Latinos living with HIV in DC: an intersectional approach exploring health outcomes

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Leah M. Varga[1,2], Morgan Byrne[2], Marinella Temprosa[2], Leah Bauder[2], Michael A. Horberg[3], Carlos Rodriguez-Diaz[2], Anne Monroe[2], Amanda Castel[2], for DC Cohort Executive Committee

[1]District of Columbia Department of Health, Washington, DC, United States, [2]George Washington University, Washington, DC, United States, [3]Kaiser Permanente Mid-Atlantic States, Rockville, MD, United States

BACKGROUND

- Latina/o/xs (Latinos) are disproportionately affected by HIV, and multiple intersectional positions may impact their health outcomes.
- Social categories, and the experience of those categories, are not independent of each other, and multiple social identities intersect with multiple structural level inequalities.
- Although intersectionality is used often in qualitative studies, there is no current statistical standard.
- Using quantitative data and an intersectional approach, we explored engagement in care and viral suppression among Latinos with HIV enrolled in a longitudinal HIV cohort.

OBJECTIVE

To conduct an intersectional statistical analysis for understanding how multiple social-structural factors impact engagement in care and viral suppression among Latinos living with HIV in DC

METHODS

Inclusion Criteria

- Active patients enrolled in DC Cohort from 1/1/2011 to 12/31/2019
- Identified as Latino at baseline

Data

Data are from electronic health records of adult Latinos with HIV enrolled in the DC Cohort, a longitudinal study of people with HIV receiving care at 15 clinics in Washington, DC (n=541).

Outcomes

- Engagement in Care: two encounters (health care visits or HIV RNA labs) at least 90 days apart in the past 12 months
- Viral suppression: HIV RNA < 200c/mL

Socio-structural factors: age, gender identity, HIV risk category, country of birth, substance use diagnoses (SUD), mental health diagnosis, most recent housing, employment, and insurance status. SUD were based on medical chart review at enrollment and/or ICD9/10 codes throughout follow-up period. Mental health diagnoses were identified with ICD9/10 codes.

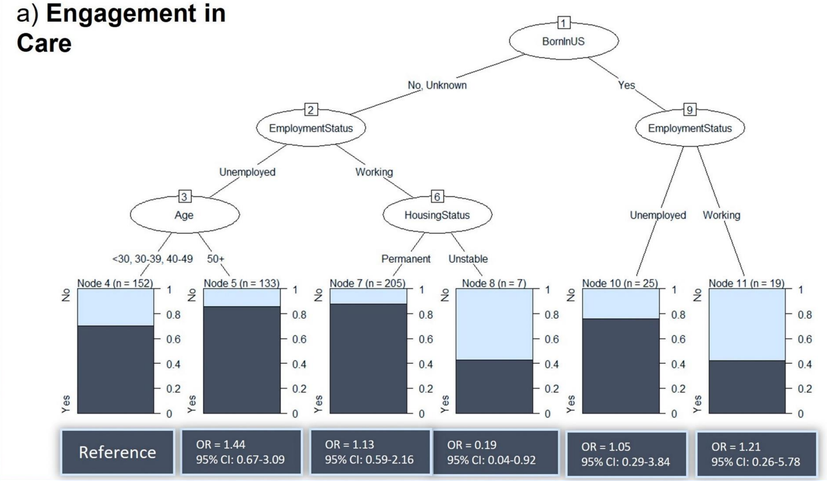
Analysis:

Chi-squared Automatic Interaction Detector (CHAID) identified mutually exclusive subgroups associated without assumptions of additivity for: 1) Engagement in Care and 2) Viral Suppression. Logistic regression was used to quantify the prediction probability of terminal nodes with **adjusted odds ratios and 95% Confidence Intervals.**

Using **an intersectional approach** and quantitative data, Latinos who are *foreign born, employed, and permanently housed* were most likely **to be engaged in HIV care.** *Permanently housed* Latinos also had the highest rates of **viral suppression.**

Figure. CHAID decision tree for variables of a)**Engagement in Care** and b)**Viral Suppression** during most recent 12 months of Follow-up, DC Cohort

a) **Engagement in Care**



b) **Viral Suppression (HIV RNA <200)**

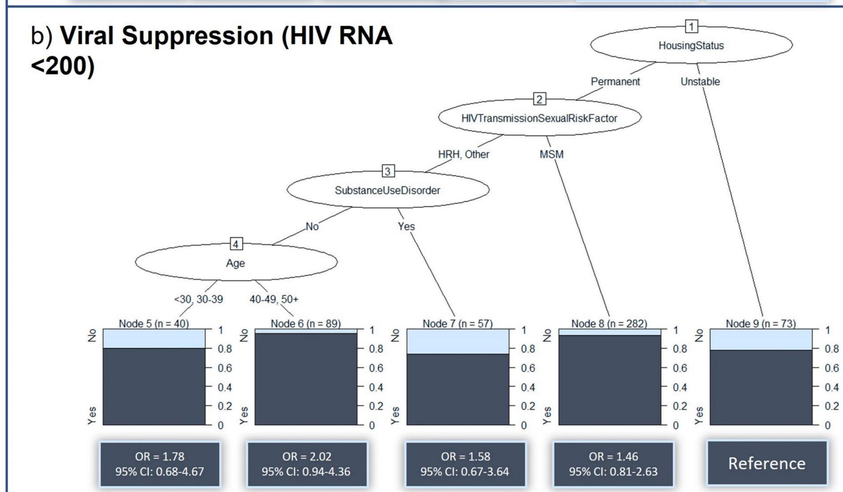


Table. Socio-Structural Demographics

n=541	
Cisgender Female	10%
Male	85%
Transgender Female	3%
Male	7%
HIV Risk Category: Heterosexual	22%
MSM	61%
Median Age	47 years
Foreign Born	48%
Substance Use Disorder	31%
Mental Health Diagnosis	49%
HIV Care at Community Site	77%
Stably Housed	86%
Employed	43%
Health Insurance	93%
Engaged in Care	**80%**
Virally Suppressed	**88%**

RESULTS

Results from the CHAID model indicate that:

- Foreign-born, employed, and permanently housed Latinos were the most engaged in care (Figure a).
- Those least likely to be engaged had the same profile but were unstably housed.
- The odds of being engaged in care are significantly lower for those who are foreign born, employed, and with unstable housing compared to the reference group.
- Groups most likely to be virally suppressed were permanently housed men who have sex with men (MSM) or permanently housed non-MSM, without substance use disorders, and older than 40 years (Figure b).
- Latinos who were non-MSM, with a substance abuse diagnosis, and permanently housed had the lowest rate of viral suppression.
- There are no statistically significant odds ratios for viral suppression.

CONCLUSIONS

- Using decision tree analysis with an intersectional framework revealed combinations of mainly structural factors, particularly housing, had the greatest impact on HIV health outcomes among Latinos.
- Understanding multi-level factors that impact engagement in care and viral suppression can inform the design of appropriate multi-level interventions to reduce inequities.
- Given the size of several terminal nodes, these findings should be explored further in future studies.

ADDITIONAL KEY INFORMATION

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Contact Information: Leah Varga Leah.varga@dc.gov

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