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Incidence and Correlates of Severe Depression and Stigmatization among HIV-Positive Patients Seeking Care at Soroti Regional Referral Hospital

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ABSTRACT

Depressive disorders are notably more prevalent among people living with HIV/AIDS (PLWHA), occurring at rates three times higher than in the general population. In Uganda, the reported prevalence of depressive disorders among PLWHA ranges between 20% and 40%, with stigma affecting about 34% of this demographic. This study aimed to estimate the prevalence and identify factors associated with major depression and stigma among HIV-positive patients attending the ART clinic at Soroti Regional Referral Hospital (SRRH). Conducted as a descriptive cross-sectional hospital-based study, the research utilized a simple random sampling technique to select 138 participants aged 18 years and older, already diagnosed with HIV and attending the SRRH ART clinic. Critically ill or admitted individuals were excluded from the study. The majority of respondents were female (60.9%), aged between 31 and 45 years (45.7%), and had attained primary school education (54%). The study found a 16.7% prevalence of current major depressive episodes among PLWHA, with 56.5% experiencing recurrent major depressive episodes. Regarding stigma, the prevalence of minimal, mild, and moderate stigma was 65.2%, 29%, and 5.8%, respectively. Factors such as male gender, being divorced or widowed, and being unemployed or engaged in peasant work were statistically associated with any form of major depressive episode. Additionally, recent initiation of ART was linked to stigma among this population. The findings underscored the frequent occurrence of major depression and stigma among PLWHA, which were influenced by factors such as changes in marital status, recent ART initiation, and limited employment opportunities. The study recommended institutionalized and personalized counseling, the formation of social or peer support groups, community education initiatives regarding major depression and stigma among PLWHA, and regular patient follow-ups to mitigate the incidence and prevalence of major depression and stigma in this vulnerable segment of the population.

Keywords: prevalence, depression, stigma, HIV

INTRODUCTION

Among people living with HIV/AIDS (PLWHA), depressive disorders are the commonest neuropsychiatric disorders occurring at rates of two to three times higher than in HIV negative individuals [1-8]. The prevalence of depressive disorders among PLWHA in Uganda has been reported as 20–40% [9-17]. Depressive disorders in PLWHA have been associated with several critical adverse health related outcomes [18-22]. Previous research work has documented poor adherence to medications including antiretroviral therapy (ART) in depressed PLWHA while other researchers have reported that PLWHA suffering from depression progress faster from HIV to AIDS when compared to the non-depressed PLWHA [23-32]. The development of major depressive disorder among PLWHA is likely the result of a combination of biological and socio-demographic factors some of which may be relatively unique to PLWHA, such as HIV/AIDS related stigma [32-38]. HIV related stigma and discrimination continue to be experienced across the globe impeding access to and scale up of HIV/AIDS prevention, treatment/care and support programmes [39-45].

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Stigma is an attribute of social relations and interactions that exists when the following components of the socio-psychological process occur: labeling, stereotyping, separation, status loss and discrimination [46-53]. While many individuals, organizations and governments have worked diligently to reduce HIV related stigma, such efforts are not implemented at a scale necessary to have a significant impact on HIV related outcomes. Thus, stigma continues to fuel HIV transmission and related morbidity [54-62].

METHODOLOGY

Study Design

This was a descriptive cross-sectional study that was hospital based.

Study Area

SRRH is among the public regional referral hospitals in the country located 320km northeast of Kampala, the capital city of Uganda.

Study Population

This study was conducted among adult patients receiving treatment at the ART clinic in SRRH.

Inclusion Criteria

All patients aged 18 years and above who are HIV positive attending the ART clinic at SRRH.

Exclusion Criteria

1. Critically ill and admitted HIV positive patients.
2. HIV patients with hearing or speech impairments.

Sample Size

Sample size was obtained through calculation by using the Kish Leslie formula which states that;

$\mathbf{n = Z^2 P (1\text{-}P)/E^2}$

Where;

n is the estimated minimum sample size required

Z is the standard normal deviation usually set at 1.96 that corresponds to the 95% confidence interval

P is proportion of HIV positive patients with stigma and major depression and was 90% from a related study in 2018 carried out in SRRH, among HIV positive pregnant and lactating mothers (RithaBinduru et al., n.d.)

E is margin of error which is estimated to be 5%

Therefore $n = 1.96^2 \times 0.90(1 - 0.90) \div 0.05^2$

Hence n = 138 respondents.

Sampling Method

A simple random sampling method was used in the ART clinic whereby clients were randomly given numbers and those with even numbers were chosen to participate in the study. All participants who met the inclusion criteria and not the exclusion criteria and provide informed consent to participate in the study were recruited.

Data Collection Procedure

A socio-demographic and clinical factor questionnaire was administered to ascertain the factors associated with major depression and stigma among HIV positive patients at SRRH.

Data Management

Data was entered and analyzed using the SPSS application and reported using descriptive statistics (frequencies, means and standard deviations) and illustrated using bar charts and frequency tables, where applicable.

