NO INCREASED VIOLENCE VICTIMIZATION AFTER RETURN OF RECENCY TEST RESULTS IN RWANDA

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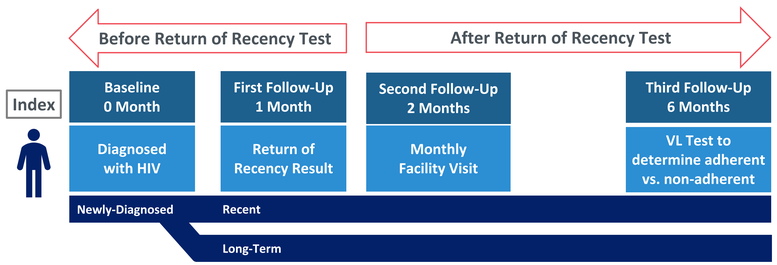
BACKGROUND

PEPFAR does not recommend returning HIV recent infection test results to newly diagnosed persons living with HIV (PLHIV) due in part to lack of safety evidence that return of results does not increase experience of intimate partner violence (IPV). We evaluated if IPV is more likely to increase as a result of return of recent infection results among newly diagnosed PLHIV in Rwanda.

METHODS

- Conducted a prospective cohort study of newly diagnosed PLHIV who underwent a rapid test for recent infection (RTRI) with baseline viral load from August 2021–October 2022 in 60 health facilities selected using probability sampling in all 5 provinces in Rwanda.
- Recent infection was defined as a RTRI recent (RT) result with unsuppressed VL (VL ≥1,000), which likely indicates infection of <12 months.
- Interviewer-administered questions on self-reported experiences of control, economic, emotional, physical, or sexual violence from a current partner 4 weeks prior to the interview were used to collect data at 4 study visits over a 6-month period.
- We compared:
  1. IPV prevalence using Fisher's exact test before/after return of HIV diagnosis (baseline vs. 1st follow up visit) and before/after return of recent infection test result (1st vs. 2nd/3rd follow up visits);
  2. IPV experiences between RT and long-term (LT) cases, using generalized linear mixed models to estimate the mean difference (MD) in counts of IPV events. We included a subject-specific random effect, and adjusted for sex, age, marital status, living in Kigali, reported violence at baseline, and by multivariable propensity score; and
  3. Self-reported reasons for IPV victimization across study visits.
- Data analyses were conducted using R (R Core Team, 2022).

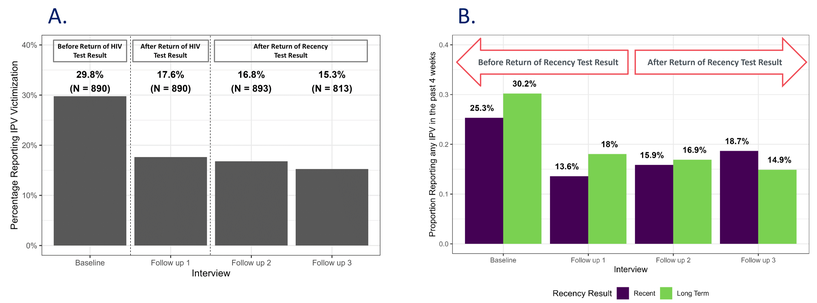
Figure 1. Data collection schedule



RESULTS

- Of 932 newly diagnosed PLHIV with IPV data from ≥1 visits after return of recent infection test results, 849 (91%) had LT infection and 83 (9%) had RT infection.
- Prevalence of IPV was higher at baseline before HIV diagnosis compared to after HIV diagnosis (29.8% vs. 17.6%, p<0.001). Prevalence of IPV did not increase after return of HIV recent infection test result (17.6% vs. 16.1%, p=0.4) or differ between RT and LT study participants **(Figures 2A–2B)**.

Figures 2A – 2B. Percentage reporting IPV victimization by follow up visit (A) and by recent infection test result (B) in Rwanda, 2021-2022



Prevalence of IPV victimization was **higher at baseline before HIV diagnosis** compared to after HIV diagnosis and **did not increase after return of HIV recent infection test result**. Experience of IPV victimization after return of recency test results did not differ between recent and long-term index study participants.

For more information, visit https://clinicaltrials.gov/ct2/show/NCT05063487 or contact Eugenie Poirot (eap2132@cumc.columbia.edu)

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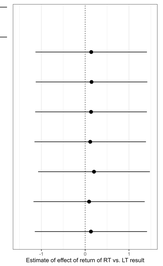
- Return of RT infection result was not associated with increased IPV relative to return of LT infection result in univariate analysis (MD=0.14, 95% CI -1.13–1.41), and after bivariate (MD=0.09, 95% CI -1.18–1.36) and multivariable propensity score adjustment (MD=0.13, 95% CI -1.15–1.41) **(Figure 3)**.
- Many reasons for IPV other than a study participant's HIV diagnosis or HIV recent infection test result – RT or LT – were reported. Only one RT case stated that their recency test result was a reason for the violence they experienced. This participant also reported many other reasons for violence, including money problems, their HIV diagnosis, partner unemployment and being pregnant **(Figure 4)**.

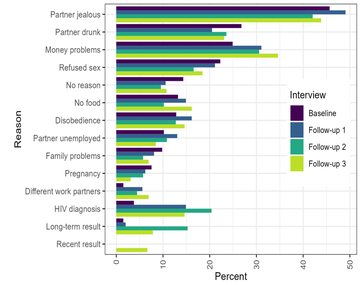
Figure 3. Forest plot for unadjusted, bivariate-adjusted, multivariable-adjusted effects of return of recency testing results in Rwanda, 2021-2022

Model	Estimate	LCL	UCL
Univariate	0.14	-1.13	1.41
Adjusted for sex	0.15	-1.13	1.42
Adjusted for age	0.13	-1.14	1.41
Adjusted for marital status	0.12	-1.16	1.39
Adjusted for Kigali/non-Kigali	0.2	-1.07	1.48
Adjusted for baseline violence	0.09	-1.18	1.36
Propensity adjustment	0.13	-1.15	1.41



Abbreviations: LCL: lower confidence limit; LT: long-term; RT: recent; UCL: upper confidence limit.

Figure 4. Self-reported reasons for violence by study visit in Rwanda, 2021-2022



CONCLUSIONS

- IPV victimization did not increase after return of recent infection test results—RT or LT result—compared to return of HIV diagnosis in a context with high baseline IPV.
- Reduction in overall IPV victimization after engagement in health services needs further inquiry.
- Programs returning results can adopt strategies to mitigate IPV risks and ensure access to violence response services.

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