

Prioritizing Nutrition in the Management of Advanced HIV Disease in Zimbabwe – Secondary data analysis from the electronic Patient Management System(ePMS)

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Background

There is a bidirectional connection between HIV infection and inadequate nutrition, and this leads to increased impaired immune function and susceptibility to opportunistic infections (OIs) in people with advanced HIV disease (AHD). AHD clients are more susceptible to HIV-related morbidity and mortality when experiencing inadequate nutrition. The objective of the study was to assess the nutritional status of clients with AHD using pre-existing patient data in the electronic Patient Management System (ePMS) from all OI/ART clinics in Zimbabwe to inform nutrition interventions.

Methods

The secondary data analysis utilized pre-existing data from the Ministry of Health and Child Care ePMS dataset between the 3rd quarter of 2014 until mid 2022. Proxy WHO standard clinical indicators captured by a clinician for assessing nutrition status among AHD clients and all people living with HIV (PLHIV) were used. These included, “Wasting Syndrome (WS)”, “Weight loss >10% (WL)”, and “Failure to Thrive (FT)”. Body mass index (BMI) was not calculated due to data availability. Descriptive statistics were performed, and a logistic regression assessed sociodemographic factors associated with HIV-related “WS,” “WL,” and “FT” among AHD clients. We also developed a Menu Modelling Tool (MMT) an e/online tool for nutrition education among AHD clients.

Results

There is a bidirectional connection between HIV infection and inadequate nutrition, and this leads to increased impaired immune function and susceptibility to opportunistic infections (OIs) in people with advanced HIV disease (AHD). AHD clients are more susceptible to HIV-related morbidity and mortality when experiencing inadequate nutrition. The objective of the study was to assess the nutritional status of clients with AHD using pre-existing patient data in the electronic Patient Management System (ePMS) from all OI/ART clinics in Zimbabwe to inform nutrition interventions.

Conclusions

This assessment provided critical data on the burden of malnutrition among PLHIV, and specifically, AHD clients in Zimbabwe. Routine nutrition analysis from client records can help inform the design of nutrition interventions. There is need to prioritize regular nutrition assessments such as BMI and nutrition interventions as part of the package of care for clients with AHD to improve morbidity and mortality outcomes. The MMT is a potential intervention solution.

Keywords

Advanced HIV disease, AIDS, malnutrition, nutrition assessment, Menu Modelling.

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