Impact of Differentiated HIV Service Delivery Models on Quality of Life in Uganda

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BACKGROUND

- Differentiated service delivery (DSD) models enhance the efficiency of HIV care, improve retention and viral suppression.
- We evaluated the impact of these models on quality of life (QoL), loss to follow-up (LTFU), and all-cause mortality among persons living with HIV (PLHIV) on ART in Uganda.

METHODS

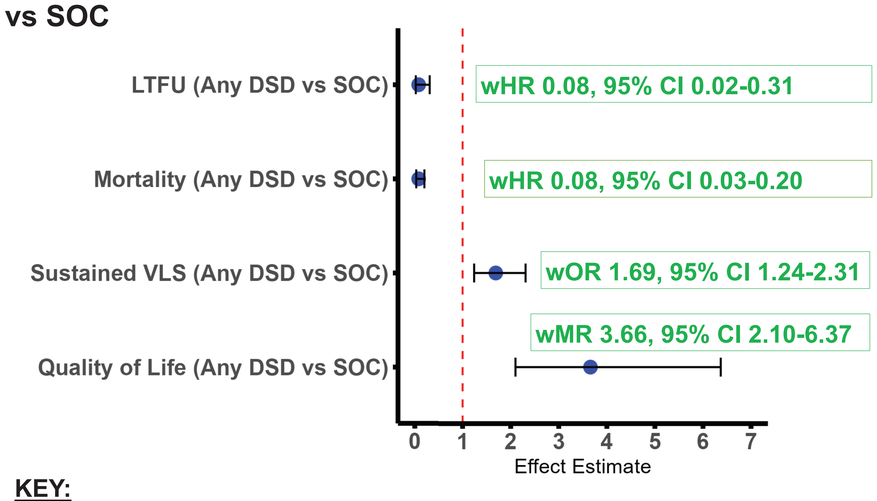
- Review of records of 1,000 PLHIV in a 10-year cohort at the Infectious Diseases Institute (IDI) clinic, Kampala, Uganda.
- QoL was measured using an adapted Medical Outcomes Study (MOS-HIV) tool
- Compared QoL, viral suppression, mortality, and LTFU in the following DSD models versus facility based individual management (FBIM) —the Standard of Care (SOC)
  - Fast-Track Drug Refill (FTDR),
  - Facility-Based Groups (FBG)
  - Composite model (FTDR + FBG)
- Using inverse probability treatment weighting (IPTW) mixed-effects models, we estimated QoL as weighted mean ratios, compared sustained viral suppression using odds ratios and all-cause mortality/LTFU using hazard ratios from Cox regression.

After eight years of follow-up, weighted mean Quality of life was higher in participants enrolled in DSD models than the standard of care, with no statistical differences across DSD models.

RESULTS

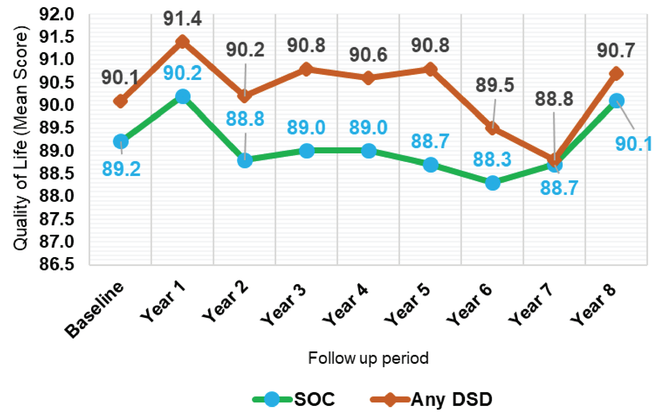
Of 1,000 PLHIV, 980 had ≥1 follow-up and were included in the analysis.
Median age was 45 years (IQR: 40-51), 62% were female, and 95% had a suppressed viral load at baseline.

Fig 1: IPTW Weighted Estimates for Outcomes by any DSD vs SOC



KEY:
IPTW=Inverse Probability Treatment Weighting
SOC=Standard of care
VLS=Viral load suppression
wOR=weighted Odds Ratio, **wHR**=weighted Hazard Ratio, **wMR**= weighted Mean Ratio

Fig 2: Mean QoL score over time by any DSD model Vs SOC



CONCLUSION

These findings support the broader adoption of DSD models in HIV care programs to enhance the QoL, well-being, and clinical outcomes of PLHIV.

ADDITIONAL KEY INFORMATION

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