

## Introduction

### Background:

- In 2019, Georgia had the highest rate of new HIV diagnoses in the US among states (23.1 per 100,000) (1).
- Retention in care and viral suppression are important to slow HIV disease progression and reduce transmission to others (2).
- Suboptimal HIV care outcomes have been reported by race and census tract poverty level (2).
- Blacks and Hispanics living with HIV were less likely to achieve and maintain suppressed viral load than Whites in studies in NYC and San Francisco (2).
- Blacks and Hispanics were more likely to live in the most impoverished census tracts than Whites in NYC study (2).
- Blacks living in the most impoverished census tracts had the lowest proportion of viral suppression in NYC study (2).
- Whites living in the least impoverished census tracts had highest proportion of viral suppression in NYC study (2).
- Census tracts are subdivisions of counties (3).
- Population size is between 1,200 and 8,000 people with an average of 4,000 people (3).
- Population of a ZIP code can exceed 100,000 people (4).

### Objective:

Examine effect of census tract poverty on retention in care and viral suppression among Blacks and Whites with HIV.

## Methods

### Data set:

- Data came from Georgia's enhanced HIV/AIDS Reporting System (eHARS) and 2015–2019 American Community Survey (ACS).
- Study population included individuals newly diagnosed during 2018–2019 whose residence at diagnosis could be geocoded to census tract.
- Variables from eHARS included race, census tract at HIV diagnosis, state at HIV diagnosis, and lab data (CD4 count and viral load tests)
- CD4 counts and viral load measures were used as proxies for HIV care visits.
- Retention in care was defined as at least two CD4/viral load (VL) tests 90 days apart during the 12 months after diagnosis.
- Viral suppression was defined as last VL <200 copies per milliliter during the 12 months after diagnosis.
- The percent of people whose income in past 12 months was below the poverty level was obtained from the ACS by census tract (5).
- Categorized as 0–6.99% below poverty level, 7–10.99%, 11–17.99%, 18–24.99%, 25–39.99%, and >40% (Figure 1).

## Results

### Overall:

- 4,645 people were diagnosed in 2018 and 2019 in Georgia and geocoded to census tract.
- 3,315 (71.4%) were Black and 721 (15.5%) were White.
- Within 12 months of diagnosis, 65.4% of Blacks and 68.9% of Whites achieved retention in care while 67.3% of Blacks and 73.0% of Whites achieved viral suppression.
- As poverty increased, retention in care and viral suppression percentages decreased.
- Viral suppression decreased more than retention in care as poverty increased.

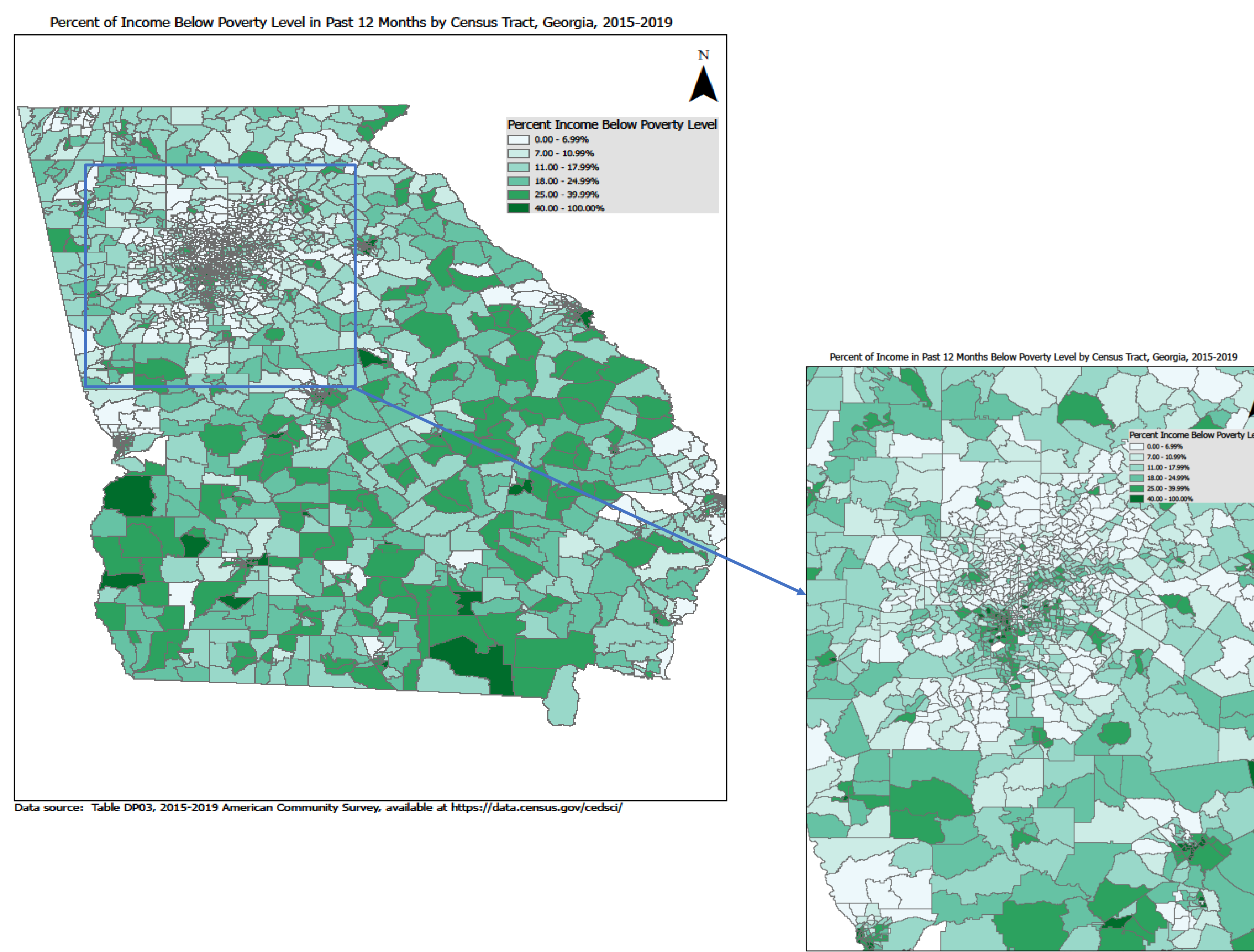
### Retention in care by poverty level:

