Original article

Anxiety among HIV/AIDS Sudanese patients: A cross-sectional analytic study

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Abstract

Introduction: Anxiety disorder and HIV/AIDS are common morbid health problems; When observed together the relationship is bidirectional exacerbating each other deleterious consequences.

Objectives: In this study, we investigated the anxiety disorderamong HIV/AIDS patients in Sudan.

Material &Methods: A cross-sectional analytic study was conducted among 362 HIV/AIDS patients from three centers in Khartoum, Sudan during the period from January 2015 to January 2016, using a structured questionnaire based on socio-demographic dataand the Hospital Depression and Anxiety [HADS] questionnaire. Participants signed a written informed consent, and the Chi-square was used for testing the significance and a P-Value of < 0.05 was considered significant.

Results: Anxiety was evident in (68.7%) of patients, 23.3% had mild Anxiety, 36.4% moderate Anxiety, and 9.1% severe Anxiety. Anxiety was commoner among illiterate, married/widowed, not receiving counseling or educational sessions, and delay in breaking the diagnosis to the patient (P-value<0.05), no significant differences were found regarding sex and etiology (P-value>0.05).

Conclusion; Anxiety was prevalent among HIV/AIDS patients mainly illiterate, widowed/married patients, those not receiving counseling and post diagnosis sessions, and delaying the result of the HIV test. Measures for the earlier detection and management when indicated are highly needed.

Keywords : HIV/AIDS, Anxiety, Sudan

1-Introduction

HIV/AIDS is a major public health concern with about half of new infections occurring in young people; it has become one of the most devastating diseases humanity has ever faced. Sub-Saharan Africa is one of the most severely affected regions in spite the fact that only 10% of the Word population live in this region, with the highest prevalence among the age 15-24 years, putting more pressure on health authorities and policy makers to take measures to reduce mortality and morbidity among this productive age group (1-3).

Sudan is bordered by countries with the highest prevalence of HIV/AIDS; the prevalence is 0.4-1.6%. The level is on the rise due to the abundance of its risk of transmissions like illiteracy, and the natural mobility of the infected people across borders. The refugees also flooded Sudan from nearby countries (4).

Anxiety and depression are common mental health disorders among patients with Acquired Immune Deficiency Syndrome from human immune deficiency virus (5). Patients suffering from this syndrome

are more prone to social stressors and stigma related to their diagnosis, these patients especially the recently diagnosed had higher rates of anxiety leading to less adherence to antiretroviral medications, and medical recommendations (6,7).

For various reasons patient with HIV/AIDS may feel anxious like fear of disease progression and death. Furthermore, patients face social stigmata, restriction of employment and marriage, divorce and family rejection that adds more to their suffering (8,9).

There is an increasing awareness of mental health disorders among patients with HIV/AIDS especially in countries with high prevalence, mechanisms to reduce their burden among HIV patients have been explored. Community-based group therapy had been shown to reduce psychiatric symptoms among patients with the diagnosis of HIV (10).

Due to the growing epidemic of HIV/AIDS it is vital to understand the mental health among these patients to improve medical care and treatment, Sudan is a vast country with lack of health facilities, mental health services are not well developed, and when present is usually centered in the capital, thus we conducted this research to study anxiety among patients with HIV/AIDS.

2-Material and methods:

This cross-sectional descriptive study was carried out at three HIV/AIDS centers during the period from January 2015-January 2016. Three hundred and sixty-two patientswith the diagnosis of HIV were randomly selected by simple random technique, then interviewed using the HAD Anxiety Scale (HADS). The Questionnaire is well validated for use as a screening tool for anxiety diagnosis witha specificity of 0.78 and a sensitivity of 0.9(11).This scale consists of seven choice questions: if feel tense or wound up, get a sort of frightened feeling as if something bad is about to happen, feel worried thought in the mind, if still can ease and feel relax, get a sort of frightened feeling like butterflies in the stomach, feel restless and have to be on the move, get sudden feelings of panic, each rating from zero to 3 with zero= nothing and 3= maximum dysfunction. A score of < 7 is regarded as normal, (8-10)mild anxiety, (11-14) moderate anxiety and (15-21) severe anxiety. Data collected include age, sex, education, marital status, place of diagnosis, the probable cause of the disease (Feeling, formal, infected, or marriage), if the patients were counseled or not, type of counseling (couple vs. individual), patients response to the diagnosis of HIV (if accepted or rejected), the time of breaking the news to the patient (immediate or delayed), and the cause of delay if present. All participants signed a written informed consent. Patients were assured that the information collected will be treated confidentially and only for the purpose of this research and that their care will not be affected by any means.

Analysis:

Data were analyzed by the Statistical Package forSocial Sciences software (SPSS version 20). The chi-square was used for testing the statisticalsignificance; data were presented as percentages or mean± SD unless otherwise specified and a P-value of less than 0.05 wasconsidered as statistically significant. The ethical committees of Khartoum University and Khartoum Hospital approvedthe research.

3-Observations and Results:

They were 362 patients with HIV; their ages ranged from 20-40 years, 220 (62.5%) were males, 120 (34.1%) were illiterate, 82 (23.3%) had primary education, 98 (27.85) had a secondary school, while52

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(14.8%) were University graduates. One hundred and twenty-two (34.7%) were single, 102(29%) were married, 94 (26.7%) were divorced, and32 (9.1%) were widows. Table (1) showed other patients characteristics.

