Self Esteem, Depression and Life Satisfaction among HIV out Patients Receiving Highly Active Anti Retroviral Therapy in A Nigerian Teaching Hospital

Abstract:

Aim: The aim of this study is to investigate self esteem, depression and life satisfaction in a sample of HIV patients receiving highly active anti retroviral therapy (HAART) attending a Nigerian tertiary health institution.

Study design: The descriptive cross sectional study design was used for the study.

Place and duration of the study: The study was carried out at the HIV/AIDS clinic of the university of Nigeria teaching hospital Enugu in south east Nigeria between the months of January and February 2023.

Methodology: A total of 480 HIV/AIDS positive patients on HAART aged between 23 to 61 years attending the HIV/AIDS clinic of the University of Nigeria Teaching hospital Enugu who consented to participate in the study were assessed for self esteem, life satisfaction and depression with the Rosenberg self esteem scale, the life satisfaction scale by Diener and the Beck's depression inventory version two.

Results: Results revealed that 53.7% of the HIV patients on HAART manifested no signs of depression; 63.8% had high self esteem and 73.1% were satisfied with their lives; however 25.2%; 15.8% and 5.5% showed signs of mild, moderate and severe depression respectively; 36.2% had low self esteem, whereas 26.9% indicated not being satisfied with their lives.

Conclusion: Following the benefits of HAARTS on the management of HIV/AIDS patients as noticed in the study, there is need for health workers to ensure strict adherence on HAART regimen for optimum suppression of HIV as recommended by The World Health Organization; furthermore, there is need to ensure continuous provision of psychological support to all HIV/AIDS patients as a way of reducing the psychosocial sequelae associated with HIV/AIDS.

Key words: HIV/AIDS, Highly active anti-retroviral therapy, Self esteem, Depression, Life satisfaction, psychosocial conditions.

1. INTRODUCTION

In Nigeria, the national prevalence of HIV in 2019 was 1.4% against previous estimate of 2.8%; currently an estimated 1.9 million people are living with HIV, whereas more women than men within the age bracket of 15-49 years are more likely to be living with HIV [1]. The groups mostly affected by HIV infection are mainly sex workers, gay men and injecting drug users [2]. Access to treatment and accelerated referrals for people living with HIV, has progressively increased in Nigeria, especially following the introduction of the 'test and treat' policy in 2016 [3]. The prevalence of depression among people living with HIV/AIDS in Nigeria has been reported to be 14.4%; while mild depression was said to be the predominant sub type with a prevalence of 9.5 %. Furthermore bereavement, poor drug compliance and low level of social support were pointed out to be the major predictors of depression among HIV positive individuals [4]. Some of the psychosocial impacts of HIV are denial of employment; stigmatization and divorce [5].

Highly active antiretroviral therapy (HAART) is a treatment protocol in which three or more antiretroviral drugs are combined with the aim of inhibiting viral replication, and have been reported to lead to improved patient outcomes [6]. To ensure the continuous suppression of HIV, there is need to adhere strictly to the highly active antiretroviral therapy regimen, because adherence of less than 95% is said to be associated with development of viral resistance and that drug-resistant viruses can be transmitted to other people, thereby limiting their treatment options [7]. Positive correlation has been reported between low self esteem and depressive symptoms across gender and age groups, and among diverse populations living with HIV [8]. Heckman et al. [9] looked at the psychosocial predictors of general life satisfaction in a community sample of 275 persons living with HIV/AIDS in a large Midwestern state and reported that improved physical/functional well-being, increased social support, more frequent use of active coping strategies, and fewer incidents of AIDS-related discrimination and stigma predicted higher levels of general life satisfaction. Sevgi et al [10] revealed that self-reported life satisfaction was strongly associated with concurrent depressive symptoms, hope and anxiety. In their study on Depression and thoughts of suicide among middle-aged and older persons living with HIV/AIDS, Kalichman et al. [11] reported that their subjects who thought about suicide reported

greater levels of emotional distress and poorer health-related quality of life than those who had not considered suicide.

