental organizations) (9). However, few studies explore the role of support provided by the main networks available to the individual, in presenting depressive symptoms and suicidal ideation in HIV-positive people.

Ownby et. al. affirm that social stigma negatively influences the patient's interaction with family, friends, partners, neighbors, coworkers and health professionals, resulting in the absence of social support. They consider that having adequate support significantly reduces the effect of social stigma and the risk of depression in people with HIV infection (10).

According to estimates, in Mozambique around 1.5 million people were living with HIV in 2007. Deaths from AIDS-related causes increased from 45,000 people in 2000 to 97,000 in 2005. The estimated prevalence is 11.5 %. The rate of patients with poor therapeutic adherence is considered to be high, related to several factors, such as low family support. Evidence of the negative effect of the lack of support in the care of patients with HIV/AIDS will promote the development of strategies aimed at fostering the support of families and communities towards these patients (11,12).

The Government of Mozambique guarantees the social support of sick people in terms of health care, by providing free medical and hospital care, social assistance and the provision of antiretrovirals at no cost. Social support in the communities by relatives and other close people is more difficult to ensure (13); however, the decisive importance that it has in therapeutic adherence and the favorable evolution of the patient is known. At the Central Hospital of Nampula 3 people with HIV/AIDS committed suicide (by defenestration) in hospital wards in the 6 months prior to the study. All this motivated the accomplishment of this investigation with the objective of identifying the presence of depression, suicidal ideation and the perception of social support on the part of the couple, relatives and other close people who have patients with HIV; as well as the relationship between these variables.

Methodology

Study design and sample

A cross-sectional, case series study was conducted with 626 HIV positive patients treated over a period of 2 years.

Study variables

Those who tested positive on the Uni-Gold Recombigen Rapid HIV Test were considered HIV positive.

All the selected patients were collected information regarding sociodemographic variables (age, sex, education, occupation and marital status).

The interview allowed authors to identify the presence of depressive symptoms and suicidal ideation. The diagnosis of depressive disorder was made according to the DSM IV criteria. Depressive disorders also included adjustment disorders with depressed mood and mixed mood (anxious depressive); as well as personality disorders and mild mentally retardation that were decompensated with a depressive manifestation.

The support of relatives, partners and close friends (friends, neighbors, coworkers) was explored. For this, questions were asked about whether they received financial, food, emotional support from these people. Lack of support was considered when the patient responded: I do not receive support or, I receive little support.

Data collection

All HIV positive patients who were admitted to medical wards, or were seen in the hospital's diabetes, psychiatry and ART consultations were evaluated through interviews, conducted by a psychiatrist and a psychologist (authors) in a suitable location, taking care of privacy rules. When the presence of psychological symptoms was detected, the patient was evaluated by the psychiatrist to make the nosological diagnosis.

Statistical analysis

The information obtained through the interviews was taken to a database made on an electronic Excel spreadsheet (Microsoft). One-dimensional and two-dimensional tables were prepared for the distribution of absolute and relative frequencies. Percentages were used for processing and analyzing. Bivariate analyzes were performed to determine the association between the lack of social support and the presence of depressive symptoms; with the diagnosis of depressive disorder and suicidal ideation.

The association between lack of social support with the presence of depressive symptoms plus suicidal ideation and lack of social support with having a depressive disorder plus suicidal ideation were also estimated. The association with a probability equal to or less than 0.05 was considered significant. The odds ratio was calculated with a 95% confidence interval. The statistical package EPINFO version 2002 was used.

Ethical Considerations

Prior to carrying out the research, authorization was obtained from the Scientific Committee (acts as the Ethics Committee) of the HCN. The data obtained were used only for the purposes of this investigation, complying with professional secrecy by not disclosing any information that affects the privacy of the person.

Results

During the study period, 626 HIV positive patients were evaluated. Half of the patients were under 35 years old; predominantly married or accompanied, those who had secondary or higher education and did not have a job. Women represented 52.7% of the sample (Table 1).

Table 1. Sociodemographic characteristics of patients with HIV/AIDS. HCN. 2014-2016.

