



THE PREVALENCE OF DEPRESSION AMONG HIV POSITIVE PATIENTS IN BSHAIR TEACHING HOSPITAL IN KHARTOUM - SUDAN

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ABSTRACT

Background: Depression also called major depressive disorder or clinical depression, it affects feeling, thinking and behavior and can lead to a variety of emotional and physical problems, it is a mood disorder that causes a persistent feeling of sadness and loss of interest. Depression is not a normal part of growing older, symptoms of depression may be different or less obvious in older adults, such as memory difficulties or personality changes, physical aches or pain, fatigue, loss of appetite, sleep problems or aches. Depression may require long-term treatment but don't get discouraged. Most people with depression feel better with medication, psychological counseling or both. HIV/AIDS (HIV) is one of the most devastating illnesses that humans have ever faced. It is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus. Depression is the most common neuropsychiatric complication of HIV disease. The aim of this study is to determine the prevalence of depression among HIV patients in Bashair Teaching Hospital in Khartoum State. **Methods:** This is a cross sectional hospital based study conducted to measure the prevalence of depression among HIV patients in Bashair Hospital. A sample of 80, 46 were males and the other 34 were females were interviewed by structured questionnaire. **Results:** The prevalence of depression among HIV patients in Bashair Teaching Hospital was 19 % and that the percentage of males who have depression is higher than the females and the difference is not significant. The highest was in patients who were educated until lower standard (primary and secondary school). There is an association between depression and the duration of diagnosis. There is no association between depression and the monthly salary. **Conclusion:** The prevalence of depression in HIV patients is 19 %.

KEYWORDS: Depression, HIV, AIDS, Neuropsychiatric.

INTRODUCTION

Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. Depression is also associated with isolated lives and the absence of pleasure, social and vocational impairment.^[1] It is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and sense of well-being.^[2]

There are nine symptoms listed in the Diagnostic and Statistical Manual IV (DSMIV) for depressive disorder namely, sleep disturbance, interest/pleasure reduction, guilt feelings, thoughts of worthlessness, energy changes/fatigue, concentration/attention impairment, appetite/weight changes, psychomotor disturbances, suicidal thought and depressed mood. For diagnosis of major depression, five of the nine must be present for at least two weeks and one of those five must be loss of interest or pleasure or depressed mood.^[3]

Life events and changes that may precipitate depressed mood include childbirth, menopause financial difficulties, job problems, a medical diagnosis (cancer, HIV, etc.), bullying, loss of a loved one, natural disasters, social isolation, relationship troubles, jealousy, separation, and catastrophic injury.^[4]

Depression is the most common neuropsychiatric complication of HIV disease.^[4] In the context of HIV/AIDS, depression is overlooked but potentially dangerous condition that can influence not only quality of life, relationships, employment, and adherence to medical care, but also perhaps survival.^[5]

The HIV/AIDS pandemic has caused far-reaching effects in low-income countries. Sub-Saharan Africa has been particularly hard hit. In 2010, 68% of all people living with HIV resided in Sub-Saharan Africa, a region with only 12% of the global population.^[6]

The World Health Organization predicted that by the year 2020, depression will be the leading cause of worldwide disability.^[7] HIV/AIDS and depression are projected to be the world's two leading causes of disability by 2030.^[8]

HIV

Acquired immunodeficiency syndrome (AIDS) is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV). By damaging the immune system, HIV interferes with the body's ability to fight the organisms that cause disease. HIV is a sexually transmitted infection. It can also be spread by contact with infected blood.^[9]

HIV is an enveloped RNA virus from the lenti virus family. After mucosal exposure HIV is transported in the lymph nodes via dendritic cells where infection become established. This is followed by viremia and disseminated to lymphoid organs, which are the main sites of viral replication.^[10]

As the virus continues to multiply and destroy immune cells, patients may develop mild infections or chronic signs and symptoms such as fever, fatigue, swollen lymph nodes often one of the first signs of HIV infection, diarrhea, weight loss, oral yeast infection (thrush) and hingles (herpes zoster). If patients received no treatment for HIV infection, the disease typically progresses to AIDS in about 10 years. Significant psychiatric morbidity is very common and is major risk factor for poor adherence. Reactive depression is the most common disorder.^[9]

OBJECTIVES

The aim of this study is to study the prevalence of depression among HIV patients in Bashair Teaching Hospital, in Khartoum State and to identify the

relationship between gender and level of education and monthly salary with depression, and to assess the association between duration of disease and depression among HIV patients.

METHODS

This is a descriptive, Cross sectional hospital based study conducted among HIV positive patients. Data was collected from 80 patients who attended Bashair Teaching Hospital during the period of the study, using structured interview questionnaires after obtaining informed consent from all participants.

Beck depression inventory contains 21 questions, each answer being scored on a scale value of 0 to 3. The cutoff used differs from the original; patients who scored (0-13) diagnosed as having minimal depression; those who scored (14-19) as mild depression; those who scored (20-28) as moderate depression; and those who scored (29-63) as severe depression.

