High Rates of Viremic HIV, Risky Sexual Behaviors, and Interest in Gender Affirming Hormone Therapy among Transgender Individuals who Engage in Transactional Sex

Amelia A. Cover[1,2], Rahwa Eyasu[1,2], Ashley Davis[1,2], Omar Harfouch[1,2], Emade Ebah[1,2], Phyllis Bijole[4], Catherine Gannon[2,3], Grace Garrett[2,3], Vivian Wang[2,3], Michelle Spikes[4], Imani Fnu[4], Miriam Jones[4], Henry Masur[3], Shyam Kottilil[1], Sarah Kattakuzhy[1,2], Elana S. Rosenthal[1,2]

1. Division of Clinical Care and Research, Institute of Human Virology, University of Maryland School of Medicine, Baltimore, MD, 2. DC Partnership for HIV/AIDS Progress, Washington, DC, 3. Critical Care Medicine Department, Clinical Center, National Institutes of Health, Bethesda, MD, 4. HIPS, org, Washington, DC

Contact: Amelia Cover, CRNP, AAHIVS: amy.cover@gmail.com; Elana Rosenthal, MD: erosenthal@ihv.umaryland.edu

Background

In the U.S., HIV transmission persists largely through sexual transmission in gender and sexual minorities. **Transactional sex (TS)** is a known risk factor for HIV transmission, yet risk behaviors and engagement in HIV treatment and other medical services among transgender (TG) individuals who have TS are poorly understood.

Methods

PATCH is a natural history study of TG individuals in Washington, DC. Participants complete laboratory testing and surveys, including assessment of TS, defined as previous year sex in exchange for drugs, money or shelter. Fisher's exact test was used for statistical analysis.

Results

Of 54 participants assigned male at birth (AMAB), 21 (39%) endorsed TS, the majority of whom were female (81%), Black (95%), median age 35, and HIV+ (76%; **Figure 1**).

When compared to non-TS participants, TG individuals with TS were more likely to have chem sex (p< 0.01), use drugs daily or more (p=0.04), use amphetamines (p< 0.01) and cocaine (p< 0.01; **Figure 1**), and less likely to have gender affirming hormone therapy (GAHT) prescribed by a provider (p=0.03). Among participants with HIV+, those with TS were less likely to have HIV VL< 200 (p=0.02; **Figure 2**).

The majority of TG people with TS had sex weekly or more (75%), with >5 partners/year (62%) and used their penis (80%) and anus (90%) during TS. A minority consistently used condoms in receptive anal sex (29%), penetrative anal sex (25%), penetrative vaginal sex (17%), and chem sex (8%) (**Figure 3**).

While 95% had ever taken GAHT, 62% were not prescribed GAHT at screening, of whom 54% were interested in seeing a provider for GAHT (**Figure 4**).

Of those with HIV, 12 (75%) were prescribed ART, though only 8 (50%) had HIV VL < 200 (**Figure 5**).

Results

	Total (N=54)	Transactional Sex (N=21)	No Transactional Sex (N=33)	P-value
Male Sex Assigned at Birth	54, 100%	21, 100%	33, 100%	P=1
Gender Identity:				
• Female	45, 83%	17, 81%	28, 85%	P=0.72
• Nonbinary/other	9, 17%	4, 19%	5, 15%	P=0.72
Median Age (IQR) Years	35.5, (31, 42.5)	35, (31, 39)	37, (31, 52)	N/A
Black/African American Race	47,87%	20, 95%	27, 82%	P=0.22
Unstable Housing	21, 39%	9, 43%	12, 36%	P=0.78
Graduated High School/Has GED	44, 81%	14, 67%	30, 91%	**P=0.04**
Living with HIV	35, 65%	16, 76%	19, 58%	P=0.24

