

Project Proposal

In the United States (US), AA MSM have some of the highest HIV prevalence and incidence rates [1-3]. Although AA MSM are just as likely as White MSM to engage in risky sexual behaviors, these behaviors do not entirely explain racial disparities [4]. There are a range of mechanisms that have yet to be studied adequately and additional research is needed to fully elucidate potential mechanisms in this high-risk population. A number of studies, including studies with large samples of MSM, have shown predictive associations of CSA with high-risk sexual behaviors and becoming HIV infected in adulthood, [5-7]. Thus, the sexual dyad is an important context that shapes HIV risk [8,9] and is particularly salient for African American MSM. There is growing evidence on the role of CSA with sexual partnership and relationship characteristics, including multiple sex partners [10,11], sex while under the influence of drugs or alcohol [12,13], sex trading [14,15] and inconsistent condom use [10,13]. The experience of sexual abuse in early life has been shown to be linked to increased difficulties appraising risk [16,17], which could play an important role in engaging in high-risk HIV sexual behaviors with sexual partners among MSM, especially AA MSM.

In light of the prevalence of CSA among AA MSM (between 30% and ~50%) [7,18] and because sexual relationships are conceptualized as a multi-factorial construct [19,20], the inclusion of multiple measures are necessary to accurately capture the impact of CSA on sexual partnership and relationship characteristics, and ultimately risky sexual behaviors and HIV infection. Thus, we propose to test the relation of CSA with multiple sexual partnership and relationship characteristics among AA MSM. The outcome measures are sexual partnership demographics, defined as the number of sexual partners and partner age, gender and type (e.g., primary), and sexual relationship (social networking, sexual encounters, intimacy, geographic proximity, and condom use) characteristics. This methodological approach differs from previous work that considered single measures and will address new questions into the etiology of HIV in AA MSM.

Specific Aim #1: To evaluate the independent cross-sectional associations of CSA with sexual partnership and relationship characteristics in 1,553 healthy AA MSM in the HPTN 061.

Hypothesis 1: Consistent with the literature, CSA will be associated with an increased number of sexual partners, sexual encounters when sexual partner was first met, and inconsistent condom use.

Hypothesis 2: Given that CSA has been linked to dissociation and difficulties appraising risk, CSA will be associated with meeting sexual partners online and at sex-focused venues, infrequent sexual encounters and communication with sexual partners and decreased social connectedness with sexual partners.

Hypothesis 3: CSA will have a protective effect or no association with partner age, race or type and geographic proximity.

Analysis Plan: To address this aim, we will use multivariable models to relate CSA [independent variables] to sexual partnership (age, race, gender, type, HIV infection status) and relationship (sexual networking, sexual encounters, communication, intimacy, geographic proximity and condom use) [dependent variables]. The analyses will account for mechanisms that may mediate the associations of CSA with sexual partnership and relationship characteristics, including socio-demographics, substance abuse, depression and healthcare access and utilization.

Secondary Aim. To explore whether the associations of CSA with sexual partnership and relationship characteristics differ by CSA experienced in childhood (before the age of 12) or adolescence (between the ages of 13 and 16 years).

Hypothesis: CSA experienced in childhood will be more strongly associated with sexual partnership and relationship characteristics compared to CSA experienced in adolescence.

Deliverable: I expect to complete my Year 4 project by 05/31/2014 and will have developed the proposed project into a manuscript by 11/31/2014.