Data analysis: Data analysis was performed using the Statistical Package for the Social Science (SPSS).

Ethical concern: Any data of participant in this study handle, treated, and analyzed with high confidentiality after been obtained with verbal and written consent before filling the questionnaire.

RESULTS

The study was conducted in 80 patients, 46 were males (57.5%) and 34 were females (42.5%). As shown in figure (1). The mean of the ages of the study population is 40.85 with standard deviation ± 8.9 . Marital status showed that 55% of them were married, 15% were unmarried, 16.2% were divorced and 13.8% are widows see table (1).

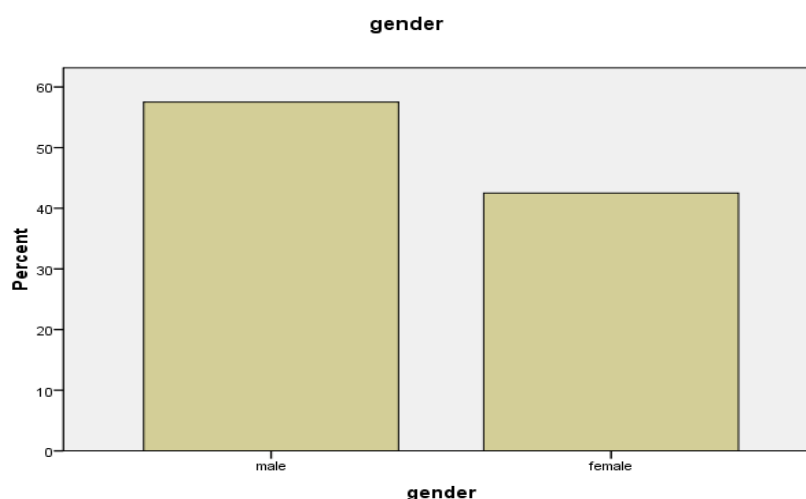
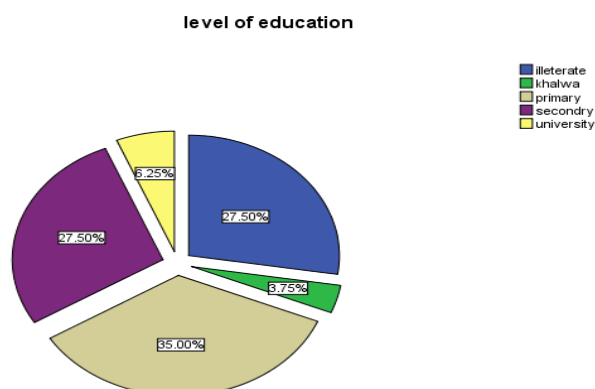


Figure 1: Gender distribution in study population.

Table 1: Marital status of the study population.

		Frequency	Percent
Valid	Married	44	55.0
	Unmarried	12	15.0
	Divorced	13	16.2
	Widow	11	13.8
	Total	80	100.0

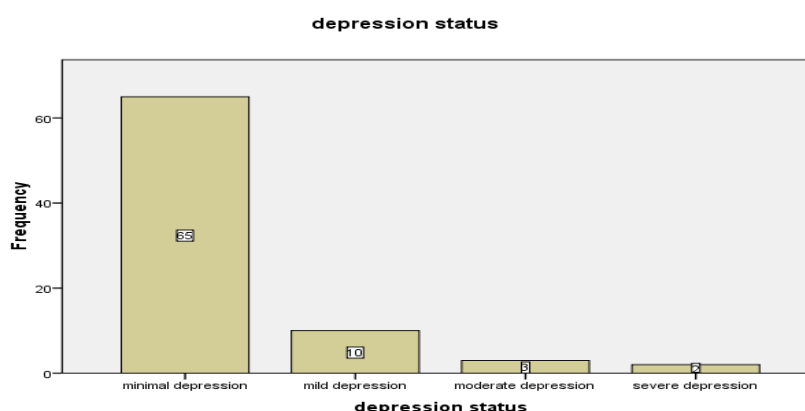
Level of education showed that 27.50% were illiterate, 3.75% attended khalwa level, 35% were at primary school level, 27.50% were at secondary school level and 6.25% at university level as in figure (2).

**Figure 2: Distribution of education level in the study population.****Table 2: The relationship between Gender and Depression.**

Depression status		Gender		Total
		Male	Female	
minimal depression	Count	37	28	65
	% within depression status	56.9%	43.1%	100.0%
mild depression	Count	6	4	10
	% within depression status	60.0%	40.0%	100.0%
moderate depression	Count	2	1	3
	% within depression status	66.7%	33.3%	100.0%
severe depression	Count	2	0	2
	% within depression status	100.0%	0.0%	100.0%
Total	Count	47	33	80

This study found that out of the 80 patients studied, 15 of them had depression (19%), 10 had mild depression (12.7%), 3 had moderate depression (3.8%) and 2 had severe depression (2.5%) as in figure (3). The number of

males who had depression is 10 (21.6%), and the females 5 (15.1%). The percentage of males who have severe depression is 4.3% with no females with severe depression seen in table (3).

