

HIV Care Continuum Outcomes in a Cohort of Transgender Women in the United States

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Background



- Transgender women are disproportionately impacted by HIV in the US and globally^{1,2}
- Data on HIV care continuum (HIVCC) outcomes among transgender women living with HIV in the US are limited but available evidence points to suboptimal HIVCC outcomes
 - CNICS data from 2005-2022 found trans women had poorer adherence and more missed visits compared to cisgender counterparts³
 - NA-ACCORD data from 2001-2015 showed consistently lower levels of care engagement and lower crude prevalence of viral suppression compared to cisgender counterparts⁴
 - Ryan White HIV/AIDS Program data from 2016 found disparities in retention in care and viral suppression among Black transgender women compared to Black cisgender counterparts⁵



Objective

- We sought to characterize the HIVCC among a large, multisite sample of transgender women in the US
 - Including identifying correlates of viral suppression

Date Source: The LITE Study

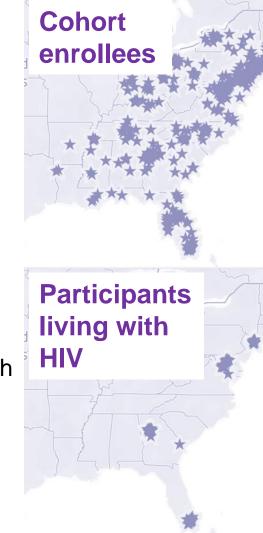
LITE was an observational cohort study that enrolled transgender women in the eastern and southern US

- The primary study aim was to estimate HIV incidence and correlates of HIV seroconversion
- Enrollment was from 2018-2020

Enrollment in the baseline survey was status neutral for those participating in-person in one of six cities

Data were collected via surveys and HIV/STI testing

- All new HIV diagnoses were confirmed to be new through medical record review and in collaboration with local health departments
- Viral suppression was based on self-report and confirmed via medical record review





Statistical Analysis

- We used descriptive statistics to characterize the HIVCC
- We conducted Poisson regression with robust errors to estimate adjusted prevalence ratios (aPR) and 95% confidence intervals (95% CI) for correlates of viral suppression

Results—Sample Characteristics

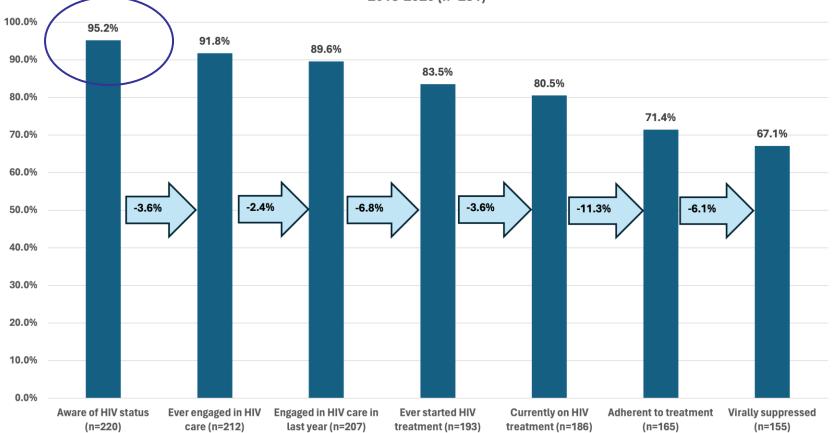
- From 2018-2020 we enrolled 1590 transgender women in The LITE Study, including 18% (n=280) who were living with HIV at enrollment
- Among transgender women living with HIV:
 - A majority were Black (71.8%) and/or Latina/x (26.4%)
 - Mean age was 41.4 years (Range: 19-71, SD=12.1)



