

The trauma and mental health syndemic associated with substance use in Black men who have sex with men in the HIV Prevention Trials Network 061 Study - A latent transition analysis

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Abstract (<=300 Words)

Substance use among Black men who have sex with men is a significant public health focus due to its association with sexual risk behaviors and, regarding injectable substances, direct transmission of HIV. Traumatic experiences and mental health challenges may form a syndemic that increases risk of substance use in this population; this may be buffered through social support however. Using data from a multicenter prospective cohort of 1068 Black men who have sex with men in the United States collected from July, 2009 to October, 2010, we conducted a longitudinal latent transition analysis testing for a syndemic of race-targeted violence, sexuality-targeted violence, intimate partner violence, other traumatic experiences, depression, and internalized homophobia at baseline and 6 months associated with a substance use index 12 months later. We also tested if social support modified this association and was associated with transitions between statuses. We identified 4 latent statuses: A “low-risk” status characterized by the lowest proportions of syndemic factors and substance use, and 3 “high-risk” statuses, characterized by higher proportions of syndemic factors. All three high-risk statuses had significantly higher substance use than the low-risk status both before and after adjusting for sociodemographics, with the greatest association observed in “high-risk status C” (aOR=4.54, 95% CI 1.98, 10.40). Social support completely attenuated the association between high-risk status C and substance use (Interaction aOR = 0.21, 95% CI 0.05, 0.85) and was associated with lower transition rates from low to high-risk status 6 months later (Transition ratio = 0.45, 95% CI 0.29, 0.69). Our findings were consistent with a syndemic of several dimensions of trauma, depression, and internalized homophobia that was prospectively associated with greater substance use, attenuated by social support. Future research into the longer-term impact of this syndemic on substance use, and the role of social support and resiliency is recommended.

Research Highlights (3 to 5 bullet points)

- A syndemic of race-targeted violence, sexuality-targeted violence, intimate partner violence, other traumatic experiences, depression, and internalized homophobia was associated with substance use 12 months later.
- Greater social support attenuated the association between this syndemic and substance use.
- Greater social support was associated with lower transitioning from low to high-risk status 6 months later.

Keywords (8)

Black, Men who have sex with men, Trauma, Mental Health, Social support, Substance use, Syndemic, Latent transition analysis