Sociodemographic characteristics	Female		Male		Total	
	n° (n=330)	%	n° (n=296)	%	n° (n=626)	%
Age group						
15 - 34 years	177	53.6	136	45.9	313	50.0
35 - 54 years	128	38.8	136	45.9	264	42.2
55 and over	25	7.6	24	8.1	49	7.8
Marital status						
With couple	147	44.5	207	69.9	354	56.5
Single	183	55.5	89	30.1	272	43.5
Scholarship						
Primary	140	42.4	113	38.2	253	40.4
Higher than primary	190	57.6	183	61.8	373	59.6
Occupation						
With employment	101	30.6	200	67.6	301	48.1
Unemployed	229	69.4	96	32.4	325	51.9

43.8% of the patients had depressive symptoms and 65.1% of them met DSM IV criteria for some type of depressive disorder. This total includes 5 patients with a diagnosis of Grief Reaction, which were not reflected in the table because grief was considered a normal adaptive reaction and not a disease. The most frequent diagnoses were major depressive disorder, adjustment disorders, and dysthymic disorder. Overall, the frequency of depressive disorder was 27.5%. The presence of suicidal ideation was explored in 588 patients and was present in 19.6% of them (Table 2).

Table 2. Depressive symptoms, suicidal ideation and nosological diagnosis in patients with HIV/AIDS. HCN. 2014 - 2016.

		n°	%
Depressive symptoms		274	43.8
Suicidal ideation*	With depressive symptoms	97	16.5
	No depressive symptoms	18	3.1
Nosological diagnosis			
Major depressive disorder		72	11.5
Adjustment disorders†		66	10.5
Dysthymic disorder		15	2.4
Personality disorder‡		7	1.1
Anxious depressive disorder		5	0.8
Mild mental retardation‡		3	0.5
Depression associated with physical illness		3	0.5
Substance-induced depression		1	0.2

*in 588 patients

† includes adjustment disorders with depressive mood and mixed adjustment disorders with depressive mood and anxiety.

‡ includes only those who were upset with depression

The perception of social support was explored in 600 patients and of these, 27.5% did not receive support from their relatives, partners or other close people.

Lack of social support was significantly associated ($p < 0.05$) with the presence of depressive symptoms, the diagnosis of some depressive disorder and the presence of suicidal ideation. Patients who do not receive support are 3 times more likely to become depressed and have suicidal ideation than those who are supported by family members, partners, and others close to them. Patients with depressive symptoms + suicidal thoughts are 5.81 times more likely to have no social support; this probability is 6 in those who received a diagnosis of depressive disorder + suicidal thoughts (Table 3).

Table 3. Relationship of the lack of social support with the presence of depressive symptoms, depressive disorders and suicidal ideation in patients with HIV/AIDS. HCN. 2014 - 2016.

	Lack of SS	X ²	p	OR	LI	LS
Depressive symptoms (%)	65.4	40.3948	0.000*	3.29	2.26	4.79
Depressive disorder (%)	47.3	36.8444	0.000*	3.16	2.16	4.63
Suicidal ideation (%)	39.4	29.4336	0.000*	3.06	2.02	4.64
Depressive symptoms with suicidal ideation (%)	35.8	64.3418	0.000*	5.81	3.67	9.22
Depressive disorder with suicidal ideation (%)	28.5	54.8192	0.000*	6.02	3.59	10.08

SS: social support.

*Variables that showed significant association during bivariate analysis

Discussion

According to the results of this research, people infected with HIV are predominantly young and female. The prevalence in women is considered to be the result of biological factors that make them more susceptible to infection. Gender inequality, poverty, and lack of economic and educational opportunities affect them the most and induce them to have sex in exchange for money or other material resources; they are victims of raping more frequently, and forced sexual relations nullify the possibility of requiring the use of condoms. Women offer more than men for research due to pregnancy and other programs aimed at preventing vertical transmission of HIV (11,14).

