HIV viral suppression in adolescents and young adults: A national survey in Kenya

CROI 2020

Presentation: *0817*

Irene NJUGUNA[1, 2], Jillian NEARY[3], Caren MBURU[7], Danae BLACK[2], Kristin BEIMA-SOFIE[3], Anjuli D. WAGNER[3], Cyrus MUGO[1,3], Yolanda EVANS[8], Brandon GUTHRIE[2,3], Janet ITINDI[9], Alvin ONYANGO[7], Laura OYIENGO[10], Barbra A. RICHARDSON[3,6], Dalton WAMALWA[7], Grace JOHN-STEWART[2-5]

[1]Kenyatta National Hospital, P.O. Box 20723-00202, Nairobi, Kenya , Departments of Epidemiology[2], Global Health[3], Medicine[4], Pediatrics[5], and Biostatistics[6] University of Washington, Box 359931, Seattle, WA 98104, USA, [7]Department of Pediatrics and Child Health, University of Nairobi P.O. Box 19676 - 00202, Nairobi, Kenya[8]Seattle Children's Hospital, P.O. Box 5371, Seattle, WA 98145-5005 Seattle, WA, USA[9]Kenya Medical Research Institute, P.O. Box 1578-40400, Kisumu, Kenya, [10]National AIDS and STI Control Program, Ministry of Health, Kenya P. O. Box 19361-00202, Nairobi, Kenya

Irene Njuguna
Kenyatta National Hospital
irenen@uw.edu

Objective

Determine individual and clinic correlates of viral suppression among HIV-positive adolescents and young adults in HIV care program settings in Kenya

Background

- Adolescents and young adults (AYA) living with HIV are at high risk of virologic failure
- Individual-level characteristics are known to play a role
- HIV clinics have developed innovative approaches to address unique AYA challenges, it is unclear if these influence viral suppression
- To achieve UNAIDS 95-95-95 goals, there is need to understand individual and clinic correlates of viral suppression in AYA

Methods

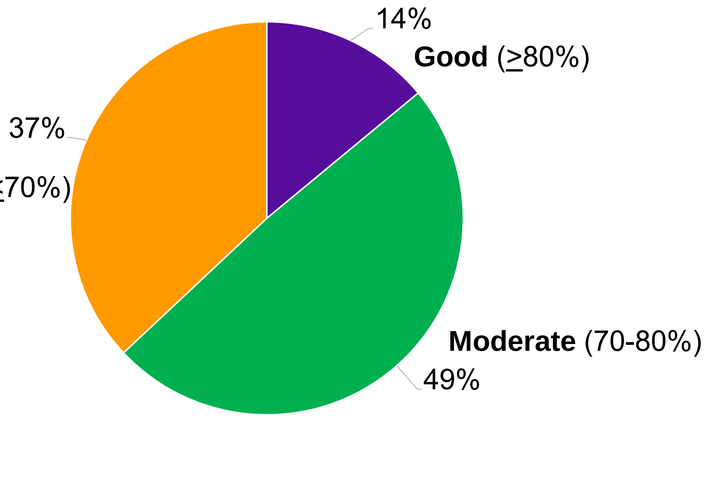
- **Cross-sectional analysis** of secondary abstracted program data as part of an ongoing trial (NCT03574129)
- **Setting:** 99 HIV clinics randomly selected from a national pool of 300 HIV clinics in Kenya using electronic medical records
- **Population**: Records of 10,096 AYA age 10-24 on ART for >6 months between January 2016-December 2017
- **Outcome:** Viral suppression (viral load <1000 copies/ml)
- **Analysis:** Multi-level logistic regression models to determine individual- and clinic-level correlates of viral suppression at most recent assessment

Results

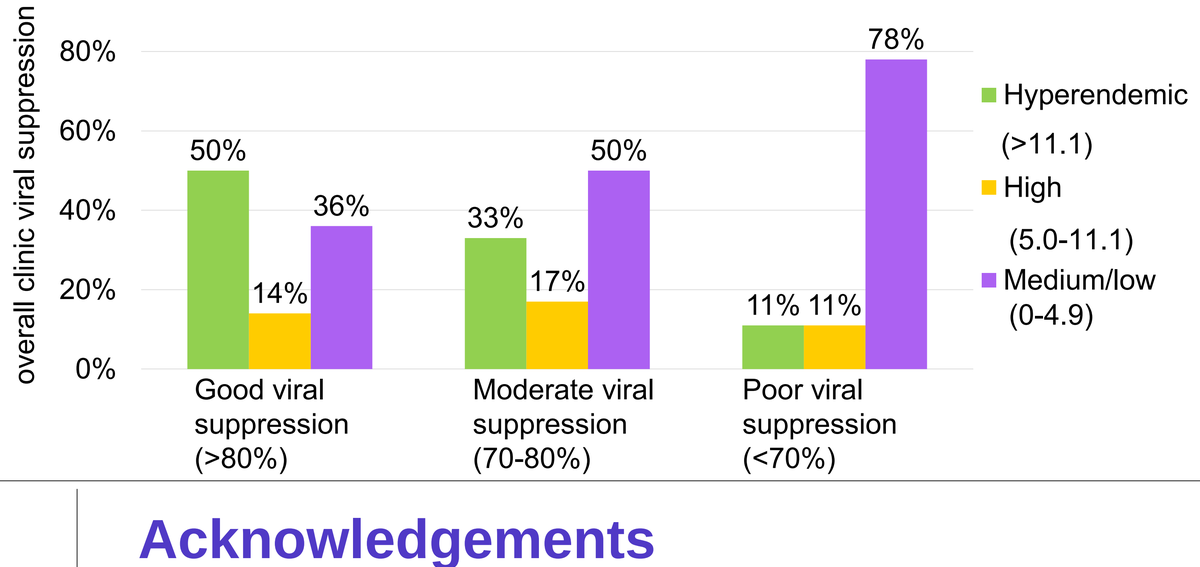
- Low overall viral suppression
  - 73% suppressed
- Individual-level correlates of suppression
  - Older age
  - Female sex
- Clinic level correlates of suppression
  - Adolescent spaces
  - Mission/foundation clinic
  - No social worker
  - Shorter result turnaround time (TAT)

Correlates of viral suppression

Covariate	N	% suppressed or median (IQR)	aOR (95% CI)
Individual			
Age 10-14	9921	67%	0.62 (0.55, 0.71)
Age 15-19	9921	68%	0.60 (0.53, 0.69)
Age 20-24	9921	81%	Ref
Male	9885	65%	0.70 (0.63, 0.78)
Female	9885	76%	Ref
Clinic			
Longer TAT (10 day)	9896	12 (7,19)	0.94 (0.92, 0.97)
Faith/foundation	99	2%	2.09 (1.35, 3.24)
County	99	11%	Ref
Social worker	99	37%	0.77 (0.66, 0.89)
Adolescent space	99	18%	1.27 (1.03, 1.56)



Few clinics achieved >80% clinic viral suppression



High regional HIV prevalence associated with viral suppression

Summary and conclusion

- Poor viral suppression
  - Young age and male sex important correlates of lack of viral suppression
    - Perinatal HIV likely contributing
  - Care approaches in mission/foundation hospitals may offer lessons for care
  - Low/medium HIV burden counties may need additional support
  - Improving result turnaround time may enhance suppression

Acknowledgements

Global WACh, Kizazi, Kenya Research & Training Center (KRTC)
ATTACH study teams, Ministry of Health, Kenya, County governments
Funding: National Institutes of Health (NIH)