

*Full Length Research Paper*

# Prevalence of depression and role of support groups in its management: A study of adult HIV/AIDS patients attending HIV/AIDS Clinic in a tertiary health facility in South-eastern Nigeria

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The purpose of the study was to determine the prevalence of depression among adult HIV/AIDS patients attending HIV/AIDS clinic in a tertiary health facility in South-eastern Nigeria. The study was a cross-sectional descriptive study carried out in June 2007. A consecutive sampling method was used to recruit participants for assessment of the prevalence of depression among HIV/AIDS patients. A pre-tested questionnaire and Hospital Anxiety and Depression Scale (HADS) were used to collect data. A total of 122 patients were studied and majority of the respondents (86.9%) were between 18 and 40 years with a female preponderance (65.6%). Fifty four percent were married. Almost half of respondents were either traders (27%) or students (22.1%) and majority (80.3%) had a minimum of secondary education. Using HADS, 21.3% were depressed and 21.3% had borderline depression. The main causes of depression were stigmatization and the disease being terminal in nature. Only 53.3% of the total population were aware of HIV support groups, and of this percentage only 46.2% belonged to any support group. Though more of the respondents who do not belong to a support group were more likely to be depressed, the difference was not significant ( $\chi^2 = 1.40$ ,  $P = 0.236$ ). Depression is very high among HIV/AIDS patients and belonging to support groups may help in its reduction and should be encouraged.

**Key words:** Prevalence, depression, HIV/AIDS, support groups, Nigeria.

## INTRODUCTION

Depression is the most frequently observed psychiatric disorder among HIV/AIDS patients (Rabkin et al., 1994; Ross, 2004). Its specific prevalence is difficult to identify as a result of the wide variations across the globe, ranging from 20 to above 70% (Berger-Greenstein et al., 2007; Sale and Gadanya, 2008; Pence et al., 2007).

Depression has been associated with increased risky behaviours, non compliance to treatment, higher risk for co-morbid disorders and shortened survival (Horberg et al., 2008; Farinpour et al., 2003; Cook et al., 2004). Failure to recognize and treat depression endangers not only the patient but the community as well.

Depressive tendencies are reduced if the patient's condition is known and accepted by the patient's family and when he involves himself in gratifying activities which could be professional, social or otherwise. On the other hand, risks for depression among HIV/AIDS patients increase when recent affective losses occur (death or rejection of all sorts), an accelerated evolution of opportunistic infections, increasing rate of hospitalizations; its duration as well as physical deterioration.

Furthermore, in patients with HIV disease, severity of depression correlates with rapidity of decline in CD<sub>4</sub> count, suggesting that failure to treat depression may accelerate HIV disease progression and impact on survival (Ross, 2004). In addition, depressed HIV patients treated with antidepressants are more likely to adhere to antiretroviral treatment than those not (Sambamoorthi et

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al., 2001).

Recent findings have shown that persons with depressed mood are more likely to engage in high-risk sexual behaviour. (Gore-Felton et al., 2002) This study will assist in identifying depressed patients (requiring antidepressant therapy) as well as the predisposing factors among HIV/AIDS patients attending HIV/AIDS clinic in a Teaching Hospital in Southeast Nigeria.

## MATERIALS AND METHODS

A cross-sectional descriptive study was conducted at University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu, Southeast Nigeria. The study population was adult HIV/AIDS patients attending and receiving treatment at HIV/AIDS clinic. Ethical permit for the study was obtained from University of Nigeria Ethics Committee while verbal informed consent was obtained from the participants. The study lasted for 4 consecutive weeks in June 2007. All patients who reported to the HIV/AIDS clinic; who gave informed consent and who were not very ill were enrolled in the study.

The study instrument was a semi-structured interviewer-administered questionnaire. Information was sought on their socio-demographic data, knowledge of HIV, belonging to support groups and adherence to medications. Estimation of depression among the patients was done using the Hospital Anxiety and Depression Scale (HADS) (Zigmond and Snaith, 1983) The HADS is an easily administered 14-item self report measure comprising 7 anxiety items and 7 depression items from which separate anxiety and depression sub-scale scores are calculated. Scoring is as follows:

- (i) 0 to 7 = Normal.
- (ii) 8 to 10 = Borderline abnormal.
- (iii) 11 to 21 = Abnormal.