Ethical Considerations

An approval letter was obtained from KIU-WC research ethics committee and permission was sought from SRRH administration prior to the onset of the study. Participation in the study was on voluntary basis and informed consent was sought from all participants. The informed consent was read to the participants in the local language to ensure understanding before they could sign or thumb print for those who were not able to write. Participants were free to withdraw consent at any point in the process of data collection without any repercussions. Collected data was safely stored in a safety box, under lock and key, and only accessible to the principal researcher and the information obtained was treated with the outmost confidentiality.

RESULTS

Table 1: Socio-demographic characteristics of respondents

Characteristic	n (%)
Gender	
Male	54 (39.1)
Female	84 (60.9)
Age	
18-25	17 (12.3)
26-30	19 (13.8)
31-45	63 (45.7)
46-60	32 (23.2)
>60	07 (5.1)
Marital status	
Single	23 (16.7)
Married	75 (54.3)
Divorced	22 (15.9)
Widowed	12 (8.7)
Cohabiting	06 (4.3)
Religion	
Catholics	55 (39.9)
Protestants	60 (43.5)
Muslim	08 (5.8)
Others	15 (10.9)
Education level	
Primary	75 (54.3)
Secondary	37 (26.8)
Collage	16 (11.6)

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University	10 (7.2)
Living arrangement	
None	04 (2.9)
1-5	56 (40.6)
6-10	66 (47.8)
>10	12 (8.7)
Occupation	
Employed	32 (23.2)
Unemployed	04 (2.9)
Peasant farmer	59 (42.8)
Government employed	14 (10.1)
Others	29 (21.0)
Drinking alcohol	
Once a week	25 (18.1)
On special occasions	19 (13.8)
Never	94 (68.1)
Time since initiation of ARV	
Days	03 (2.2)
Months	12 (8.7)
Years	123 (89.1)
Prior diagnosis of psychiatric disorder	
Yes	00 (00)
No	138 (100)

Table 2: Major Depression among study participants

DEPRESSION SYMPTOM/CHARACERISTIC	n (%)
Consistently depressed or down most of the day	46(33.3)
Lost interest in the past two weeks	27(19.6%)
Over the past 2weeks, when you felt depressed or uninterested	
Decreased or increased appetite, decrease or increase of body weight	38(27.5%)
Having trouble sleeping nearly all night	36(26.1%)
Talked or moved slowly than normal	17(12.3%)
Felt tired or without energy almost all day	39(28.3%)
Felt worthless or guilty almost every day	27(19.6%)
Had difficulty concentrating or making decisions almost all day	35(25.4%)
Repeatedly considered hurting themselves, felt suicidal or wished they were dead	10(7.2%)
5 or MORE ANSWERS (A1-A3) CODED YESS (MAJOR DEPRESSIVE EPISODE, CURRENT)	23(16.7%)
MAJOR DEPRESSIVE EPISODE, RECURRENT	13(56.6%)

According to the study, 23(16.7%) of the respondents had major a current depressive episode and of the 23 respondents, 13(56.5%) of them had a recurrent major depressive episode.

Table 3: Factors associated with major depression among PLWHA in SRRH after bivariate analysis

CHARACTERISTIC	DEPRESSION n (%)	P-VALUE
SEX		
MALE	8(5.7)	0.03*
FEMALE	15(10.9)	0.08
AGE(years)		
18-25	5(3.6)	0.08
26-30	4(2.9)	0.07
31-45	9(6.5)	0.06
46-60	2(1.4)	0.06
>60	3(2.2)	0.07
MARITAL STATUS		
Single	2(1.4)	0.08
Married	3(2.2)	0.06

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Divorced	9(6.5)	0.04*
Widowed	7(5.1)	0.03*
Cohabiting	2(1.4)	0.06
OCCUPATION		
Employed	1(0.7)	0.08
Unemployed	4(2.9)	0.04*
Farmer/peasant	11(7.9)	0.01*
Government employed	4(2.9)	0.06
Others.	3(2.2)	0.05
TIME SINCE ARV INITIATION		
Days.	2(1.4)	0.03*
Months.	8(5.8)	0.04*
Years.	13(9.4)	0.05

*P value of < 0.05 is significant

From the above table 3, the significant factors associated with depression were male sex, being divorced, widowed, unemployment, and recent time of initiation of ART.

Table 4: Stigma among PLWHA attending SRRH

Assessment perceived stigma (n)						
1	Have you been avoided by some people because of your illness	Never	Rarely	Sometimes	Often	Always
		84	18	29	07	00
2	Have Some people acted as though it was your fault?	Never	Rarely	Sometimes	Often	Always
		65	25	36	11	01
Assessment of internalized stigma (n)						
3	Have you felt left out of things Because of your illness	Never	Rarely	Sometimes	Often	Always
		73	24	29	10	02
4	Have you felt embarrassed about your illness	Never	Rarely	Sometimes	Often	Always
		62	15	48	08	05

A total of 54 (39%) of the respondents had ever been avoided by some people because of their illness, while a total of 73 (52.9%), people had acted as though it was their fault.