Results—New diagnoses

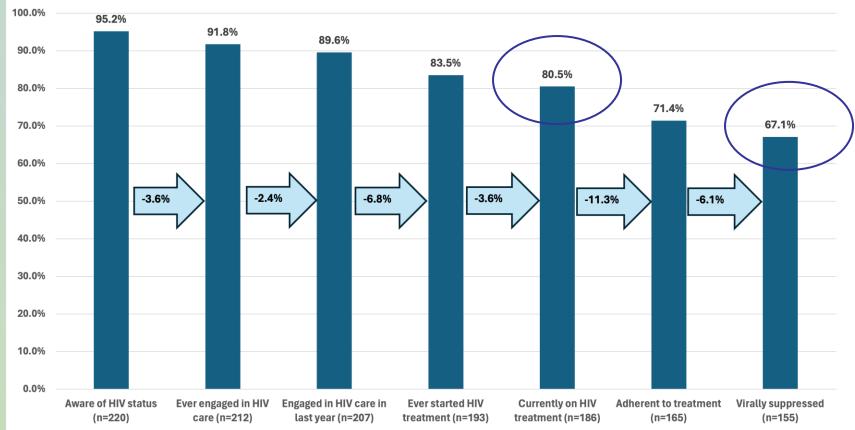
- 50% of transgender women in our sample were diagnosed with HIV within the prior 5 years, including 4% (n=11) newly diagnosed at study enrollment
- Of those newly diagnosed, 45.5% (5/11) had never tested for HIV
- Among 115 diagnosed after FDA approval of PrEP in 2012, 87.8% (n=101) had never used PrEP

HIV Care Continuum among Trangender Women Living with HIV in the eastern and southern United States in 2018-2020 (n=231)



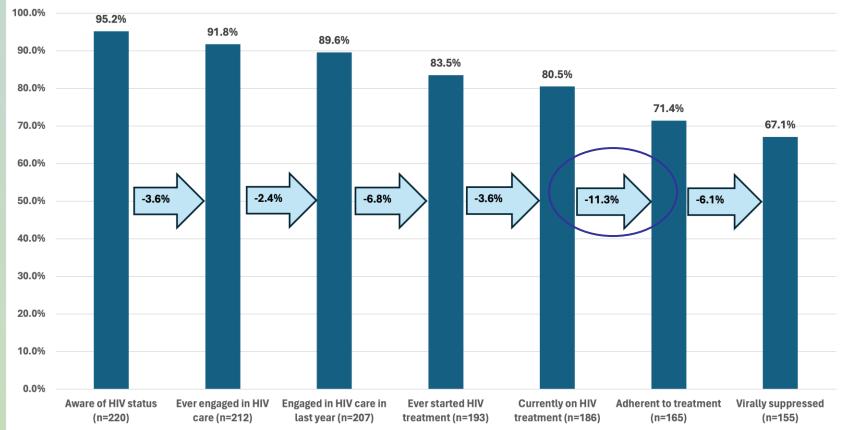
Note: Each arrow contains the percent change (relative difference) from one step in the continuum to the next. The denominator for each bar in the chart is n=231. This represents the total number of transgender women living with HIV who completed survey items on HIV care continuum engagement (n=220) plus those newly diagnosed at study enollment (n=11). N=280 trans women in our study were confirmed to be living with HIV via laboratory testing and/or medical record review. N=49 either did not disclose that they were living with HIV when completing the survey or answered "prefer not to answer" to items related to the HIV care continuum and are therefore not included in the denominator for this analysis.

HIV Care Continuum among Trangender Women Living with HIV in the eastern and southern United States in 2018-2020 (n=231)

