

The current project proposes an analysis of 'bi-racial' (i.e., Latino Black) MSM who participated in The Brothers Study (HPTN 061). In the US, MSM are the group most impacted by HIV accounting for 53% of new infections (CDC, 2010). Within MSM, Latinos and, to a greater extent, Blacks have significantly higher risk of acquiring HIV compared to whites even though these groups report similar rates of HIV-risk behavior (see CDC, 2011). There is a limited but slowly growing literature that examines factors impacting HIV-infection among Latino and Black MSM, both separately and in comparison to each other (e.g., Gonzalez et al., 2009). Little is known, however, about how such findings apply to Latino Black MSM. Although some cross-sectional studies report that MSM endorsing both Black race and Latino ethnicity have similar HIV-risk behaviors and HIV prevalence as Black MSM (Oster et al., 2011; Valleroy et al., 2000), the majority of HIV prevention research fails to examine this 'bi-racial' subgroup. This type of research is needed in order to develop prevention interventions tailored to the socio-demographic circumstances of specific subgroups (Crepaz et al., 2007).

The Brothers Study offers a unique opportunity to explore ethnicity and race within Black MSM. Of the 1553 Black MSM enrolled across study sites, 8% (i.e., 119) endorsed Latino ethnicity (per SCHARP report). The currently proposed project's primary aim is to explore HIV-related high-risk behavior and sero-conversion among Latino Black and non-Latino Black MSM. This will be based on data available given measure of interest and protocol study design (e.g., number of Latino Black MSM newly HIV+ versus HIV-). The following analyses are anticipated and, if I am selected, will be refined in consultation with biostatisticians from SCHARP:

Cross-sectional (baseline)

- Between-group comparisons of demographic variables, factors believed to impact HIV risk and HIV status.
- Measures: demographics (e.g., site, age, race, ethnicity, sexual orientation, education, income, household, health insurance, marital status, years in US, religion); mental health (depression, PTSD); childhood sexual abuse; mental health care; HIV knowledge; prior HIV test; sexual and social networks; social support; internalized homophobia; stigma and discrimination; substance use; number of male and female sex partners; sex with drugs; sex for money; condom use; sexual transmitted infections; high-risk sexual behavior; HIV status.
- Demographic comparisons will be assessed using Chi-square test while association of ethnicity with HIV-risk factors will be assessed using logistic regression.

Longitudinal (baseline and follow-up)

- Between-group comparisons of rates of HIV acquisition (for those HIV- at baseline) and rates of HIV treatment utilization (for those HIV+ at baseline). Includes above measures. HIV infection rates computed using Poisson regression, with comparison performed using Cox proportional hazards.
- Within-group analyses, for Latino Black MSM, of predictors of (a) HIV-related high-risk behavior and (b) sero-conversion. Includes above measures. Predictors of high-risk sexual behavior assessed using logistic regression where baseline bivariate predictors are explored and those statistically significant are entered into multivariable model; analyses will be replicated using GEE modeling for longitudinal data. Predictors of sero-conversion assessed using Cox proportional hazard regression modeling.

The secondary aim is to explore the differential perceived need, utilization and response to the intervention by Latino versus non-Latino Black MSM in order to better understand feasibility of the intervention across groups. This includes exploring views of the strengths and challenges of The Brothers Study, as well as study participation and use of intervention (e.g., terminations; use of peer navigators; referrals). This will be based on data available given measure of interest and protocol study design (e.g. number of Latino Black MSM who agreed versus refused HIV testing).