

PWID Living with HIV in India Experience Viral Rebound on ART and Persistent Viremia

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Disclosures

No conflicts of interest to disclose



BACKGROUND AND METHODS

95-95-95 Targets in India



Prevalence: 0.2% Virally Suppressed: 54%

76%

Of people living with HIV knowing their HIV status

84%

Of people who know their status receiving treatment



Of people on HIV treatment being virally suppressed

National AIDS Control Organization and Free ART Initiative





* HIV Care Continuum estimated from a respondent-driven sampling survey among a sample of PWID

Aims

Characterize longitudinal patterns of HIV viral suppression among a cohort of PWID living with HIV and naïve to ART

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Estimate the probability of suppression over one year in six-month periods

Analytical Dataset

- N=1200 PWID
 - n=117 deaths prior to 12-month visit
 - n=328 missing visits
 - n=755 PWID with 0-12 months of prior ART exposure and completed the first 12 months of the study with three viral load measurements
- Study visits from October 30, 2017, to November 27, 2019
- Cohort data from cluster-randomized trial in integrated care centres across 8 Indian cities
 - Intervention did not have an effect on viral suppression



Methods





RESULTS

Baseline Characteristics (n=755)













Viremia

Baseline 6 Month Visit 11% 33%

12 Month Visit

Viremia

Viremia











Viral Rebound and Persistent Viremia Viremia Suppression Achieve/Persistent Suppression Viral Rebound /

Persistent Viremia



People Who Had Viral Rebound or Persistent Viremia were more likely to be...





Limitations

- Study was originally conducted for 24 months analysis was restricted to 12 due to COVID-19 and loss-to-follow up
- Only included participants who had three viral load measures in the first 12 months
- Self-reported risk behaviors



CONCLUSION

Conclusions

Many PWID living with HIV in India experienced persistent viremia (47%) and viral rebound (13.3%)

This despite free and accessible dispensation of ART and other resources.

And despite legal protections for those living with HIV

- Efforts need to be intensified to engage and support PLHIV to initiate and adhere to treatment to improve individual health and reduce population level transmission
 - Peer-based and community-based resources
 - Free ART outside of government centers
- Particularly among marginalized and stigmatized populations, such as PWID

Acknowledgements

Co-Authors

- Allison M. McFall
- Sunil S. Solomon
- AK Srikrishnan
- CK Vasudevan
- Rifa T. Khan
- S. Anand
- Saravanan Shanmugam
- P Nandagopal
- David D. Celentano
- Shruti H. Mehta
- Gregory M. Lucas

Other Acknowledgements

- All study participants
- Department of Epidemiology, Johns Hopkins School of Public Health
- Center for Infectious Diseases in India, Johns Hopkins School of Medicine
- YRG Care
- Funding
 - National Institute on Drug Abuse of the NIH (R01DA041034, K24 DA035684)
 - Johns Hopkins Center for AIDS Research (P30 AI094189)
- IAPAC and Adherence 2023



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SUPPLEMENTAL SLIDES

#ADHERENCE2023



Integrated Care Centers in India

PWID Integrated care centers

TB Testing & Treatment

Symptom screen and sputum collection on-site; Testing and treatment from DMC/DOTS centers

General medical care: Glucose screening, blood pressure monitoring, doctor available for general health problems

Condoms

STAFF:

- -1 site coordinator
- -2 nurses (OST, STI Treatment, TB screening & treatment)
- -1 doctor (general medical care, HIV care, ARV prescription)
- -2 counselors
- Multiple outreach workers

HCT: rapid testing performed on-site; positive results confirmed at <u>govt</u> center



Syringe services Field-based & on-site O.S.T. CENTRE ਓ. ਔਸ.ਟੀ. ਸੈਂਟਰ SECOND FLOOR 1 ਦੁਸਰੀ ਮੰਜਿਲ



ART: delivered through a link model (ARVs provided by government but peer health worker picks up meds so clients can receive directly from ICC)



Counseling: Individual & group/ substance use, alcohol, adherence, couples, family etc



Transition Model (n=926)

Viremia



Primary Analysis (n=755)



Sensitivity Analysis (n=926)



Transition Model, PWID



Viremia

Randomized Trial Information



 Table 4. Primary and secondary outcomes from trial comparing HIV treatment incentives to usual care among HIV-positive people who inject drugs and men who have sex with men in India.

Outcomes	Statistic (intervention vs. usual care)	PWID stratum
Primary		
Proportion surviving with viral suppression at 12 months	Adjusted ¹ prevalence ratio (95% CI)	1.45 (0.27, 7.92)
Secondary		
Proportion surviving with viral suppression at 6 months	Adjusted ¹ prevalence ratio (95% CI)	1.62 (0.69, 3.82)
Proportion surviving with viral suppression at 18 months	Adjusted ¹ prevalence ratio (95% CI)	1.34 (0.33, 5.53)
Proportion with at least one suppressed viral during follow-up	Adjusted ¹ prevalence ratio (95% CI)	1.32 (0.45, 3.87)

PWID, people who inject drugs; MSM, men who have sex with men; ART, antiretroviral therapy

¹ Adjusted for viral suppression at baseline visit.

² Completed one or more visits to government HIV clinic in both 0 to 6 months and 6 to 12 months

³ Medication possession ratio ≥ 0.90 based on refill records.