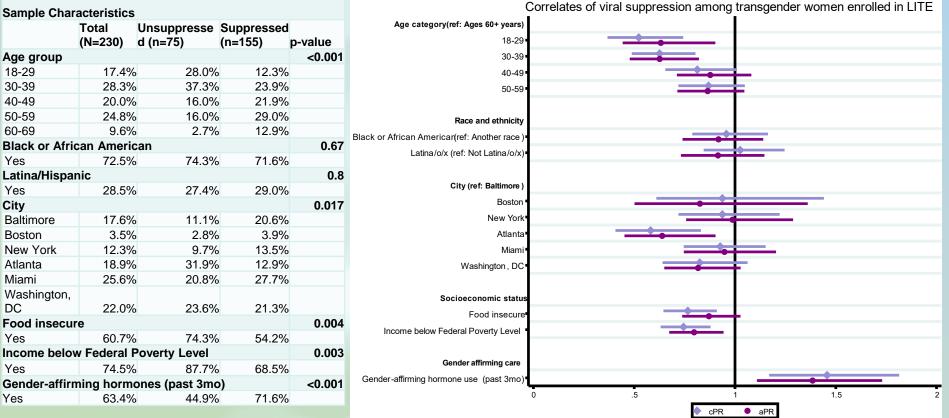


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Sample Characteristics

Yes

Yes

City

DC

Yes

Yes

Yes



1.5

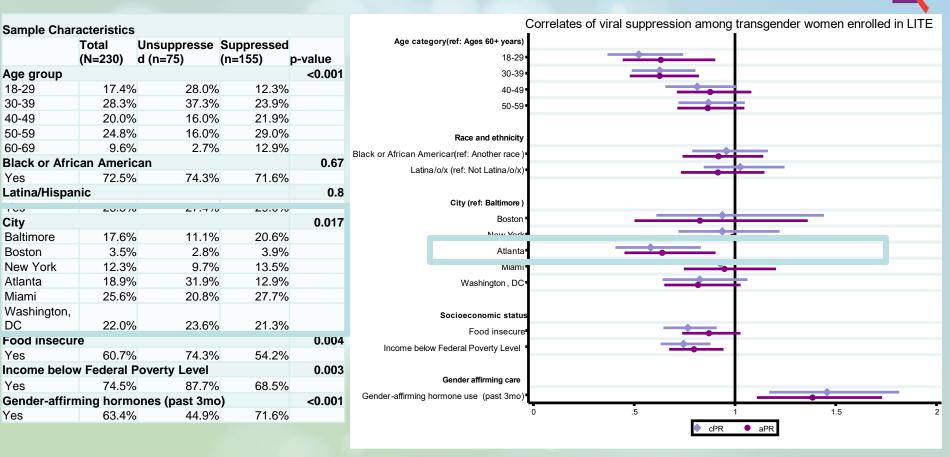
Sample Characteristics Age category(ref: Ages 60+ years) Total **Unsuppresse Suppressed** 18-29 (N=230) d (n=75) (n=155) p-value Age group < 0.001 30-39 18-29 17.4% 28.0% 12.3% 40-49 30-39 28.3% 37.3% 23.9% 50-59 21.070 20.070 40-49 50-59 29.0% 24.8% 16.0% Race and ethnicity 60-69 9.6% 2.7% 12.9% Black or African Americar(ref: Another race) 0.67 Black or African American Latina/o/x (ref: Not Latina/o/x) Yes 72.5% 74.3% 71.6% Latina/Hispanic 0.8 City (ref: Baltimore) 28.5% 27.4% 29.0% Yes Boston¹ City 0.017 17.6% New York Baltimore 11.1% 20.6% Boston 3.5% 2.8% 3.9% Atlanta• New York 12.3% 9.7% 13.5% Miami • Atlanta 18.9% 12.9% 31.9% Washington, DC Miami 25.6% 20.8% 27.7% Washington, Socioeconomic status DC 22.0% 23.6% 21.3% Food insecure Food insecure 0.004 Income below Federal Poverty Level 60.7% Yes 74.3% 54.2% Income below Federal Poverty Level 0.003 Gender affirming care Yes 74.5% 87.7% 68.5% Gender-affirming hormone use (past 3mo) Gender-affirming hormones (past 3mo) < 0.001 .5 0 Yes 63.4% 44.9% 71.6%

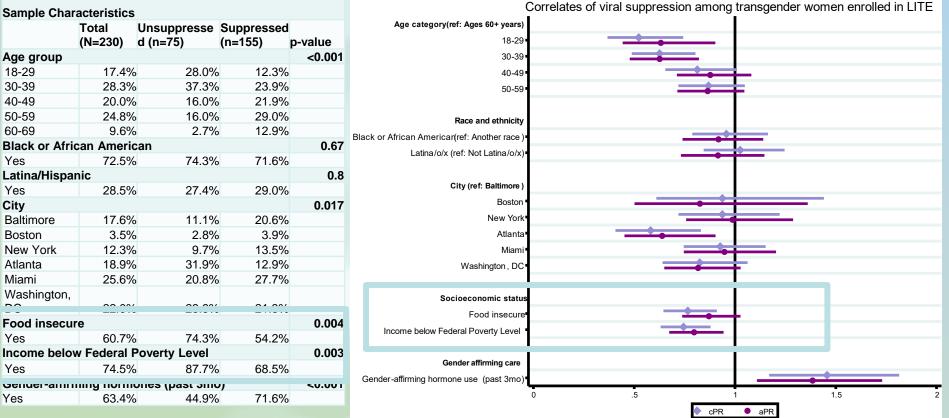
Correlates of viral suppression among transgender women enrolled in LITE

