# GENDER DIFFERENCES IN ADVERSE CHILDHOOD EXPERIENCES, PSYCHOLOGICAL STRESS, AND DRUG USE DISORDER AMONG PERSONS WHO INJECT DRUGS IN NORTHEAST GEORGIA, USA: A MODERATED MEDIATION ANALYSIS

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## **Background:**

Persons who inject drugs (PWID) are more prone to have adverse childhood experiences (ACEs) as well as drug use disorder (DUD). ACEs have been linked with several mental health outcomes, including psychological stress. Psychological stress might affect the adoption of harmful behavior like drug addiction. This study aims to determine the potential mediational role of psychological stress between ACEs and DUD moderated by gender among PWID living in northeast Georgia, United States.

### Methods:

The study used data collected from adult (≥18 years) HIV-negative PWID attending community organizations in Athens, Georgia, during February-December 2023 (n=172). The study used the 6-item Kessler-6 scale for psychological stress measurement, the 11-item ACEs scale, and the 11-item drug use disorder identification test (DUDIT). Other explanatory variables include age, gender, sexual orientation, race/ethnicity, education, homelessness, syringe-sharing behavior, injection drug frequency, and primary drugs used. Analyses were performed using R 4.4.2 and Stata 18.5.

#### **Results:**

The majority of the PWID were cisgender men (69.2%), heterosexual (94.2%), non-Hispanic Black (50.6%), experiencing homelessness (92.4%), did not share syringes (69.2%), used syringes multiple times (62.2%), and primarily used stimulants (64.5%). After adjusting for sociodemographic characteristics, in moderated mediation analysis, ACEs were significantly associated with higher psychological stress ( $\beta$  = 0.58, p < 0.01), and psychological stress was significantly associated with DUD ( $\beta$  = 0.48, p < 0.001). Although the interaction between ACEs and gender was not statistically significant ( $\beta$  = -0.58, p = 0.10), the conditional indirect effect of ACEs on DUD through stress was statistically significant (B= 0.28, p= 0.016) for men but not significant for women.

## **Conclusion:**

These findings indicate that psychological stress mediates the relationship between ACEs and drug use disorder primarily for male PWID, but not for females. Future interventions might benefit from targeting stress-related coping mechanisms, especially for men with a history of ACEs.

#### **Disclosure of Interest Statement:**

No potential conflict of interest is reported by the authors.