- Retention in care did not vary much among Blacks by poverty (Figure 2).
- Retention in care was usually higher among Whites than Blacks, regardless of poverty (Figure 2).

### Viral suppression by poverty level:

- Viral suppression decreased as poverty increased for Blacks and Whites (Figure 3).
- Viral suppression was usually higher among Whites than Blacks, regardless of poverty level (Figure 3).

Figure 1. Percent below poverty level by census tract.



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## Results

Figure 2. Retention in care by race and poverty level.

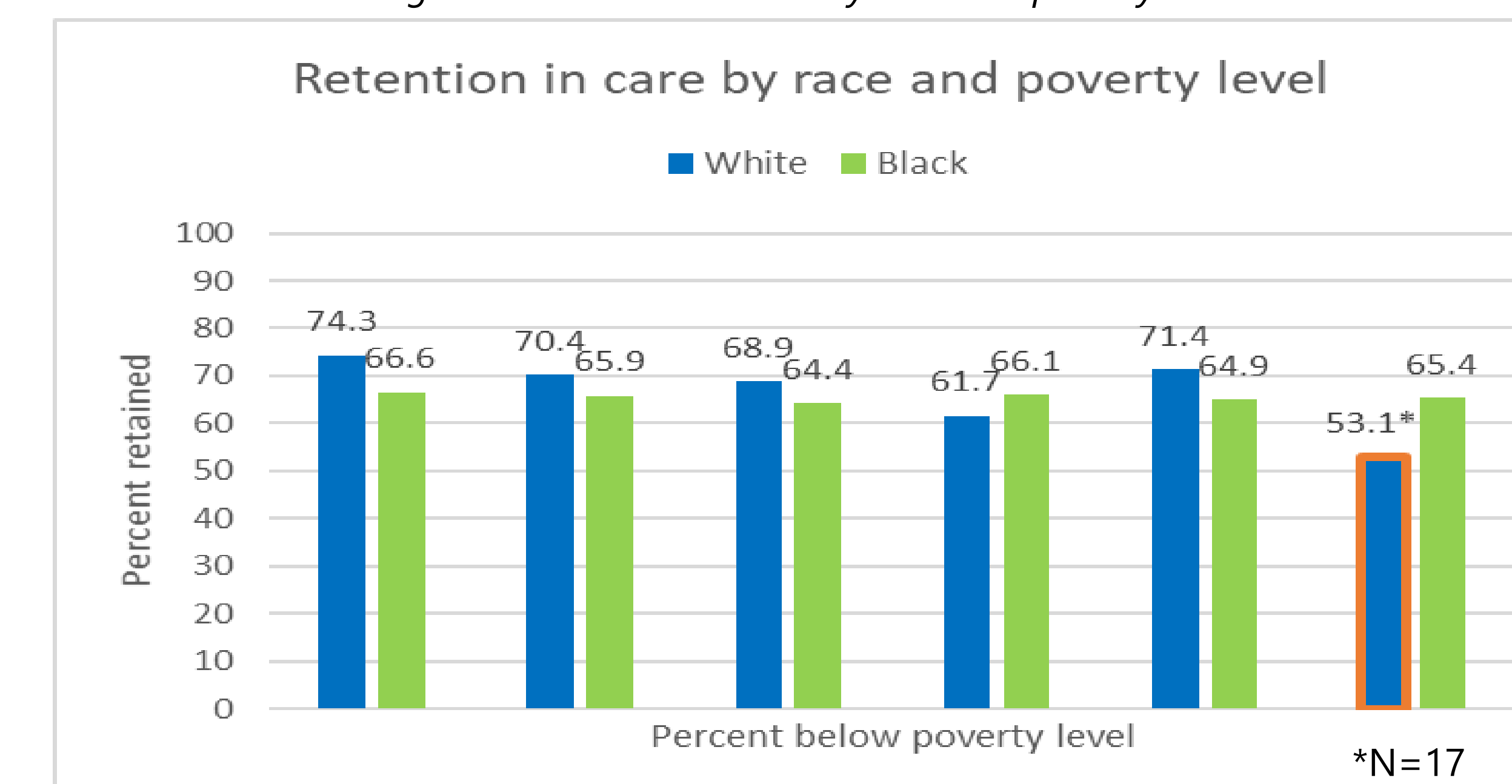
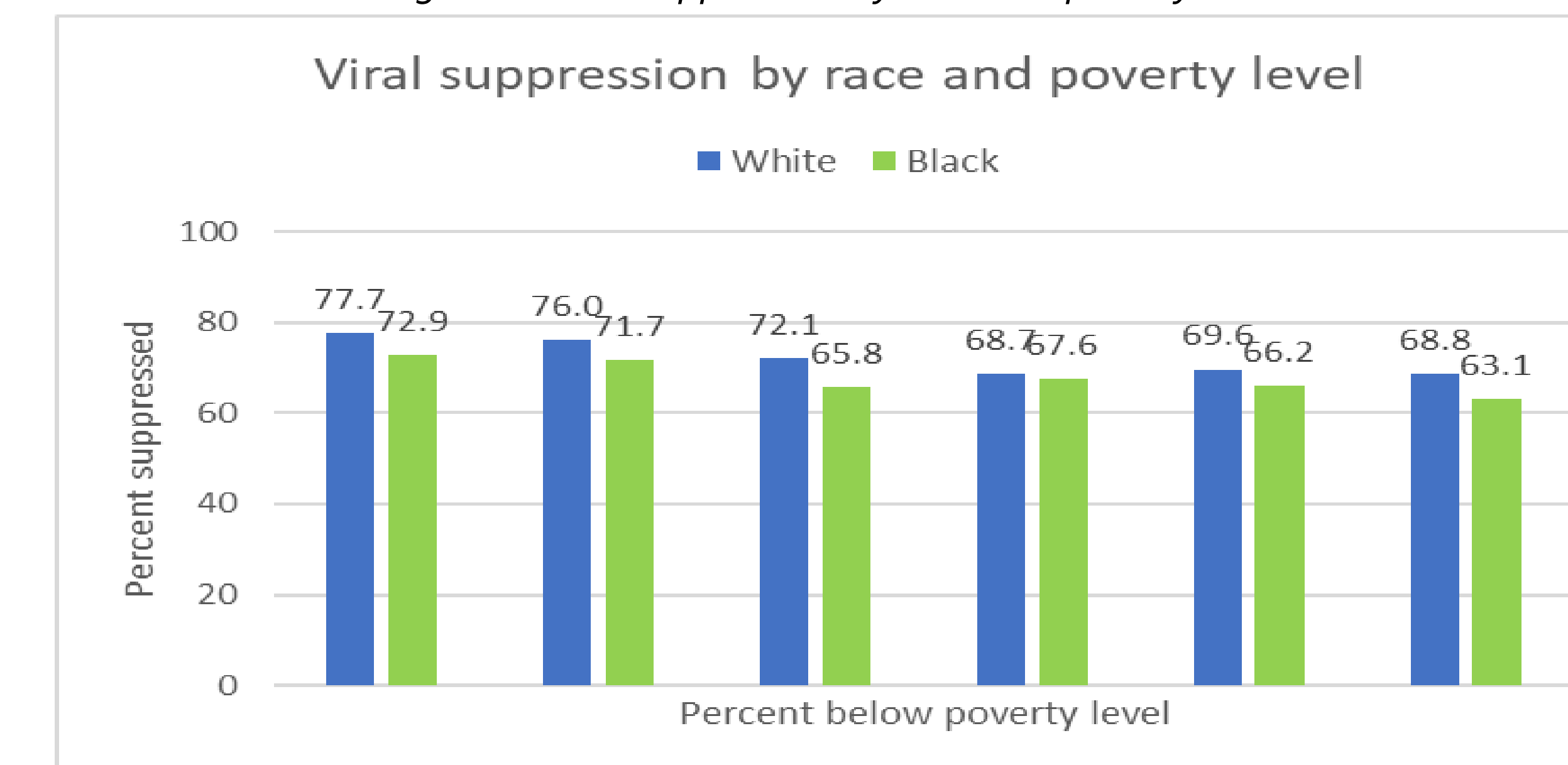


Figure 3. Viral suppression by race and poverty level.



## Discussion and conclusions

- Retention in care was less affected by poverty than viral suppression.
- Retention in care and viral suppression were usually higher among Whites.
- Black-White gap in retention in care and viral suppression remained approximately the same across poverty levels.
- Census tract poverty may be useful to identify people needing additional public health programmatic/policy support to improve retention in care and viral suppression and reduce HIV transmission.

### Limitations:

- No individual-level measure of poverty was available.

## References

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