They concluded that Persons who are in midlife and older and are living with HIV/AIDS experience significant emotional distress and thoughts of suicide, suggesting a need for targeted interventions to improve mental health and prevent suicide.
In their study on Psychosocial differences between urban and rural people living with HIV/AIDS, Heckman et al. [12], measured quality of life, perceptions of loneliness, social support, experiences with AIDS-related discrimination, access to services, and illness-related coping strategies in a sample of 276 people living with HIV/AIDS. They argued that Compared with their urban counterparts, rural people with HIV reported a significantly lower satisfaction with life, lower perceptions of social support from family members and friends, reduced access to medical and mental health care and elevated levels of loneliness among other symptoms.
Given the paucity of data on this subject matter within the study area, the aim of the present study is to investigate self esteem, depression and life satisfaction in a sample of HIV patients receiving highly active anti retroviral therapy (HAART) attending a Nigerian tertiary health institution.

2. MATERIALS AND METHOD

2.1. Study location: The study was conducted at the HIV/AIDS clinic of university of Nigeria teaching hospital Enugu in south east Nigeria. Enugu is a mainland state and occupies an area of about 7,161 square kilometers and has a population of about 5,590,513. Due to the abundance of coal deposits, Enugu is also referred to as the coal city state. The university of Nigeria teaching hospital is the largest tertiary health institution in the state; while the HIV/AISDS clinic of the hospital receives and treats patients from across the state and other parts of the south east of Nigeria, with an average daily clinic attendance of 400 patients. This study adopted the cross sectional descriptive method and was conducted in Enugu, south east Nigeria between the months of January and February 2023.

2.2. Subjects: A total of 480 HIV/AIDS positive patients on HAARTS attending the HIV/AIDS clinic of the University of Nigeria Teaching hospital Enugu, were randomly recruited and served as subjects for the study. Patients with HIV positive diagnosis and screened by ELISA and confirmed by western blot technique; have been on HAART for about five months; aged 23-61

years and gave their consent to participate were included in the study. On the other hand, patients who are too ill to participate, those outside the age range, those who decline consent and those with previous DSM IV axis I diagnosis of depression were excluded. The Ethics committee of the University of Nigeria teaching hospital gave approval to conduct this study. All the subjects who met the inclusion criteria were invited to participate in the study. After explaining the purpose and procedure of the study and assuring them that their responses will be treated with confidence, they were also assured that non participation will not prevent them from receiving their usual clinical attention. All the subjects agreed and signed the consent form, and responded fully to the instruments of data collection, thereby given a hundred percent response rate.

2.2.1. Data collection and instruments: Data for the study was collected by the authors between the months of January and February 2023. The following instruments were used for data collection: (1) a socio demographic questionnaire containing information bothering on age, sex, occupation, educational status, religion and marital status. (2) The Rosenberg Self Esteem scale [13] was used to assess self esteem. It is a ten-item measure that is scored on a 4-point Likert type response format starting from 1=strongly disagree to 4= strongly agree. Total obtainable score ranged from 10-40 with high scores indicating high self esteem. This instrument has been validated and used for various studies in Nigeria [14]. (3) The five- item Life Satisfaction scale [15] was used to measure life satisfaction among the respondents. The Scores ranged from 5-35 with higher scores indicating high life satisfaction. This scale has been widely used in assessing life satisfaction in various countries including Nigeria [16]. (4) Beck depression inventory-version two (BDI-2) was used to assess depression among the respondents. It is a well-known self-report measure used to assess depression and its severity. This inventory has been used for various studies in Nigeria [17].

2.3. DATA ANALYSES

The Statistical package for social science; version 16.0 was used to analyze the data of the study; while means, standard deviations, percentages and chi square test were performed to find relationships between variables. The significance level chosen for this study is $p \leq 0.05$ at 95% confidence interval.

3. RESULTS

The results revealed the following: age of respondents ranged from 23 to 61 years with a mean of 39.2 years and standard deviation of 8.7 years. There were equal number of males and females. They had various levels of educational attainment ranging from primary to tertiary levels. 237 (49.4%) were married. Furthermore, the respondents had one form of employment or the other even as 73 (15.2%) were students. Although 257 (53.5%) showed no depressive symptoms yet others showed various signs of depression with 26(15.5%) of them showing signs of severe depression. 174(36.2%) had low self esteem whereas 129(26.9%) were not satisfied with life (Table I). No significant association was noticed between self esteem, life satisfaction, depression and age (Table II). Equally no significant association was observed between self esteem, life satisfaction, depression and gender (Table III). However, results revealed significant associations between education and depression χ^2=67.3; P= 0.000 (Table IV); occupation and life satisfaction χ^2=11.8; P = 0.00 ; occupation and depression χ^2=30.4; P = 0.00 (Table V); as well as marital status and life satisfaction χ^2=22.2; P=0.000 ; self esteem and depression χ^2=22.6;P=0.000 respectively (Table VI).

