Despite advances in HIV prevention, substance users and African-American MSM are disproportionately vulnerable to new HIV infections\textsuperscript{1-3}. There is evidence that social networks may influence individual HIV risk behavior\textsuperscript{3,4}, but there are limited studies that have used egocentric network analysis in high risk African-American MSM who also report a history of substance use. The aim of this study is to use data collected from the HPTN 061 study to explore how egocentric social network factors can correspond with individual HIV risk behavior. For this analysis, measures of individual substance use and measures of sexual risk behavior (including condom use, number of partners, and sex with partners who are HIV+ or are of unknown HIV status) will be tested within the social networks classified by specific, baseline group characteristics in HIV-negative Black MSM in multisite HPTN 061 study. Our initial analysis will focus on social network dynamics in participants who endorsed substance use at baseline,
and we will subsequently compare social network dynamics in those who did vs. did not endorse substance use on their initial assessments. In addition, we will subsequently compare social network dynamics in people who endorse sexual behavior while intoxicated with alcohol or illicit substances compared to people who do not endorse sexual behavior while under the influence of alcohol or drugs. We will examine sexual behavior while intoxicated in regards to ever endorsing a history of this type of behavior, frequency of sexual contacts while under the influence, and whether a participant’s last sexual encounter occurred while under the influence of alcohol or substance use. Our hypothesis is that participants who endorse substance use will be more likely to describe egocentric social networks with high-risk sexual behavior compared to participants who report no substance use. We also predict that the association between substance use and type of egocentric social network will differ depending on the substance class (ex. alcohol and stimulant use will have a greater association with high-risk social networks compared to people who endorse substance use outside of alcohol or stimulants or deny any alcohol or substance use). Finally, we predict that subject participants who endorse sexual behavior while intoxicated will have a greater likelihood of being associated with high-risk social networks compared to people who do not endorse this type of sexual behavior. We would also expect that this association will be stronger in participants who more frequently engage in sex while under the influence of alcohol or drugs or participants who report that their more recent sexual encounter occurred while under the influence of alcohol or drugs. Results from this study can inform novel interventions that use social media to reduce HIV incidence in both individuals and their respective social networks.

References


