



PREVALENCE AND PRESCRIBING PATTERNS OF ANTIDEPRESSANT AND ANTIPSYCHOTIC MEDICATIONS AMONG PEOPLE LIVING WITH HIV/AIDS AT A TERTIARY HOSPITAL IN BAYELSA STATE, NIGERIA

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ABSTRACT

Background. Depression and other mental disorders are common among people living with HIV/AIDS (PLWHA) and undermine antiretroviral therapy (ART) adherence and clinical outcomes. Although antidepressants and antipsychotics are effective, their real-world utilization among PLWHA is poorly characterised in low- and middle-income countries (LMICs), and contemporary Nigerian data—especially from the high-burden Niger Delta—are scarce. **Objective.** To estimate the prevalence of antidepressant and antipsychotic use and describe prescribing patterns among PLWHA attending a tertiary HIV clinic in Bayelsa State, Nigeria. **Methods.** A facility-based cross-sectional study was conducted at the Federal Medical Centre (FMC), Yenagoa, between January and December 2023. Using the Taro Yamane formula a target of 381 adult PLWHA was set; 336 participated (response rate 88.2%). Data were collected through a structured, pre-tested questionnaire and medical records, and analysed descriptively in SPSS v27. **Results.** Overall, 77 participants (22.9%) had been prescribed a psychotropic medication—20.8% an antidepressant, 2.1% an antipsychotic and 0.6% both. Fluoxetine accounted for 68.8% of antidepressant prescriptions, and a haloperidol-olanzapine combination (6.5%) was the most frequent antipsychotic regimen. Psychiatrists prescribed 81.8% of antidepressants, medicines were taken daily (89.6%) and orally (92.2%), and were obtained mainly from the public hospital (67.5%) and community pharmacies (24.7%). **Conclusion.** Nearly one in four PLWHA at FMC Yenagoa received psychotropic therapy, dominated by fluoxetine and concentrated in the hands of a single psychiatric service. The findings reveal a pattern of centralised, specialist-dependent prescribing that constrains access and supports the case for task-shifted, integrated mental-health care.

KEYWORDS: drug utilization; antidepressants; antipsychotics; HIV/AIDS; prescribing patterns; Nigeria.

INTRODUCTION

Human immunodeficiency virus (HIV) infection has evolved into a manageable chronic illness, yet its psychiatric burden remains heavy and frequently overlooked. Depression is the single most common mental disorder among people living with HIV/AIDS (PLWHA); the World Health Organization estimated a global prevalence of depression of about 19.8% among PLWHA, with roughly a further 9.8% experiencing other common mental disorders (WHO, 2017). Depression and related disorders reduce adherence to antiretroviral therapy (ART), accelerate disease progression and increase

morbidity and mortality (Uthman et al., 2014; Asrat et al., 2020; Nyongesa et al., 2019).

Antidepressants and antipsychotics are effective for these disorders and can improve mood, cognition, ART adherence and quality of life in PLWHA (Prado et al., 2018; Yen et al., 2022; Smith, 2017). However, their utilization—the extent, choice and pattern of prescribing—among PLWHA is poorly documented in LMICs, where mental-health resources are limited and the HIV burden is greatest (Sherr et al., 2011; Kariuki et al., 2019). Most published utilization data originate from high-income settings whose

epidemiology, formularies and health systems differ markedly from those of sub-Saharan Africa (Abrahamsbrak & Stagnitti, 2020; Bing et al., 2001).

Nigeria carries one of the world's largest HIV burdens, and Bayelsa State, in the Niger Delta, records an HIV prevalence of about 3.8%—well above the national average of 1.4%. Despite this, mental-health services in the region are sparse: the Federal Medical Centre (FMC), Yenagoa—a designated HIV treatment centre—operates with a single psychiatrist and one psychiatric nurse and no dedicated psychiatric ward. Drug utilization research (DUR) in such settings is essential for rational prescribing, formulary planning and equitable access (Wettermark et al., 2016; Atif et al., 2017; Carver et al., 2023), yet no contemporary local data describe how psychotropic medicines are actually used among PLWHA. This study was designed to close that gap by estimating the prevalence of antidepressant and antipsychotic use and describing prescribing patterns at FMC Yenagoa.

MATERIALS AND METHODS

Study design, setting and population

A facility-based, descriptive cross-sectional study was carried out at the HIV/AIDS clinic of FMC Yenagoa, a tertiary hospital serving Bayelsa and neighbouring states, between January and December 2023. The target population comprised adult PLWHA (≥ 18 years) enrolled at the clinic who had received at least one prescription of an antidepressant or antipsychotic medication during the study period. The data reported here form part of a larger cross-sectional study on the drug utilization of antidepressant and antipsychotic medications among PLWHA at the Federal Medical Centre, Yenagoa; this paper addresses a distinct set of objectives, and care has been taken to avoid duplication of findings reported elsewhere.

Sample size and sampling

The sample size was estimated with the Taro Yamane (1967) formula at a 5% margin of error, giving 346 and, after a 10% allowance for non-response, a target of 381. Participants were drawn from clinic electronic records using stratified sampling (by gender, age group and disorder type) followed by systematic random selection within strata. A total of 336 respondents participated, yielding a response rate of 88.2%; of these, 77 had received psychotropic medication and constituted the analytical sample for utilization-specific analyses.