TABLE I: Distribution of Socio Demographic Variables, Depression, Self Esteem and Life Satisfaction among the Respondents

VARIABLE	FREQUENCY	PERCENTAGE (%)
Gender		
Male	240	50
Female	240	50
AGE (In Years)		
23-39	266	55.4
40-61	214	44.6
RELIGION		
Christianity	480	100
EDUCATION		
Primary	50	10.4

Secondary	191	39.8
Tertiary	239	49.8
MARITAL STATUS		
Single	83	17.3
Married	237	49.4
Divorced/widowed	160	33.3
OCCUPATION		
Student	73	15.2
Self employed	115	24.0
Public servant	292	60.8
DEPRESSION		
Non depressed	257	53.5
Mild	121	25.2
Moderate	76	15.8
Severe	26	5.5
SELF ESTEEM		
Low	174	36.2
High	306	63.8
LIFE SATISFACTION		
Not satisfied	129	26.9
Satisfied	351	73.1

Note: (1) The Rosenberg Self Esteem scale was used to assess self esteem.

(2) The five- item Life Satisfaction scale was used to measure life satisfaction

(3) The Beck's depression inventory (BDI-2) was used to measure depression

TABLE II: Self Esteem, Life Satisfaction and Depression among Age Group

SELF ESTEEM	**AGE GROUP**	
	23-39 YEARS (N=266)	**40-61 Years (N=214)**
High	165(62.0)	141 (65.9)
Low	101 (38.0)	73 (34.1)
LIFE SATISFACTION		
Satisfied	189 (71.1)	162 (75.7)
Not satisfied	77 (28.9)	52 (24.3)
DEPRESSION		
Non depressed	145 (54.5)	112 (52.3)
Mild	71 (26.7)	50 (23.4)
Moderate	39 (14.7)	37 (17.3)
Severe	11 (4.1)	15 (7.0)

TABLE III: Self Esteem, Life Satisfaction and Depression among Gender

SELF ESTEEM	GENDER	
	MALE (**N=240**)	FEMALE (**N=240**)
High Low	150 (62.5) 90 (37.5)	156(65.0) 84 (35.0)
LIFE SATISFACTION		

Satisfy	184 (76.7)	167 (69.6)
Non satisfy	56 (23.3)	73 (30.4)
DEPRESSION		
None	129(53.8)	128(53.3)
Mild	63 (26.3)	58(24.2)
Moderate	34(14.2)	42(17.5)
Severe	14(5.7)	12 (5.0)

TABLE IV: Self Esteem, Life Satisfaction and Depression among Education

Self Esteem	**Education Level** Primary(N=50)	Secondary(N=191)	Tertiary(N=239)
High	39 (78.0)	119(62.3)	148 (61.9)
Low	11(22.0)	72 (37.7)	91(38.1)
Life Satisfaction			
Satisfy	28 (56.0)	125(65.4)	198 (82.8)
Non Satisfy	22 (44.0)	66 (34.6)	41 (17.2)
DEPRESSION			
Non	11(22.0)	114 (60.0)	132 (55.2)

Mild Moderate Severe	36 (72.0) 2(4.0) 1 (2.0)	31 (16.2) 35 (18.3) 11 (5.5) **χ^2=67.3;P= 0.000***	54 (22.6) 39(16.3) 14 (5.9)

***=Significant**

TABLE V: Self Esteem, Life Satisfaction and Depression among Occupation

Occupation	Public Servant(**292**)	Self employed(**115**)	Student(**73**)
Self Esteem High Low	 189 (64.7) 103(35.3)	 71 (61.7) 44(38.3)	 46(63.0) 27(37.0)
Life Satisfaction Satisfy Non Satisfy	 203 (69.5) 89 (30.5) **χ^2=11.8; P = 0.00***	 83(72.2) 32 (27.8)	 65 (89.0) 8 (11.0)
DEPRESSION Non Mild Moderate Severe	 143(49.0) 73 (25.0) 54(18.3) 22 (7.7)	 56 (48.7) 39(34.0) 16(14.0) 4 (3.3) **χ^2=30.4; P = 0.00***	 58(79.5) 9(12.3) 6(8.2) 0(0)