A total number of 65 (47.1%) had felt left out of activities because of their illness, while 76 (55.1%) had felt embarrassed about their illness.

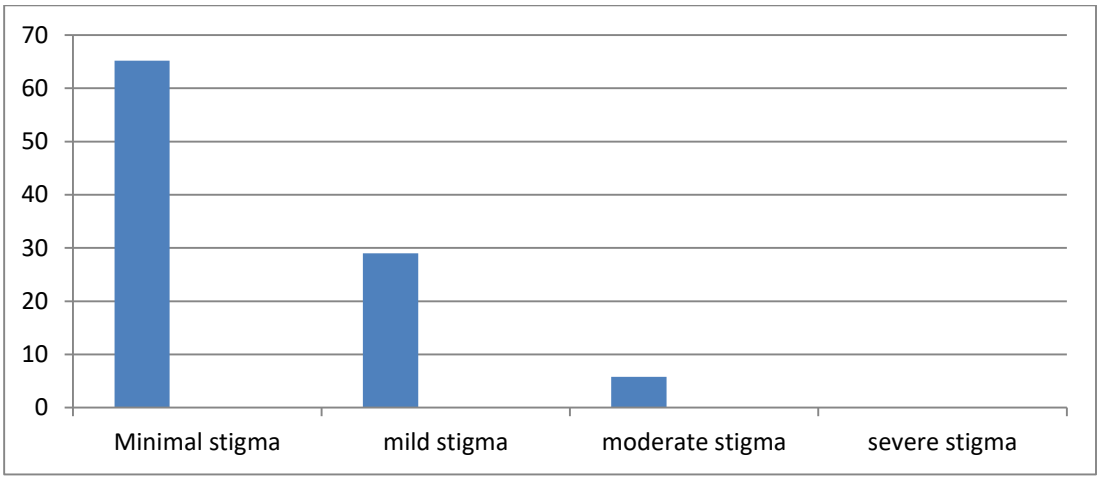

Figure 2: Different levels of stigma

65.2% of the respondents had experienced minimal stigma, whereas 29% had experienced mild stigma. None of the participants had experienced severe stigma.

DISCUSSION

The prevalence of minimal stigma was 65.2%, mild stigma was 29% and moderate stigma was 5.8%. A total of 54 (39%) of the respondents had ever been avoided by some people because of their illness, while a total of 73 (52.9%), people had acted as though it was their fault i.e., perceived stigma. A total number of 65 (47.1%) had felt left out of things because of their illness, while 76 (55.1%) had felt embarrassed about their illness i.e., internalized stigma. These findings of stigma are related to that by the PLWHA Stigma Index 2013 in Uganda, which reported experiences of both external and internal stigma. The index stated that the most common forms of external stigma and discrimination directed at PLWHA are gossip at 60%, followed by verbal harassment, insults and or threats at 37%, and sexual rejection at 21.5 % [62].

The prevalence of major depressive episode, current was 16.7% and that of major depressive episode, recurrent was 56.5% of those with major depressive episode, current. This was slightly higher than what was obtained from a study done by Mohammed et al on Prevalence of depression and associated factors among HIV Patients. Their findings pointed out that the prevalence of depression among people living with HIV was 53% [63].

The study revealed that (23)16.7% of the respondents had major depressive episode, current and of the 23 respondents, 13(56.5%) of them had a major depressive episode, recurrent. The time since ARV initiation was significant to development of both stigma and major depression. Those who had just been diagnosed and had just started taking ARVs were more depressed and stigmatized compared to those who had been in care for a long period of time. This could have been so because of disclosure by those who were diagnosed early as opposed to those diagnosed later. This was in agreement with a study by Gardner *et al* which showed respondents had stigma since in our society HIV is still viewed as a disease of promiscuity and majority of them had a mild form of depression and never needed medication [64-66].

Being male was an associated factor of significance for development of major depression in the study. This was in agreement with a study by Mohammed et al that showed that males living with HIV were more likely to develop depression [63-68]. These findings were however different from the study conducted in urban South Africa, which found that females were associated with scoring positive to depression [65-68].

Marital status of the respondents was an important factor associated with major depressive episode from the study. Widowed and divorced PLWHA were more likely to have a major depressive episode than patients who were single. This could be because of lack of responsibility to take care of and no burden of disclosure to the partner. Similar findings were found to be in consistence with study done in Rwanda in which widowed and divorced were more likely to be depressed (59.3% and 42.9% respectively) than those who were single. These findings were however found to differ with a study done in the South India where married PLWHA were 6 times more likely to have depression as compared to single PLWHA. Married PLWHA were more likely to have depression and the potential reasons could be the responsibility to take care of the children and family and fear of disclosing the status to the family members due to concerns of losing social and economic support [66-68].

CONCLUSION

It was realised that there was a high burden of major depression and stigma among PLWHA in SRRH. The factors such as being male, divorced or widowed and being a peasant or unemployed were statistically associated with major depression, whereas recent initiation of ART was associated to stigma. Additionally, stigma was predisposing participants to depression through behaviors like being teased, insulted, and gossiped about.

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