Table 1. Patient Demographics

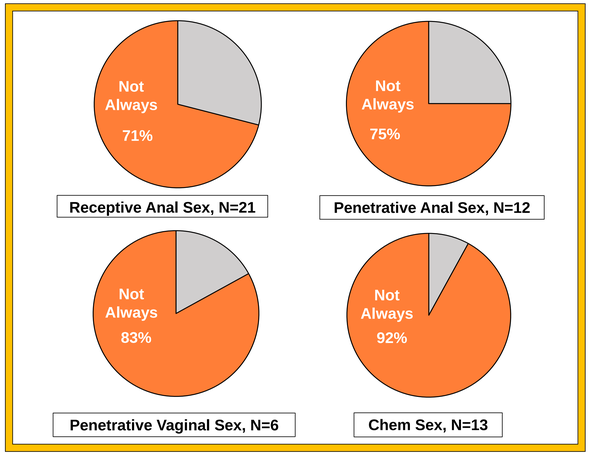

Figure 3. Condom Use Among Participants with Transactional Sex

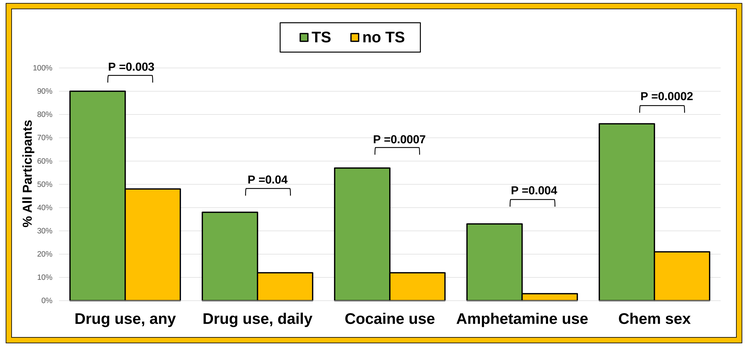

Figure 1. Drug Use By Transactional Sex Status

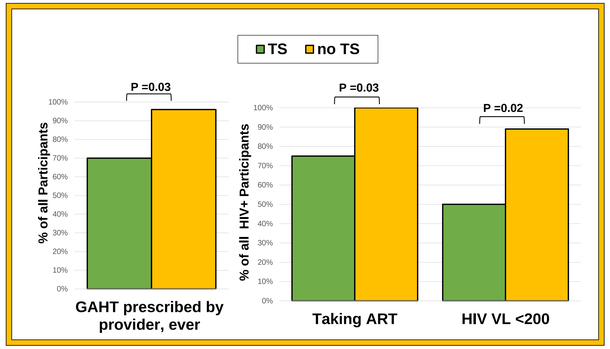

Figure 2. Clinical Care and Outcomes By Transactional Sex Status

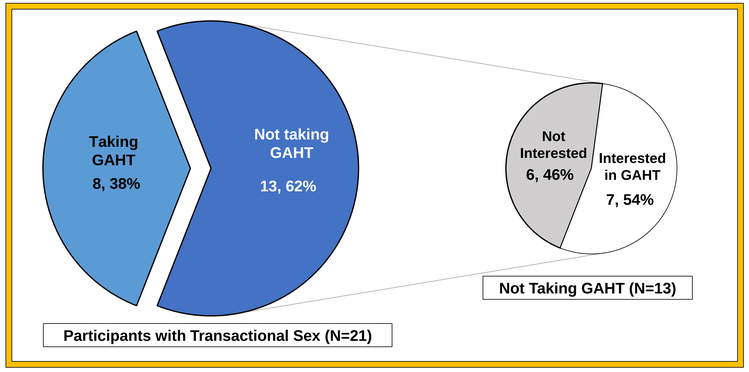

Figure 4. Gender-Affirming Hormone Therapy Among Participants with Transactional Sex

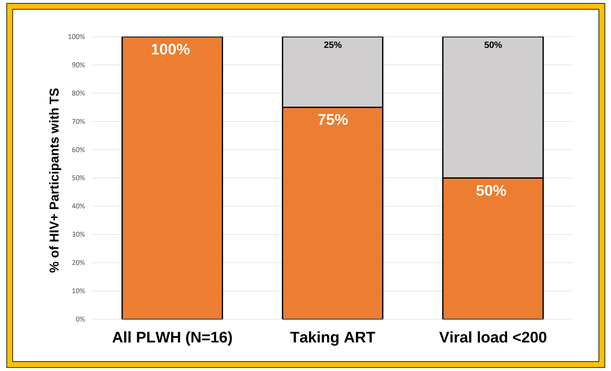

Figure 5. Antiretroviral Use and Viral Suppression Among Participants with Transactional Sex

Conclusions

This cohort of transgender individuals assigned male at birth engaging in transactional sex had high rates of viremic HIV, and multiple risk factors for HIV transmission, including frequent condomless sex with multiple partners. Additionally, those with TS were more likely to have high risk drug use and chemsex, indicating that **novel strategies to decrease risk associated with chem sex, particularly stimulant use, should be prioritized**. Further, nearly all TG participants with TS had taken GAHT, yet were less likely to get GAHT from a provider. As the majority had interest in seeing a provider for GAHT, **co-locating GAHT with HIV treatment and prevention services could help providers engage this population and reduce HIV-related risks.**