Substance Use and Treatment Utilization Among Reproductive-Age Women with and without HIV in the Southern United States

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Ayako Wendy Fujita[1], C. Christina Mehta[1], Qian Yang[1], Tina T. Tisdale[1], Maria L. Alcaide[2], Aadia Rana[3], Deborah J. Konkle-Parker[4], Daniel Westreich[5], Seble G. Kassaye[6], Elizabeth F. Topper[7], Anandi N. Sheth[1]

1 Division of Infectious Diseases, Department of Medicine, Emory University School of Medicine, Atlanta, GA, USA; 2 Division of Infectious Diseases, Department of Medicine, University of Miami Miller School of Medicine, Miami, FL, USA; 3 Division of Infectious Diseases, Department of Medicine, University of Alabama at Birmingham, Birmingham, Alabama, USA; 4 University of Mississippi Medical Center, Schools of Nursing, Medicine, Population Health, Jackson, MS, USA; 5 Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC, USA; 6 Division of Infectious Diseases, Department of Medicine, Georgetown University, Washington, DC, USA; 7 Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

EMORY UNIVERSITY SCHOOL OF MEDICINE

Division of Infectious Diseases

BACKGROUND

- Reproductive-age women with HIV (WWH) are vulnerable to poor health outcomes.
- Co-morbid substance use disorders (SUD) are associated with worse HIV-related outcomes.
- Pregnant, postpartum, or parenting women with SUD face multiple barriers to seeking and accessing care.
- Understanding contemporary patterns of SUD and treatment across the reproductive life course may offer insight into opportunities to integrate SUD care into women's health and/or HIV care settings.
- **We leveraged the Study of Treatment and Reproductive Outcomes (STAR) cohort to describe substance use and treatment utilization across reproductive life stages.**

METHODS

- STAR: longitudinal cohort study of cisgender women with/without HIV (ages 18-45 years) enrolled in six Southern sites (**Figure 1**)
- Included baseline data from March 2021-April 2024

Table 1. Definitions

Variable	Definition
Substance use	Self-reported, non-medical use of drugs in the past year, including: crack/cocaine, methamphetamines, other stimulants, opioids, sedatives, other drugs (PCP, angel dust, psychedelics, hallucinogens, DMT, mescaline, ketamine, or other) ***Alcohol, tobacco, cannabis were assessed separately***
Substance use treatment	Self-reported, past year utilization of drug treatment program among those with past-year substance use. Included inpatient/outpatient drug detoxification programs, halfway house, Narcotics Anonymous, prison/jail-based programs, medications for opioid use disorder (methadone, buprenorphine/naloxone, naltrexone)
Pregnancy status	• Nulliparous: never had pregnancy resulting in a birth • Pregnant: laboratory-confirmed pregnancy at time of enrollment • Postpartum: pregnancy within past 1 year • Neither pregnant/postpartum: parous but no pregnancy outcome in >1 year

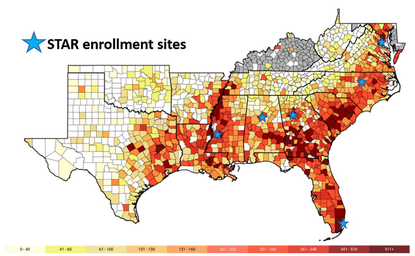


Figure 1. STAR enrollment sites in the Southern US
- **Atlanta, GA**
- **Birmingham, AL**
- **Jackson, MS**
- **Chapel Hill, NC**
- **Miami, FL**
- **Washington, DC**

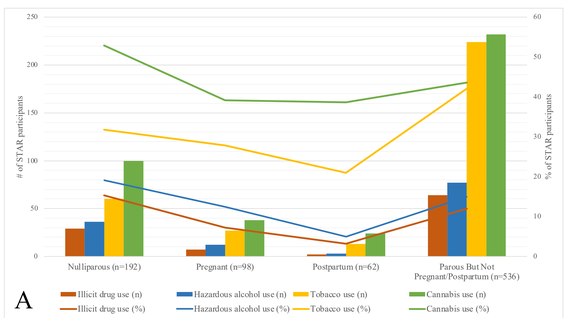
In a large, prospective cohort of reproductive-age women with/without HIV in the Southern US, nonmedical substance use was common—predominantly **stimulant use** with high rates of co-occurring cannabis and tobacco use.

