

Evaluation of Adverse Drug Reactions and Quality of Life of HIV Patients

Assessing Care at Public Secondary Hospitals in Ilorin, Nigeria

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1.Introduction

- Adverse drug reactions (ADRs) are significant causes of hospitalization, discontinuation of medications, morbidity, mortality and poor quality of life (QoL).
- Antiretroviral medicines (ARVs) have transformed the prognosis of HIV.
- However, mild-serious ADRs are associated with the use of ARVs resulting in poor medication adherence, treatment discontinuation, switches in antiretroviral therapy regimens and poor quality of life of HIV patients.

2. Objectives

• Evaluation of ADRs and QoL of HIV patients assessing care at public secondary hospitals in Ilorin, Nigeria.

3. Methods

- Multi-centre prospective cross-sectional study conducted from January to July 2022. Sample size: 310 (based on Fisher formula) was proportionally allocated to each hospital.
- Eligible HIV patients' ADRs were assessed using structured questionnaire adapted from National Agency for Food and Drug Administration and Control form for reporting ADRs.
- Appropriately designed data abstraction forms were used to obtain relevant sociodemographic, clinical and treatment data from patients' medical folder.
- Study participants' QoL was assessed using WHOQOL HIV-Bref.
- Quantitative data analyses involved descriptive and inferential statistics. Level of significance was set at P<0.05.
- Ethical approval for this study was obtained from an Institutional Ethical Review Committee (ERC/MOH/2021/10/009). In formed consents were obtained from the study participants.

4. Results

- Majority (90.3%) of the study participants were on Tenofovir/lamivudine/dolutegravir.
- Prevalence of ADRs was 34.5%. Observed ADRs are shown in Figure 1

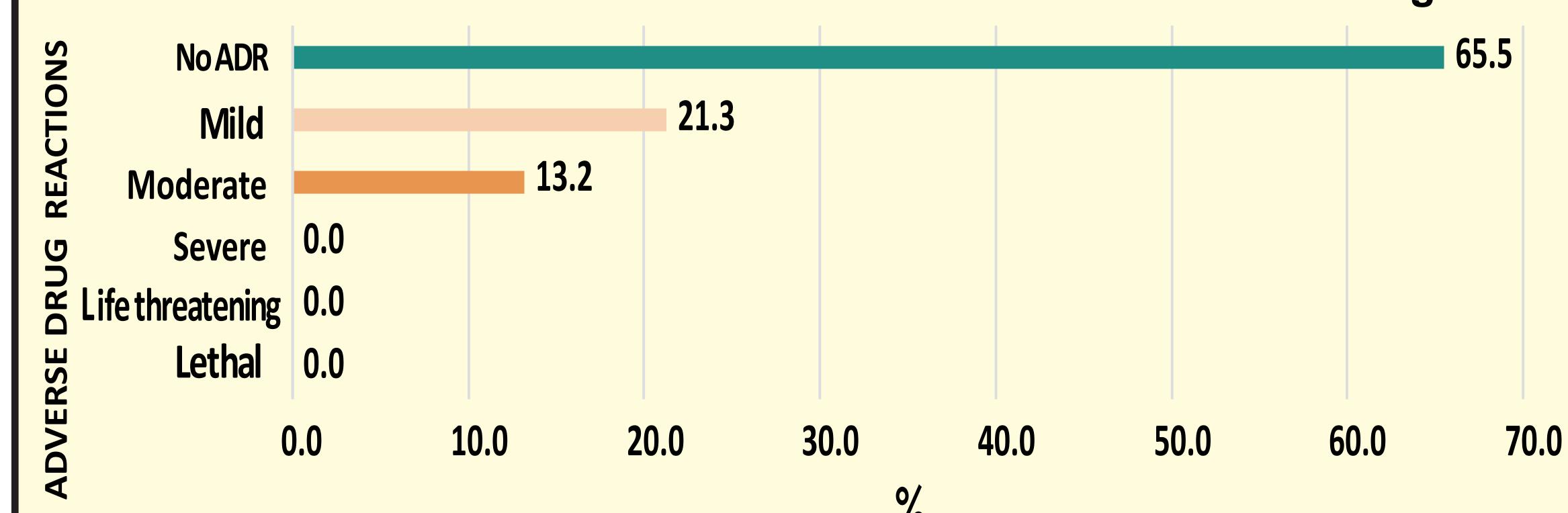


Figure 1: Observed ADRs among study participants

 Most mild ADRs involved central and peripheral nervous system & headache was the most frequent ADR.

Table 1. Combination ART regimen associated with ADRs

ART REGIMEN	NO OF PATIENTS RECEIVING TREATMENT	NO OF PATIENTS WITH ADR (%)
Tenofovir/lamivudine/dolutegravir	280	77 (27.5)
Tenofovir/lamivudine/efavirenz	5	5 (100)
Tenofovir/lamivudine/lopinavir	5	5 (100)
Zidovudine/lamivudine/lopinavir	6	6 (100)
Tenofovir/lamivudine/atazanavir	7	7 (100)
Zidovudine/lamivudine/atazanavir		7 (100)

- ART regimen with minimal ADRs was Tenofovir/lamivudine/dolutegravir.
- Overall QoL score was 80.3%.
- Highest QoL score: 86.4±4.2 in the physical domain. Least QoL score: 60.1±3 in the environment domain.
- Age, gender and ADRs experienced by the study participants were statistically associated with all domains of QoL (P < 0.05).

5. Conclusions

- ADRs affected the QoL of HIV patients.
- HIV patients should be placed on ART regimens with minimal ADRs in line with HIV treatment guidelines in order to maintain and improve patients' QoL.

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