

**C31**

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**Racial and Ethnic Disparities and HIV Viral Load Among People Living with HIV During the Coronavirus-19 Pandemic in Brooklyn, New York**

**Rationale:** Racial/ethnic disparities exist in the diagnosis of human immunodeficiency virus (HIV) and viral load suppression among people living with HIV (PWH). Previous studies in our laboratory demonstrated the association between Coronavirus-19 (COVID-19) and viral load suppression in PWH in NYC. Lower viral load suppression in certain racial groups could lead to the risk of higher HIV transmission and disease progression. This study examines the association between racial/ethnic disparities and viral load, including CD4+ T-cell counts in PWH.

**Methods:** A retrospective chart review was conducted for 1,130 adult patients receiving care (Brooklyn, NY). Patients were stratified by race and ethnicity. HIV viral load and CD4+ T cell counts were compared across three timeframes (pre-pandemic, January 1, 2019, to December 31, 2019; first pandemic phase, March 19, 2020, to December 31, 2020; and second pandemic phase, January 1, 2021, to May 11, 2023) with analysis of variance (ANOVA) and Kruskal-Wallis tests.

**Results:** The distribution of mean HIV viral load was different across races during the first phase of the pandemic ( $P = 0.006$ ), but not CD4+ T cell counts. Specifically, the mean (standard deviation [SD]) HIV viral load was higher in Black compared with White patients (5,015.1 (43,772.3) vs 3,735.0 (16,945.9),  $P = 0.015$ ) during the first pandemic phase. Non-Hispanic versus Hispanic had higher mean (SD) HIV viral load (3,878.4 (30,138.9) vs 2,809.1 (13,145.9),  $P = 0.028$ ) during the pre-pandemic phase. No differences in race were observed pre-pandemic or during the second phase (ANOVA, Kruskal-Wallis tests).

**Conclusions:** HIV viral load differed among racial groups during the first pandemic phase, highlighting exacerbated racial disparities.