RESULTS

- Among STAR participants (n=891):
  - **Past-year substance use; 11.6%** (9.4% WWH, 14.7% WWoH; p=0.016)
  - Hazardous alcohol use: 14.9% (11.3% WWH, 20.2% WWoH; p<0.001)
  - Current tobacco use: 36.8% (33.9% WWH, 41.0% WWoH; p=0.098)
  - Past year cannabis use: 44.7% (40.0% WWH, 51.5% WWoH; p=0.001)
- Among pregnant women, 7.2% reported substance use, 12.4% hazardous alcohol use, 27.8% tobacco use, 39.2% cannabis use in the past year (**Figures 2A/2B**).
- Among 102 with past-year substance use, most frequently used drug was crack/cocaine (60.8%; **Figure 3**).
- Among women with past-year substance use, 15.8% reported history of accidental overdose.

Table 2. Characteristics of Women Enrolled in STAR Cohort, 2021-2024

Characteristics	Total N=891 N (%)
Median age, years (IQR)	35.5 (29.1, 40.7)
Non-Hispanic Black race	657 (73.9)
Pregnancy status Nulliparous Pregnant Postpartum Neither pregnant/postpartum	 192 (21.6) 98 (11.0) 62 (7.0) 536 (60.4)
Takes care of children ≤18y in home	386 (43.5)
Unemployed	445 (50.1)
≤ High school education	484 (54.5)
Annual household income ≤$24,000/year	373 (44.4)
History of incarceration	296 (33.3)
Depressive symptoms	321 (36.5)



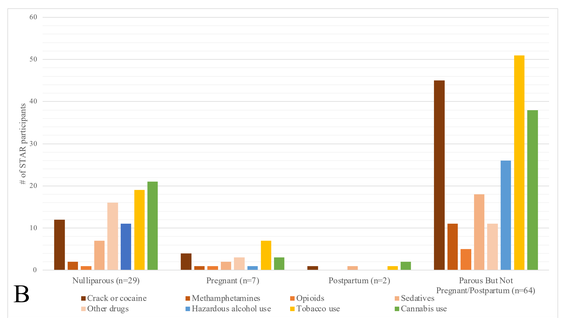


Figure 2. Patterns of Types of Substances Across Reproductive Life Stages Among All STAR Participants (n=887, panel A) and Among Those with Past Year Substance Use (n=102, panel B).

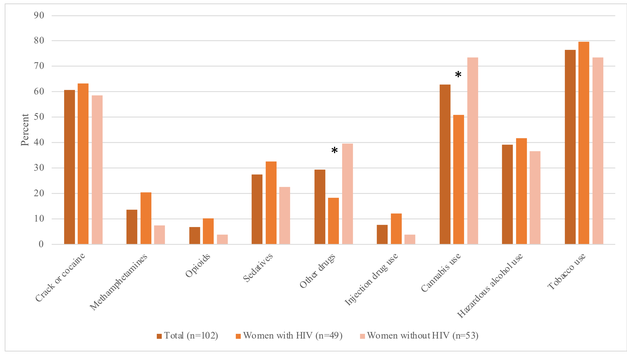


Figure 3. Types of Substances Used Among Women with Past Year Illicit Drug Use (n=102), by HIV serostatus. *Represents statistically significant differences by HIV serostatus (p<0.05).

RESULTS

- **Among women with past-year substance use, 22.6% utilized a drug treatment program in the past year.**
- No difference in treatment by HIV serostatus or pregnancy status. Unable to determine differences by stimulant vs opioid use due to small N of opioid-only use.

CONCLUSIONS

- We found high rates of substance use and co-occurring cannabis and tobacco use among STAR participants.
- Stimulant use was common with rare opioid-only use in this cohort.
- Prevalence of substance use was lower during pregnancy and postpartum periods, but interpretation limited by small sample size in those subgroups and cross-sectional data.
- Future directions: implementation studies to understand barriers/facilitators to SUD care and identify key factors to integrating HIV/SUD care for women.

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Contact information:
Ayako Wendy Fujita, MD MSc
afujita@emory.edu
@wendyfujita.bsky.social