Data collection and analysis

Data were collected with a structured, validated and pre-tested questionnaire covering socio-demographics, pattern of psychotropic use, determinants, outcomes, and barriers and facilitators, supplemented by a standardised medical-record extraction form. Trained interviewers administered the questionnaire face-to-face using electronic tablets. Data were analysed in SPSS version 27 using frequencies, percentages, means and standard deviations. Ethical approval was obtained from the Research Ethics Committee of the Federal Medical Centre, Yenagoa. Written informed consent was obtained from every participant for both the interview and access to their medical records. Participation was voluntary and confidential, and respondents could withdraw at any time without consequence.

RESULTS

Socio-demographic profile

Of 336 respondents, most were female (59.5%), married (51.8%) and had at least secondary education (secondary 46.4%; tertiary 30.7%). The mean age was 44.2 ± 13.9 years, the modal group being 45–54 years (28.6%) followed by 35–44 years (25.9%). Most were self-employed (56.5%), Christian (91.7%) and reported a moderately active lifestyle (58.6%); mean monthly income was approximately ₦140,353. Key characteristics are summarised in Table 1.

Table 1. Selected socio-demographic characteristics of respondents (N = 336).

Characteristic	Category	N	%
Gender	Female	200	59.5
	Male	136	40.5
Education	Secondary	156	46.4
	Tertiary	103	30.7
	Primary	64	19.0
Marital status	Married/partnered	174	51.8
	Single	103	30.7
Employment	Self-employed/employed	126	37.5
Religion	Christianity	308	91.7

Prevalence of psychotropic use

Screening of medical records and interviews showed that 69 participants (20.5%) had symptoms of depression only, 6 (1.8%) of psychosis only and 2 (0.6%) of both—so 77 (22.9%) had a mental-health symptom warranting treatment. Correspondingly, 70 participants (20.8%) had been prescribed an antidepressant, 7 (2.1%) an

antipsychotic and 2 (0.6%) both, giving an overall psychotropic-use prevalence of 22.9% ($n = 77$).

Prescribing patterns

Among antidepressant users, fluoxetine was the dominant agent, accounting for 68.8% of prescriptions, consistent with a strong preference for selective serotonin reuptake

inhibitors (SSRIs). The most frequent antipsychotic regimen was a haloperidol-olanzapine combination (6.5%). Psychiatrists prescribed 81.8% of antidepressants, with HIV specialists accounting for 9.1%; antipsychotics were prescribed almost exclusively by the psychiatric service. Most antidepressant users had been on treatment

for 7–12 months (37.7%) or 1–6 months (31.2%). Medicines were predominantly taken daily (89.6%) and by the oral route (92.2%), and were sourced mainly from the public hospital (67.5%) and community pharmacies (24.7%). These patterns are presented in Table 2.

Table 2. Prescribing patterns among psychotropic users (n = 77).

Domain	Predominant finding	%
Most-used antidepressant	Fluoxetine (SSRI)	68.8
Most-used antipsychotic	Haloperidol + olanzapine	6.5
Main prescriber	Psychiatrist	81.8
Dosing frequency	Daily	89.6
Route	Oral	92.2
Main source	Public hospital	67.5
Secondary source	Community pharmacy	24.7

DISCUSSION

Almost one quarter of PLWHA attending FMC Yenagoa had received psychotropic medication—a prevalence that exceeds the broad WHO global estimates of around 10% for antidepressant and 5% for antipsychotic use among PLWHA and is consistent with the high psychiatric burden documented in Nigerian and sub-Saharan cohorts (Kariuki et al., 2019; Sulyman et al., 2012; Olley et al., 2017; Okeke et al., 2024). The close correspondence between the proportion screening positive (22.9%) and the proportion treated (22.9%) suggests that, once recognised, symptomatic patients in this clinic were generally offered pharmacotherapy; the more pressing concern is whether symptoms are being detected at all, given that screening relied on routine clinical records rather than validated instruments.

The overwhelming preference for fluoxetine mirrors international practice and is clinically sound in HIV care: as an SSRI with a favourable interaction profile, once-daily dosing and low cost, fluoxetine is well suited to co-administration with antiretrovirals (Goodlet et al., 2019; Thompson et al., 2006; Mayo Clinic, 2025). The reliance on a haloperidol-olanzapine combination reflects the limited antipsychotic formulary typical of resource-constrained settings (Medline Plus, 2025). The most striking pattern, however, is the concentration of prescribing within a single psychiatric service: with psychiatrists responsible for more than four-fifths of prescriptions and only one psychiatrist on site, access becomes a structural bottleneck. This supports calls to broaden prescribing competence through task-shifting and integration of mental-health care into HIV services (Olawale et al., 2024; Akinbode et al., 2023).

Strengths and Limitations

To our knowledge this is among the first contemporary descriptions of psychotropic drug utilization among PLWHA in the Niger Delta, combining record review with patient interviews. Limitations include the small number of antipsychotic users (n = 7–8), which limits the precision of antipsychotic-specific estimates; reliance on self-report

and routine records, which may under-detect disorders and introduce recall bias; and the single-centre design, which constrains generalisability (Bellomo et al., 2009). Screening with validated tools such as the PHQ-9 would strengthen future case ascertainment.

CONCLUSION

Psychotropic medication use is common among PLWHA at FMC Yenagoa, dominated by fluoxetine and delivered through a centralised, specialist-dependent model that limits access. Strengthening detection and decentralising safe prescribing—within an integrated HIV–mental-health framework—should be priorities for the facility and for similar high-burden settings in Nigeria.

Declarations

Ethics approval and consent. Approved by the FMC Yenagoa Research Ethics Committee; written informed consent obtained from all participants.

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Conflicts of interest. The author(s) declare no competing interests.

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