The U.S. HIV epidemic has disproportionately affected Black men who have sex with men (MSM), with Black MSM comprising a quarter of new HIV infections in the U.S. The disproportionate rate of HIV among Black MSM is not explained by differences in individual risk behaviors, such as number of sexual partners, unprotected intercourse, and substance use. 

Sexual networks may play Black MSM at increased risk for HIV infection, although data is limited. Previous studies have noted that Black MSM were more likely to have older partners and to have some race/ethnicity mismatch of MSM of other races/ethnicities. 

The objectives of this study are to describe the sexual network characteristics of Black MSM enrolled in the HIV Prevention Trials Network (HPTN) 061 multi-site study, and to evaluate sexual network factors that are associated with having Black sex partners or having serodiscordant unprotected intercourse (SDUI).

HPTN 061 was a study designed to determine the feasibility and acceptability of a multi-component intervention, including peer health system navigation, for Black MSM in the U.S. 

Black MSM were recruited from the community or referred by sexual partners in 6 cities between 07/2009 and 10/2010: Los Angeles, CA; San Francisco, CA; Atlanta, GA; Boston, MA; New York, NY (channeled Prevention Center and New York Blood Center); and Washington, DC. 

Main eligibility criteria: (1) self-identified as man or male at birth, (2) self-identified as Black, African-American, Caribbean Black, or multi-ethnic Black, (3) age 18-36 years, (4) reported unprotected and intercourse with a man in prior 6 months, and (5) provided written informed consent.

A study participant completed an ACASI questionnaire and a social and sexual network inventory at the baseline visit, as well as at 6 and 12 months. A rapid HIV antibody test, along with confirmation with Western Blot if reactive, was performed at each visit.

P-value < 0.05 for all variables when compared by study site, except for HIV serostatus by self-report at enrollment. (N=482 partners) 

Disclosure of HIV status to sex partners by HIV+ participants

Frequency of condom use with sex in past 6 months (N=4361)

Among HIV+ participants (N=348 partners)

Unknown

HIV+

HIV-"+

Partner Level Characteristic, n (%)

• None

• Not living with partner or single, age 31-40

• Less than college degree

• Race of partner

• Age of partner, years

• Age and being HIV+.

Given the very high, and rising, rates of HIV infection among young MSM having Black or Hispanic sex partners or having serodiscordant unprotected intercourse (SDUI), it is noted that Black MSM were among self-reported HIV+ participants, SDUI was associated with an HIV+ or unknown status partner, or an HIV-participant with an HIV+ or unknown status partner.

Among self-reported HIV- participants, SDUI was associated with (after adjusting for study site):

• having an absence of overlap of social and sexual networks

• having sexual network size of 3-5 partners

• not living with partner or being single/divorced/widowed

• lower household income

• prior incarceration history

• being HIV- but unaware of diagnosis

• age

• gender of partner

• Among self-reported HIV+ participants, SDUI was associated with not identifying as Latino/Hispanic after adjusting for study site.

**STUDY DESIGN AND METHODS**

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**CONCLUSIONS**

• For community-recruited Black MSM enrolled in the HPTN 061 study, having Black partners was associated with younger age and being HIV+. Given the very high, and rising, rates of HIV infections among young MSM, these findings show the need for new prevention interventions that effectively engage Black-only sexual networks of young Black MSM.

• Among self-reported HIV+ participants, SDUI was associated with absence of overlap of sexual and social networks, and with unprotected and intercourse. Among self-reported HIV- participants, SDUI was not associated with any sexual network characteristics.

• Interventions that address network dynamics of sexual risk and partnering by Black MSM should be developed to lower this high infection rate.

• Given the high level of SDUI (46%) and lack of disclosure of serostatus among HIV+ men (47% reporting no disclosure to sex partners) in the study, counseling of HIV- men about reducing HIV transmission risk behaviors should be implemented.

• Given the association of SDUI among participants who were HIV- but unaware of their diagnosis, HIV testing and linkage to care efforts should be intensified among Black MSM.