The data was analyzed using Statistical Packages for Social Sciences (SPSS) version 15.0 and tests of significance were conducted using chi-square. The level of significance was 0.05 while confidence interval was 95%.

## RESULTS

The age range of the respondents was 18 to 60 years. This consisted of 34.4% males and 65.6% females (Table 1). Most respondents had completed secondary education while only 6.6% did not complete any formal education. Also most were traders (27%), students (22.1%) or civil servants (22.1%) (Table 1). Many of the respondents (50.8%) identified stigmatization as a major cause of depression among people living with HIV/AIDS (PLWHA) while 42.6% felt it was mainly due to the terminal nature of the disease (Table 2). In addition, only 65 (53.3%) of the total population were aware of HIV support groups, and of this percentage only 30 (46.2%) belonged to any support group.

Using HADS, in all there were 26 (21.3%) respondents who were depressed and an equal number was in borderline state while the remaining 70 (57.4%) were not depressed. A higher percentage of PLWHA who belonged to support group were not depressed (66.7%)

compared to those not belonging to any support group (54.3%). The difference nevertheless is not statistically significant ( $P = 0.236$ ). Most of the respondents belonged to low socioeconomic class, 118 (96.7%). Hence, the impact of social status on rate of depression among PLWHA was not clearly defined by this study (Table 3). Despite this there was still no observed significant difference between social class and the depression status of PLWHA ( $P = 0.375$ ).

## DISCUSSION

Depression is one of the most common psychiatric disorders and its prevalence among PLWHA has been noted to be twice as high as in the general population (Ross, 2004). The most frequently identified cause of depression among this group of patients is rejection of all sorts. This was further highlighted by the present study where a high percentage of the respondents opined that stigmatization were some of the main causes of depression. Indeed, depression may be under reported because patients may be unwilling to discuss their moods with the health workers due to fear of being stigmatized further (Chandra et al., 2005).

In present study, 1 in every 5 patients had depression. This rate is high and similar to previous reports (Ross, 2004; Orlando et al., 2002; Komiti et al., 2003). It is however lower than 36% reported by Pence et al. (2002) and 35% by Bing et al. (2001). On the other hand, it is higher than rate of 14% reported among gay men and non-drug-using women. (Joseph et al., 1990). These variations in prevalence of depression may be due to the various reasons: firstly, it may be due to the diagnostic criteria used by these studies in making diagnosis of depression, example, while present study used HADS some other studies may have used Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV). Secondly, variations may also be due to the various stages of HIV in these patients compared to other studies. Indeed there are conflicting results regarding the influence of stage of HIV infection on depression (Sammod and Bairy, 2007). A study showed poor correlation with severity of apathy and cognitive performance with incidence of depression (Castellon et al., 1998) while in another study there were 40% of sero-positive individuals suffering from syndromal depression with suicidal tendency being highest during the first week after the revelation of the seropositive status (Dannenberg et al., 1996). Lastly, depression is known to increase with co-existing medical conditions like HIV/Hepatitis C co-infection (Hauser et al., 2002) and presence or absence of Hepatitis C was not checked in many of these studies.

It is interesting to note that another 21.3% of the respondents had borderline depression. The implication is that appropriate measures should be put in place for the prevention, early detection and management of

**Table 1.** Demographic variables of patients.

<b>Demographics</b>	<b>No.</b>	<b>Percentage</b>
<b>Age range (years)</b>		
18-30	57	46.7
31-40	49	40.2
41-50	11	9.0
51-60	5	4.1
Total	122	100.0
<b>Sex distribution</b>		
Male	42	34.4
Female	80	65.6
Total	122	100.0
<b>Educational level</b>		
No formal education	8	6.6
Primary	16	13.1
Secondary	62	50.8
Tertiary	36	29.5
Total	122	100.0
<b>Occupation</b>		
Trader	33	27.0
Student	27	22.1
Civil servant	23	18.9
Farmer	18	14.8
Artisan	14	11.6
Unemployed	4	3.2
Clergy	2	1.6
Teacher	1	0.8
Total	122	100.0
<b>Marital status</b>		
Single	34	27.9
Married	66	54.1
Divorced/Separated/Widowed	22	18.0
Total	122	100.0