***=Significant**

TABLE VI: Self Esteem, Life Satisfaction and Depression among Marital Status

Marital Status	Single(**N=83)**	Married(**N=237)**	Divorced/Widowed**(160)**
Self Esteem			
High	48 (57.8)	166 (70.0)	92 (57.5)
Low	35 (42.2)	71 (30.0)	68 (42.5)
		χ^2=8.12;P=0.044*	
Life Satisfaction			
Satisfy	59 (71.1)	190 (80.2)	102 (63.8)
Non Satisfy	24 (28.9)	47 (19.8)	58 (36.2)
		χ^2=22.2;P=0.000*	
DEPRESSION			
Non	52 (62.7)	120 (50.6)	85 (53.1)
Mild	19 (22.9)	56 (23.6)	46 (28.8)
Moderate	7 (8.4)	43 (18.0)	26 (16.3)
Severe	5 (6.0)	18 (7.7)	3 (1.8)
		χ^2=22.6;P=0.000*	

NOTE: *= Significant

4. Discussion

The treatment of HIV/AIDS with highly active anti retroviral therapy (HAART) has led to a reduction of some of the psychosocial consequences associated with the disease. This study investigated self esteem, depression and life satisfaction in a sample of HIV patients receiving highly active anti retroviral therapy (HAART) attending a Nigerian tertiary health institution. After data analyses the following results were obtained.

53.7% of the HIV patients on HAART manifested no signs of depression; 63.8% had high self esteem and 73.1% were satisfied with their lives. This underscores the benefits of HAARTS in the management of HIV patients.

However, in spite of these benefits associated with HAART, some subjects of the study still manifested varying degrees of depression, low levels of self esteem and diminished life satisfaction. For instance, 25.2%; 15.8% and 5.5% showed signs of mild, moderate and severe depression respectively; 36.2% had low self esteem, whereas 26.9% indicated not being satisfied with their lives. The presence of these psychosocial consequences, among the subjects, may be due to not adhering strictly to the highly active antiretroviral therapy regimen to ensure the continuous suppression of HIV, as recommended by the World health organization who posited that adherence of less than 95% is associated with development of viral resistance and that drug-resistant viruses can be transmitted to other people, thereby limiting their treatment options [7]. Furthermore, The WHO [7] had earlier reported the presence of intense psychological burden on people with HIV such as depression and anxiety as they adjust to the impact of the diagnosis of HIV/AIDS as a life threatening illness. Equally, the low self esteem experienced by HIV positive individuals may be related to problems of stigma and discrimination associated with HIV, such as rejection and problems of self identity [5].

Furthermore, Heckman et al. [9] reported significantly lower levels of life satisfaction, lower perceptions of social support from family members and friends and higher levels of loneliness among rural people with HIV. The pattern of findings noticed in this study corroborates these previous reports. The significant relationship between education and depression may be attributed to the increased understanding of educated HIV positive people on the negative consequences of HIV; they therefore tried to cope with these negative consequences and did not allow these consequences to wear them down emotionally. There was significant association between occupation and life satisfaction in this study. This may be attributed to the joy associated with being gainfully employed and the possibility of having some income to meet up

with purchase of medications and meeting up other needs that promote good life and positive wellbeing among the subjects.

5. Conclusion

This study had pointed out the absence of some psychosocial consequences associated with HIV on some of the patients on HAARTS thereby proving the benefits of HAARTS in the management of HIV. However in spite of this, a number of patients on HAARTS who participated in the study manifested some psychosocial consequences of HIV like various degrees of depression, low self esteem and low life satisfaction. In this regard, there is need for government to ensure strict adherence on HAART regimen for optimum suppression of HIV as recommended by The World Health Organization; and ensure continuous provision of psychological support to all HIV/AIDS patients as a way of reducing the psychosocial sequelae associated with HIV as reported in this and other studies.

6. Strength and Limitation of the Study: The ability of this study to provide baseline data on self esteem, depression and life satisfaction among HIV out patients receiving highly active anti retroviral therapy in a Nigerian teaching hospital can be regarded as a strength, while limiting the study to only one teaching hospital in Nigeria is a weakness of the study. However more teaching hospitals in Nigeria will be included in future researches.

7. Consent: All the subjects consented to participate in the study.

8. Acknowledgement: The authors were grateful to all the participants who consented to participate in the study

9. Ethical approval: The university of Nigeria research and ethics committee approved the study.

10. Conflicting interest: The authors declared no conflict of interest for this study.

Authors' contribution: All the authors jointly took part in this study, starting from the conception, literature search and review, data collection and proof reading of the manuscript. Author FEO did the data analyses, authors GCO and TCO did the discussion, while all the authors read and approved the final version of the manuscript.

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