cPR

aPR

Sample Characteristics					(Correlates of viral suppression among transgender women enrolled in LITE
	Total	Unsuppresse	Suppressed		Age category(ref: Ages 60+ years)	
	(N=230)			p-value	18-29•	
Age group				<0.001	30-39•	
18-29	17.4%	28.0%	12.3%		40-49•	
30-39	28.3%	37.3%	23.9%		50-59•	
40-49	20.0%	5 16.0%	21.9%			
50-59	24.8%	5 16.0%	29.0%		Race and ethnicity	
60-69	9.6%	2.7%	12.9%		Black or African Americar(ref: Another race)	
Black or Afri	can Amerio	can		0.67	Latina/o/x (ref: Not Latina/o/x)	
Yes	72.5%	5 74.3%	71.6%			
Latina/Hispa	nic			0.8		
Yes	28.5%	27.4%	29.0%		City (ref: Baltimore)	
U.U17					Boston	
Baltimore	17.6%	5 11.1%	20.6%		New York	
Boston	3.5%	2.8%	3.9%		Atlanta	
New York	12.3%	9.7%	13.5%		Miami	
Atlanta	18.9%	31.9%	12.9%		Washington , DC•	
Miami	25.6%	20.8%	27.7%			
Washington,					Socioeconomic status	
DC	22.0%	23.6%	21.3%		Food insecure	
Food insecu	re			0.004	Income below Federal Poverty Level	
Yes	60.7%	5 74.3%	54.2%		Income below rederant overty Level	
Income below Federal Poverty Level 0.003					Our los (finition ou set	
Yes	74.5%	87.7%	68.5%		Gender affirming care	
Gender-affiri	ning horm	ones (past 3mo))	<0.001	Gender-affirming hormone use (past 3mo)	· · · · · · · · · · · · · · · · · · ·
Yes	63.4%	44.9%	71.6%			0 .5 1 1.5 2
						◆ cPR ● aPR





Sample Characteristics

Yes

Yes

City

Yes

Yes

Yes

Sample Char	acteristics				(Correlates of viral suppression among transgender women enrolled in LITE
	Total	Unsuppresse	Suppressed		Age category(ref: Ages 60+ years)	
	(N=230)	d (n=75)		p-value	18-29•	
Age group				<0.001	30-39	
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40-49	20.0%	16.0%	21.9%			
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60-69	9.6%	2.7%	12.9%		Black or African American(ref: Another race)	
Black or Afri	can Amerio	can		0.67	Latina/o/x (ref: Not Latina/o/x)	
Yes	72.5%	74.3%	71.6%			
Latina/Hispanic 0.8						
Yes	28.5%	27.4%	29.0%		City (ref: Baltimore)	
City 0.017					Boston	
Baltimore	17.6%	11.1%	20.6%		New York	
Boston	3.5%	2.8%	3.9%		Atlanta	
New York	12.3%	9.7%	13.5%		Miami	
Atlanta	18.9%	31.9%	12.9%		Washington, DC	
Miami	25.6%	20.8%	27.7%			
Washington,					Socioeconomic status	
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Income below Federal Poverty Level 0.003						
Yes	74.5%	87.7%	68.5%		Gender affirming care	
Gender-affirm	ning horm	ones (past 3mo)	<0.001	Gender-affirming hormone use (past 3mo)	
Yes	63.4%					0.5 1 1.5 2
						CPR ● aPR

Conclusions

- Suboptimal HIVCC outcomes among transgender women in the eastern and southern US, particularly those ages 18-29 years are notable
- A large proportion of diagnoses occurred post-FDA approval of PrEP among individuals who had never used it, and half of those newly diagnosed had never been tested, highlighting missed opportunities for HIV testing and prevention
- Interventions that provide gender-affirming care and address socioeconomic determinants may improve viral suppression and health outcomes among transgender women living with HIV

Acknowledgements:

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Photo Credit: LITE Atlanta Community Photo Shoot

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We express gratitude to the many participants who made this research possible. We also want to thank all study staff who contributed to this study and connected with study participants in meaningful ways.

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LITE Community Advisory Board Brigham and Women's Hospital Sari Reisner (joint PI) Johns Hopkins University: Andrea Wirtz (joint PI) Dee Adams Keri Althoff Chris Beyrer James Case Erin Cooney Charlotte Gaydos Oliver Laeyendecker Meg Stevenson Callen-Lorde Community Health Center Asa Radix Fenway Health Ken Mayer Emory Univ. /Grady Hospital Jason Schneider Sonya Haw University of North Carolina Tonia Poteat Whitman Walker Institute Christopher Cannon University of Miami Allan Rodriguez Andrew Wawrzyniak Centers for AIDS Research at Johns Hopkins, Harvard, DC CFAR, Univ. of Miami, and Emory National Institutes of Health: Joint support by NIAID, NICHD, NIMH award #UG3/UH3AI133669 Lori Zimand, Gerald Sharp Sonia Lee, Michael Stirratt And NIMH #F31 MH124582 Susannah Allison





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