The presence of depressive symptoms is high in these patients and most of the depressed individuals meet criteria for some nosological diagnosis. The researchers' explanation is that depression in HIV/AIDS patients is related to biological, psychological, and social factors. The effect of the virus on the brain monoaminergic system and the probable increase in neuroinflammatory markers are invoked in the pathogenesis of the disorder. It can be the result of guilt, shame or a psychological reaction when feeling rejected by family, friends and society in general (1,6,10,14). Some opportunistic diseases such as Kaposi's sarcoma, neurological infections, among others, favor the appearance of depressive symptoms (15). The perceived threat of life-threatening illness, limitations on having children, fear of adverse reactions from antiretroviral drugs, and the presence of stressful life events often predispose to depression.

This frequency of depression is in correspondence with other research carried out in African countries. In an Addis Ababa hospital, Ethiopia, 41.2% of seropositive patients were reported to have depression according to the Hospital Anxiety and Depression Scale (HADS) (2). Abadiga reported a similar result (41.7%) in the same country, but at the Gimbi General Hospital, using the PHQ-9 as a diagnostic instrument for depression (15). In investigations carried out in other countries of this continent, higher figures were reported. At a Kwara State Hospital, Nigeria, 56.7% of people on ART were depressed according to PHQ-9 criteria (16). In a ART clinic in a hospital in Pretoria, South Africa, the prevalence of depressive symptoms was 53.8% according to the Center for Epidemiological Study Depression Scale (CES-D) (17). At Khartoum Hospital, Sudan, 63.1% of the HIV-positive surveyed patients had depression (18); results equal to those reported in Yaoundé, Cameroon, with patients who tested positive for HIV in the last 6 months (19). At a Primary Care Clinic in Harare, Zimbabwe, 68.5 % of people living with HIV scored for depression according to PHQ-9 (20).

High numbers are also reported in countries on other continents. A review, which included 50 studies of patients living with HIV / AIDS in China, found that the prevalence of depression or depressive symptoms ranged from 18.3% to 86.9% with an average prevalence of 50.8 %. The researchers included articles where structured interviews were conducted to diagnose depression and others that used various scales that explored depressive symptoms (21). A study at a London Mental Health Clinic reported that in 2005, 45 % of patients with HIV had depression, which increased to 47 % in 2014 (22). In Lahore, Pakistan, 44 % of the patients had depressive symptoms (23). In the Liaoning province, China, a frequency of depression of 64.4 % was found, with very high rates among women (9). In a hospital in Dheli, India, 58.7 % of ART patients were depressed (24).

The disclosure of the positivity of the HIV test is beneficial for the patient because it enables the early initiation of treatment, the reduction of the risk of transmission to other people through sexual contact, or vertical mother-child transmission. However, it has a negative emotional impact on the individual, with the perception of termination of life (25), which can trigger depressive symptoms such as an adaptation reaction (19), which can vary as other factors such as disclosure to the couple, the family reaction and the social stigma (26). Some frequent behaviors in seropositive and depressed patients, such as alcohol and other drug abuse, contribute to aggravating symptoms (25).

Numerous studies agree that MDD is the most frequent mental disorder in patients with HIV / AIDS (1,7,8,27); however, all the reviewed articles used instruments that evaluate depressive symptoms. In this investigation, the patients were interviewed by the authors and the nosological diagnosis was made by a single psychiatrist using DSM IV criteria. This reduces the information biases that occur when using inventories of depressive symptoms, as it reduces the possibility that some clinical manifestations of the disease (fatigue, anorexia, weight loss, insomnia) will be confused with depressive symptoms, which can cause wrong diagnosis of depression or omission of diagnosis. It also eliminates the answer-inducing questions used in structured diagnostic interviews.

MDD seems to be more related to infection-dependent biological factors, such as the effect of the virus on the central nervous system, the immune system, and the endocrine system; also as a reaction to social stigma and guilt. Adjustment disorders appear as a consequence of knowing that the person is HIV positive; also with changes in clinical stages of the disease and exposure to other adverse life events (14).

The presence of suicidal ideation is high in this study, which corresponds to the numbers of depressed people, since having suicidal thoughts is a common symptom in people with depression; although not all depressed people have suicidal thoughts, neither everyone who expresses suicidal thoughts is depressed. Depression carries a high suicide risk; when the person with HIV expresses these ideas, the clinician must take into account the possibility of suicide, and therefore should prioritize the care of this type of patient from the point of view of their mental health.

