Viral Suppression Among Persons Enrolled in HIV Recent Infection Surveillance in Zambia, March - August 2021

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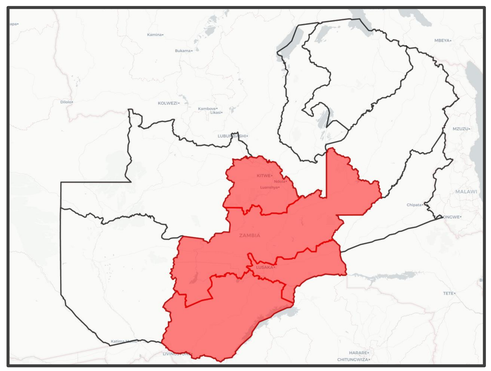
BACKGROUND

- As part of recent infection surveillance, consenting newly HIV diagnosed clients receive a rapid test for recent infection (RTRI) to classify their infection as recent or long term.
- In Zambia, baseline viral load (VL) testing is performed on clients who are diagnosed with HIV.
- VL results can be used with RTRIs to reclassify persons with VL <1,000 copies/mL (which likely reflects ART use) as long-term infected.



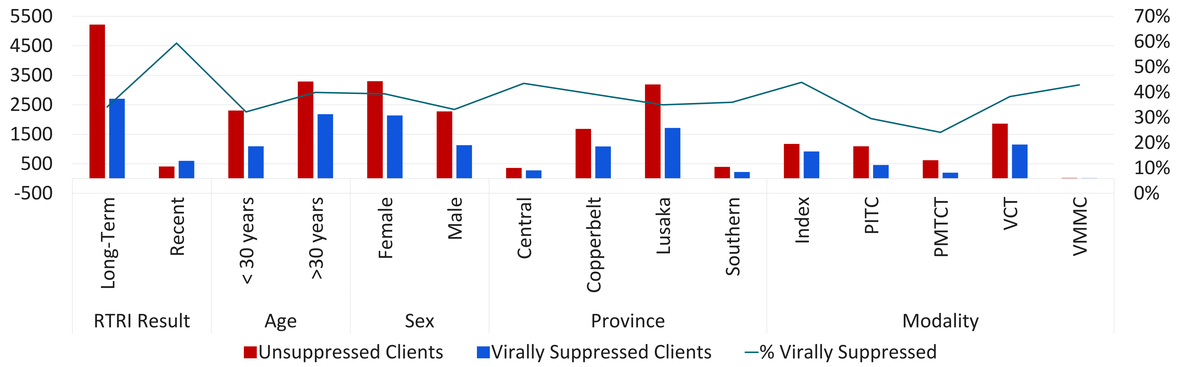
METHODS

- We used recent infection surveillance data from March - August 2021 from newly HIV diagnosed clients in four provinces to describe viral load suppression (VLS).
- Among 11,350 clients at least 15 years old with an RTRI, 8,928 (78.7%) had a VL result.
- A descriptive analysis of these 8,928 was conducted examining proportions of clients with VLS by RTRI status, age, sex, province and modality.
- Then, bivariate analysis was conducted with chi-square test to detect associations between demographic variables and VLS.

In Zambia, baseline viral load plays an important role within HIV recent infection surveillance to identify persons likely previously diagnosed.

RESULTS

- Among the 8,928 clients, 3,301 (37.0%) were virally suppressed, of which 82% were RTRI Long-term (LT) and 18% were RTRI Recent.
- Thirty four percent of clients with an RTRI LT result and 59% of clients with an RTRI Recent result were virally suppressed.
- Higher proportions of VLS were seen among clients ≥30 years (39.9%), females (39.3%), tested in Central Province (43.5%), and diagnosed with HIV as part of index testing services (43.9%).
- Lower proportions of VLS were among clients 15-19 years (28.1%), males (33.2%), those tested in Lusaka Province (35%), and diagnosed as part of PMTCT programs (24.1%).
- Bivariate analysis revealed significant association between VLS and all demographic variables (p-value <0.01).





CONCLUSIONS

- Recent HIV infection surveillance data from Zambia suggest that, of the newly HIV diagnosed clients that have been RTRI tested, a considerable proportion have previous exposure to antiretroviral therapy (ART) and are likely not true new HIV diagnoses.
- The proportion virally suppressed varies by geography and demographics, suggesting that these factors may influence which clients choose not to disclose their previous HIV diagnosis.
- Further study of these relationships using quantitative and qualitative methods may contribute to a better understanding of this behavior and improve screening.

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