**Table 2.** Patients' opinion on causes of depression.

<b>Cause</b>	<b>No.</b>	<b>Percentage</b>
Stigmatization	62	50.8
Terminal nature of disease	52	42.6
Abandonment by relatives and friends	45	36.9

\*Some respondents gave more than one option.

depression, otherwise, many patients will come down with full blown depression in the near future and this will not only result in increased risky behaviours (which will endanger the society at large) but will also increase the co-morbidities associated with HIV/AIDS which will

ultimately lead to shortened survival.

Patients' support groups are known to be highly beneficial to patients with chronic diseases as sharing experiences help to improve their ability to cope with their condition (Baker et al., 1996). They also occasionally

**Table 3.** Prevalence of depression according to support group and social status.

Support group	Depressed {No. (%)}	Borderline {No. (%)}	Not depressed {No. (%)}	Total {No. (%)}
Do not belong to a Support Group	20 (21.8)	22 (23.9)	50 (54.3)	92 (100.0)
Belong to a Support Group	6 (20.0)	4 (13.3)	20 (66.7)	30 (100.0)
Total	26 (21.3)	26 (21.3)	70 (57.4)	122 (100.0)
$\chi^2 = 1.40$ , $P = 0.236$				
<b>Social status</b>				
Low social status	25 (21.2)	26 (22.0)	67 (56.8)	118 (100.0)
High social status	1 (25.0)	0 (0.0)	3 (75.0)	4 (100.0)
Total	26 (21.3)	26 (21.3)	70 (57.4)	122 (100.0)
*Likelihood-ratio $\chi^2 = 1.963$ , $P = 0.375$				

\*Some cells have frequency < 5.

offer emotional, informational and material support (Heyer et al., 2010). In present study, only 53.3% of the respondents were aware of HIV support groups and not even up to half of these belong to any support group. This means that over 75% of the respondents are deprived of the benefits derivable from support groups. The reason for this may be from fear of stigmatization.

Although there was no statistical significant difference in the prevalence of depression/borderline depression among respondents who belonged to a support group compared to those who did not ( $P = 0.236$ ), smaller percentage of those who belonged to support group were depressed (20.0%) compared to those who did not belong to support group (21.8%). This implies that belonging to a support group is perhaps helpful in preventing depression among PLWHA. This has been supported by several other studies (Nguyen et al., 2009; Dageid and Duckert, 2007; Paxton 2002). A similar finding was observed in Cambodia where 23% of members of a PLWHA support group said they had been deterred from suicide, crime and revenge (Kong and Hall, 2000). Even when there is depression, a study by Pfeiffer et al. (2010) showed that peer support interventions help to reduce symptoms of depression.

The effects of social status on the prevalence of depression among these patients were not evident because only 4 (3.3%) respondents belonged to the high social status.

One therefore wonders if HIV/AIDS is mainly a disease of the poor segment of the society or it may be that the richer ones have alternative sources of treatment different from the free services provided by the government institution used for this study.

## CONCLUSION AND RECOMMENDATIONS

This study revealed a high rate of depression and borderline depression among PLWHA. It also showed

that belonging to a support group may be of assistance in preventing depression, yet only a small percentage belonged to a support group.

It is therefore recommended that routine psychiatric screening of patients should be done at HIV clinics with referrals to appropriate services as necessary. PLWHA should also be advised to belong to a HIV support group. However, to improve the roles of the support groups their sizes should be limited to allow confidentiality and open discussions in the groups. Also, structured curriculum containing up-to-date information about management of depression and anxiety among HIV infected patients should be offered to support groups.

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