The occurrence of 3 suicides in the wards of this hospital, in the 6 months prior to this investigation, and the non-occurrence of any in the 2 years that the investigation lasted, attests to this.

This frequency of suicidal ideation is higher than that reported by Egbe and collaborators in treatment centers for people with HIV/ AIDS in Nigeria, where 14.3 % of the patients reported having suicidal thoughts (8); but it is lower than the one found by Gebremariam and collaborators in an Ethiopian hospital where 22.5 % of the patients manifested suicidal ideation (28) and Zeng and collaborators who reported a frequency of 29.7% in patients from a hospital in China (29). The differences may be related to the design of the investigations, since in the present study only the presence of the current suicidal idea was collected; while in the aforementioned studies the presence of suicidal thoughts was explored during the 6 or 12 months prior to the interview or since the diagnosis of seropositivity was received.

Some researchers point out that suicidal ideas are a response to the rejection of the couple and the relatives once they know the seropositive status of the patient (29); they can also be a consequence of fear of complications to come, or when they appear. Adverse reactions from antiretroviral drugs, exposure to stressful life events, loss of the meaning of life and the suffering caused by depression can make the individual consider that ending life is an outlet for this state of psychological pain (30).

A little more than ¼ of the patients consider that they receive little or no support from close friends. There is evidence that social support has a beneficial effect on health, reinforces therapeutic adherence in patients with HIV, reduces vulnerability to stress, improves quality of life and protects against psychological distress (31).

This study showed that not having social support from the couple, relatives and other close people increases the probability of presenting depressive symptoms, meeting criteria for the diagnosis of a depressive disorder and having suicidal thoughts. Evidence of the relationship between lack of social support and the presence of depression and an increased risk of suicide should stimulate further research on the subject; make the psychological evaluation of all HIV positive people a habitual practice and promote social support from close sources (couple, family, community), which will result in more comprehensive care for the patient, with a better quality of life.

Some studies have associated lack of social support with the presence of depressive psychopathology in HIV positive people. Duko and colleagues at 2 hospitals in southern Ethiopia found that people with poor social support had significantly more depression than those with good support (32). Bhatia and Munjal reported that patients who had good family support had a low prevalence of depression; while those who rated family support as poor, had high frequencies of depression (24). A study with HIV-positive adolescents and youngsters from 9 hospitals in Addis Ababa, Ethiopia reported that having little social support (according to an evaluation scale) increases the probability of having depressive symptoms by almost 3 times (33). Abadiga found that patients with poor social support were 10 times more likely to have depression than those with strong support networks (15).

In the study by Wonde et al., having little social support was associated with the presence of suicidal ideas. These authors point out that social support has an important role in the psychological adaptation of people living with HIV/AIDS, that its absence creates feelings of loneliness and helplessness, with weakening coping mechanisms for the disease and related factors with it, which increases the suicide risk (30).

Among the sources of social support, the one that most helps in adapting the patient to the disease is the support provided by the family and the couple, which protects them from the emotional impact that physical illness produces and improves therapeutic adherence. Emotional support is the most important (4); however, the majority of the population in this study has very low economic incomes, so financial and nutritional supports are vital to deal with HIV/AIDS.

The usefulness of this study is that it contributes to warn about the high prevalence of depression in people infected with HIV and the relationship it has with the lack of social support. It is a pioneering study in Mozambique, despite the country having a high prevalence of HIV/AIDS. The fact that individual interviews were carried out using standardized diagnostic criteria, makes the diagnosis of depression more reliable, with a reduction in overdiagnosis and underdiagnosis. Its limitation is given in the way of choosing the sample, which does not allow the results to be generalized. In addition, since they are people who have entered hospital wards or have been to outpatient clinics, the presence of typical complications of the disease is higher and this can influence the results, so it is necessary to carry out other investigations with community samples.

Conclusion

The presence of depressive symptoms, depressive disorders and suicidal ideation are high in HIV positive patients. The lack of support from the couple, family, friends and other close friends, increases the probability of depression and suicidal thoughts in these patients; therefore, the psychological evaluation of all sick patients should become daily practice and support promotion from the closest networks.

Conflict of Interest

The authors declare no conflict of interest.

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