

How do outcomes compare between older men and women enrolled in an HIV treatment program in Southern Nigeria: A retrospective analysis

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Background

The presence of highly efficacious treatment options has led to a growing number of older people living with HIV in Sub-Saharan Africa. We examined the demographic, clinical characteristics and treatment outcomes of older adults living with HIV in Nigeria.

Methods

This retrospective cohort study involved older adults (aged ≥ 50 years), at least one year on antiretroviral therapy (ART) as of September 2022 across 154 health facilities supported by PEPFAR through USAID in Akwa Ibom and Cross River States, Nigeria. Demographic (age, education, marital status, and residence area) and treatment characteristics (care delivery point, ART regimen, recent blood pressure, CD4 count at ART initiation, and viral load suppression [<1000 copies/ml]), were abstracted from

electronic medical records and compared by sex using Chi-square test. Log-rank test was used to assess differences in retention rates (i.e., being active) as of September 2022, with an apriori expectation of a 95% retention and viral suppression rates. All analysis were conducted on SPSS vs.24.

Result

There were 16,420 older adults living with HIV (10.8% of the treatment cohort) at the time of the study (fig 1). Females constituted 53.8% (n=8,834); 60.6% were resident in rural areas; and 54.1% had secondary education. Mean duration on ART was 3years; 59.9% (n=9,831) received treatment at out-of-facility locations and 99.5% were on a first-line ART regimen at the time of the study. Median [IQR] nadir CD4 count was 496[286-699] cells/ml, with men having lower baseline CD4 [13.4%

vs 10.2%, p-value=0.004]. The prevalence of hypertension was 9.6%, with men less likely to be hypertensive [8.0% vs 11.1% p-value<0.001] than females. Men were also more likely to receive ART at out-of-facility models than females [65.7% vs 54.8% p-value<0.001]. Overall, retention as of September 2022 was 96.4% while viral suppression was 98.7% and did not differ significantly by sex [retention: p=0.901; VS: p=0.056]. (fig 2 & 3).

Conclusion

Older adults living with HIV had good treatment outcomes (>95% retention and viral suppression). More emphasis should be on improving screening, diagnosis and management of non-communicable diseases like hypertension.

Keyword: Geriatrics, viral suppression, Retention, Sex distribution, HIV/AIDS

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Reference

1. UNAID. 2014. THE GAP REPORT 2014. https://www.unaids.org/sites/default/files/media_asset/12_Peopleaged50yearsandolder.pdf

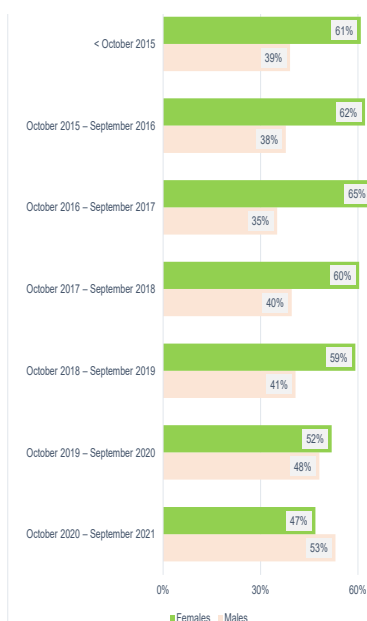


Figure 1: Number of older adults living with HIV started on ART as of September 2021 disaggregated by different time cohorts and sex, southern Nigeria (n=16,420)

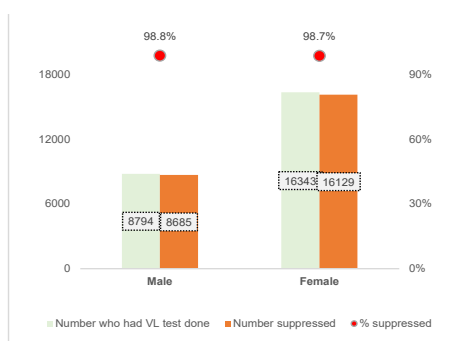


Figure 2: Viral suppression rates for older adults living with HIV (n=16,343) in southern Nigeria as of September 2022, disaggregated by cohort

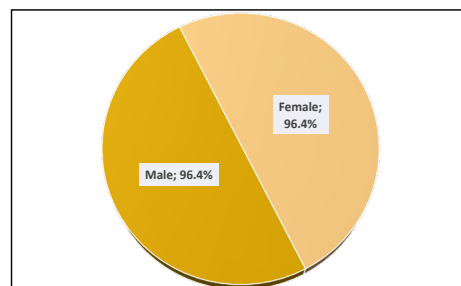


Figure 3: Retention rates among older adults living with HIV on ART in southern Nigeria as of September 2022