

Preferences and Treatment Outcomes of Differentiated Service Delivery Models for HIV Care: A Retrospective Cohort Study of Women Living with HIV in Southern Nigeria

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Background

Women living with HIV (WLHIV) have changing needs, and Differentiated Service Delivery (DSD) of antiretroviral therapy (ART) is a client-centred approach that is responsive to individual needs^{1,2}. This study described DSD model preferences and assessed treatment outcomes among (WLHIV) devolved to DSD in Southern Nigeria.

Method

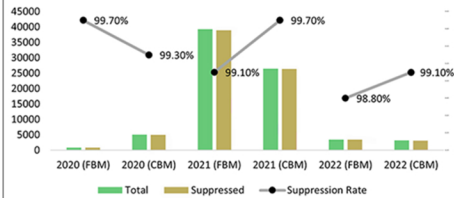
This retrospective cohort study utilised data from electronic medical records of WLHIV aged 15-49 years, devolved to DSD models in three 12-month cohorts (October 2019-September 2020 [C1], October 2020-September 2021 [C2] and October 2021-September 2022 [C3]) at 154 health facilities supported by PEPFAR/USAID in Akwa Ibom and Cross River States, Nigeria. Explanatory variables include age, sex, DSD type and date devolved, ART status and viral load (VL) results with dates were outcome variables. DSD was categorised as facility-based (FBM) or community-based (CBM) in line with National guidelines; ART status was "active" if alive and in care, otherwise "inactive". DSD model preferences were described using proportions, while retention in treatment (proportion active) and viral suppression rates (proportion with VL <1000 copies/ml) were compared across DSD models 12 months post-devolvement within each cohort, using Chi-square on SPSS with significance level at .05.

Results

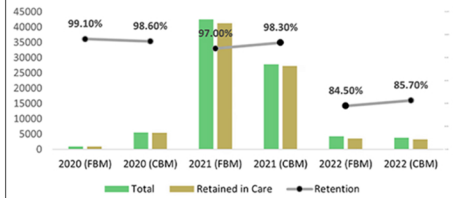
Over the 3 years, 85,011 WLHIV were devolved; 87.6% (74,436/85,011) were aged ≥25 years, and 56.2% (47,797/85,011) were devolved to FBM. In C1, 84.7% (5,547/6,549) were in CBM, while the majority of those devolved in C2 (60.5% [42,539/70,353]) and C3 (52.5% [4,256/8,109]) were in FBM. Overall retention was 96.4% (81,982/85,011), and out of 78,431 WLHIV who had VL tests 99.3% (77,872/78,431) attained viral suppression.

Retention was comparable across DSD respectively in C1 (FBM:99.1% vs CBM:98.6% [p=0.286]) and C3 (FBM:84.5% vs CBM:85.7% [p=0.143]) cohorts, but better in CBM compared to FBM (CBM:97.0% vs FBM:98.3% [p<0.001]) in C2 (Figure 1). VL suppression rates were comparable across DSD models in C1 (FBM:99.7% vs CBM:99.3% [p=0.266]) and C3 (FBM:98.8% vs CBM:99.1% [p=0.290]), but higher in CBM compared to FBM (CBM:99.1% vs CBM:98.8% [p<0.001]) in C2 (Figure 2).

Viral Suppression among women living with HIV receiving ART, compared across Facility (FBM) and Community (CBM) Differentiated Service Delivery models



Retention in care among women living with HIV receiving ART, compared across Facility (FBM) and Community (CBM) Differentiated Service Delivery models



Treatment outcomes for women living with HIV remained comparable despite a shift from community based to facility based models of DSD

Conclusions

DSD preferences for WLHIV in our setting moved from CBM to FBM between 2020 and 2022, with comparable treatment outcomes across models. Investigation of factors influencing DSD model preference among WLHIV is recommended, to support sustained optimal treatment outcomes.

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