The majority of patients (59.7%) were on a 1D treatment regimen, 10.2% on 1C treatment, while 23.2% were on septrin, other treatment modalities were shown on Table No (2).

Table (3) depicted anxiety among the study group in which: Anxiety was reported in 352 [68.7%] of patients 82 (23.3%) mild anxiety, 128 (36.4%) moderate anxiety, and 32 (9.1%) severe anxiety.

In current study anxiety was commoner among females (72.7%) with no significant statistical difference P-value 0.134, illiterate patients had the highest rate of anxiety with significant statistical difference P-value 0.003. Anxiety was commoner among widows with significant statistical difference P-value 0.004. Anxiety was lower among those who received counseling with significant statistical difference P-value 0.001. Patients who received their result earlier had a lower rate of anxiety (87/.1% vs.64.8%) with high significant statistical difference P-value < 0.001. Table (4) illustrates the relation other patients characteristics to anxiety.

Table No (1): Basic characteristics of HIV patients

Character	No%
Sex	
Males	220 [62.5%]
Females	132 [37.5%]
Education	
Illiterate	120 [34.1%]
Primary	82 [23.3%]
Secondary	98 [27.8]
university	52 [14.8%]
Marital status	
Single	122 [34.7%]
Married	102 [29%]
Divorced	94 [26.7%]
Widow	32 [9.1%]
Center type	
ART	228 [64.8%]
Blood	2 [0.6%]
Mobile	28 [8%]
PMTCT	8 [2.3%]
TB/HIV	30 [8.5%]
VCT	56 [15.9%]
Test type	
Volunteer	246 [69.9%]
Referred	106 [30.1%]

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Etiology	
Exposure	38 [10.8%]
Feeling	208 [59.15]
Formal	42 [11.9%]
Infected	44 [12.5%]
Marriage	20 [5,7%]
Counseling 1	292 [83%]
Counseling 2	348 [98.9%]
Session type	
Couple	12 [3.4%]
Individual	340 [96.6%]
The family response	
Accepted	304 [86.4%]
Rejected	48 [13.6%]
Resultdelivery	
The same day	290 [82.4%]
Delayed	62 [17.6%]

Table No [2]: Treatment type of HIV patients

Treatment type	No%
1 A	6 [1.7%]
1B	12 [3.4%]
1C	36 [10.2%]
1D	210 [59.7%]
Second line	4 [1.1%]
Septrin	84 [23.9%]

Table no [3]: The severity of anxiety among HIV patients

Anxiety	352 [68.7%]
Mild	82 [23.3%]
Moderate	128 [36.4%]
Severe	32 [9.1%]

Table No[4]: Anxiety relation to patients characteristics

Character	Anxiety %	P-value
Sex		0.134
Males	66.3	
Females	72.7	
Education		0.003

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Illiterate	81.6	
Primary	65.8	
Secondary	65.3	
University	50	
Marital status		0.004
Single	62.2	
Married	72.5	
Divorce	70.2	
Widow	75	
Center type		0.004
ART	64	
Blood bank	0%	
Mobile V	78.5	
PMTCT	100	
TB/HIV	86.6	
VCT	71.4	
Test type		0.363
Referred	69.9	
Voluntary	66	
Etiology		0.382
Exposure	68.4	
Feeling	66.3	
Formal	70.8	
Infected	68.1	
Marriage	70	
Counseling 1		0.001
Done	65	
Not done	86.6	
Counseling 2		0.578
Done	68.9	
Not done	50	
Depression session		0.001
Individual	70.5	
Couple	16.6	
Patient response		0.049
Accept	67.1	
reject	79.1	
Delivery of result		0.000
Same day	64.8	
Delayed	87.1	

Treatment type		0.018
A1	66.6	
B1	100	
C1	83.3	
D1	63.8	
Second line	50	
Septrin	71.4	

4-Discussion:

The present study concluded a high rate of anxiety among patients with HIV/AIDS patients especially among illiterate, widowed/divorced. Previous literature (12) found that high level of anxiety could compromise the patient's outcomes necessitating the scaling-up of the psychological and mental health services in our country.

In the current research, the affected age group ranged from 20-40 years which are the years of production mirroringthe results of other studies (13).

The current data showed higher anxiety rates among widowers/divorce with a significant statistical difference, similar to previous literature in which anxiety was linked to marital status (14).

Regarding the level of education, the majority of patients were illiterate, more than two-thirds receive a primary or secondary education. Similarly Brown and Morgan (15) concluded that nearly two-thirds of anxious patients with the diagnosis of HIV had secondary education.

In the present study, anxiety was evident in (68.7%), similar results (82.3%) had been reported by previous researchers (16)**.**

In the present study moderate anxiety was reported in 36.4% of patients in agreement with Panigrahi et al. (17) who found mild to moderate anxiety in 28% of patients

Cognitive behavioral stress management had been shown to reduce anxiety and depression symptoms in patients living with HIV (18), in the present research patients received counseling and depression sessions reported lower anxiety symptoms.

In the light of increasing prevalence of HIV/AIDS in Subsaharan Africa,

interventions that combine stress management and psychosocial support programs within the clinical practice are likely to enhance the overall well-being of patients with HIV.

5-Conclusion: anxiety is prevalent among HIV/AIDS patients and associated with illiteracy, widowers, and not receiving counseling and post diagnostic sessions.

The study limitations are the relatively small size of the survey size and the reliance on self-reported questionnaires. Also, we did not report a prior diagnosis of mental disorders.

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