**Figure 3: Shows the prevalence of depression among HIV patients.**

Concerning the relationship between depression in HIV patient and the level of education, this study showed that khalwa and university levels patients showed only minimal depression as in figure (4). When the duration of diagnosis was prolonged the depression was less

sever. The highest percentage was in period between two and eight months but the most severe cases were diagnosed for less than one month in table.

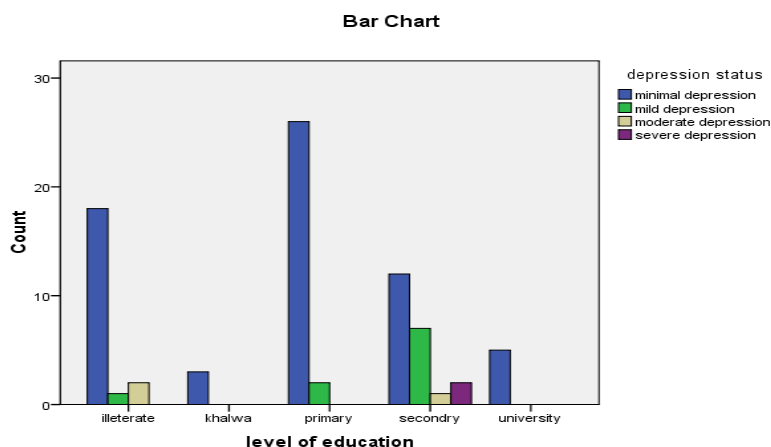


Figure 4: The relationship between depression in HIV Patient and The level of education.

DISCUSSION

Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest, normal day-to-day activities, and sometimes you may feel as if life isn't worth living.^[1]

Depression is the most common neuropsychiatric complication of HIV disease.^[4] In the context of HIV/AIDS, depression is overlooked but potentially dangerous condition that can influence not only quality of life, relationships, employment, and adherence to medical care, but also perhaps survival.^[5]

The HIV/AIDS pandemic has caused far-reaching effects in low-income countries. Sub-Saharan Africa has been particularly hard hit. In 2010, 68% of all people living with HIV resided in Sub-Saharan Africa, a region with only 12% of the global population.^[6]

The World Health Organization predicted that by the year 2020, depression will be the leading cause of worldwide disability.^[7]

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Reports on the actual prevalence of depression in HIV-infected persons have varied widely, from 22%^[11] to 71%.^[12] With 350 million people affected worldwide^[13], rates of depression are roughly two times greater in people living with HIV than the general population (approximately 10% versus 5%), as determined by a meta-analysis of published studies.^[14]

This is a cross sectional hospital based study conducted measure the prevalence of depression among HIV

patients in Aashair Teaching Hospital in A Khartoum State in Sudan. The majority of patients their level of education was primary school. Most of them were married. A high proportion of them were free employers, and their salary was low. The majority of them were diagnosed for more than a year.

The prevalence of depression among HIV patients in bashair hospital was low when comparing to studies in Kwara State Specialist Hospital Sobi north central Nigeria, was high (57%),^[15] in Guru Teg Bahadur Hospital and University College of Medical Sciences, Delhi was 58.75 %^[16] and in the United State reported 36%.^[17] This may be because of the good family support in Sudan; this has a powerful protective effect on health.

This study found that the percentage of males who had depression is higher than the females and the different is not significant which matches the results of the research in delhi.^[16] Whereas in South Africa women were 3 times more likely than men to have had a depressive episode.^[18]

The highest was in patients who were educated until lower standard (primary and secondary school) and it agrees with the study conducted in Guru Teg Bahadur Hospital and University College of Medical Science, Delh,^[16] in Nigeria and Canada.^[6] Education is the social determine of health.

This study noticed that patients who went to khalwa have no depression, because of their religious beliefs. There was an association between depression and the duration of diagnosis. When the duration of diagnosis was prolonged the depression was less severe. The highest percentage was in period between two and eight months

but the most severe cases were diagnosed for less than one month.

There was no association between the depression and the monthly salary and the difference between the prevalence of depression between different incomes wasn't significant because the patients are generally of low income and even those with average income their monthly salary was in the low average, whereas in north central Nigeria and Canada the depression was highest among low income patents.^[6]

CONCLUSIONS

The prevalence of depression in HIV in this study is low, more common in males than females, and there is an association between the duration and depression. There is no association between the monthly salary and depression. The majority of patients their level of education was primary school and patients who went to khalwa have no depression. A high proportion of them were free employers.

Recommendations

HIV patients need more psychiatric care. Early diagnosed patients should be referred to a psychiatrist.

More researches should be done concerning the adherence of depressed patients living with HIV with the anti retroviral therapy.

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