# HIV Vulnerabilities and Extreme Disparities among Young Transgender Women in Lima, Peru

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## Background:

Globally, transgender women (TW) are at high risk for HIV acquisition with nearly 50-fold increased odds of HIV compared to the general population. In Peru, transgender women are most affected by HIV, with a prevalence of 20.8-29.8% compared with 0.2-0.3% in the general population. Peruvian young transgender women (YTW) ages 16-24 years are a critical but understudied group for primary HIV prevention efforts. Previous studies show sharp increases in HIV prevalence among transwomen ages 25 years and older.

This study aimed to characterize the prevalence of HIV and other STIs, identify structural and psychosocial vulnerabilities for HIV, and estimate the correlates of HIV status among young transgender women in Lima, Peru.

#### Results:

Out of 218 potential participants screened, 211 transgender women enrolled in the study and 164 (77.7%) gave blood samples for HIV/STI testing. The median age of participants was 23 years (minimum 16, maximum 24). Approximately half of participants (52.1%) were born outside of Lima and 72.0% of participants had completed secondary school or higher and 18% reported being in school.

	Prevalence (%) (95% CI)
HIV	41.5 (33.9 – 49.4)
Syphilis (recent)*	19.4 (12.7 – 28.4)
Syphilis (All-life exposure)**	53.0 (45.1 - 60.8)
Chlamydia	6.1 (3.1 - 11.1)
Gonorrhoea	12.3 (7.9 – 18.7)
Hepatitis B (anti core)	11.0 (6.8 – 17.0)
Hepatitis C	1.2 (0.2 – 5.8)
HIV and STI co-occurrence	31.9 (25.0 – 39.7)
At least 1 STI	73.8 (66.2 – 80.2)

Table 1: Prevalence of HIV and other STIs

The median age of self-acknowledgment of gender identity was 13 (IQR: 8-16). About half of the sample (52.7%) were not "out" about being trans in all aspects of their lives, 49.8% reported ever using hormones, 20.9% ever injecting silicone, and 15.2% having had at least one surgical procedure.

Ever tested for HIV	127 (60.2%)
Tested for STIs in past 6 months	54 (25.6%)
Medical insurance	45 (21.3%)
None	45 (21.3%)
Private	64 (30.3%)
SIS (public)	97 (46.0%)
Missing	5 (2.4%)
Heard of PrEP	46 (31.3%)
Past 30 days PrEP use	8 (5.4%)

Table 2: Access to healthcare and HIV prevention

#### Methods:

Between February-July 2022, we conducted a cross-sectional quantitative study with YTW ages 16-24 years residing in Lima, Peru (N=211). Data collection consisted of a bio-behavioural survey accompanied by laboratory-based testing for HIV and sexually transmitted infections (STIs). A formative qualitative research phase informed this study.

Feminas, a community-based organization formed and led by transgender women in Lima, assisted with the study design and implementation. Participants were recruited through peers. Six study offices were placed throughout metropolitan Lima. The survey interviewers were transgender women in their early twenties. Bivariate and multivariable Poisson regression models were used to estimate prevalence ratios between sociodemographic and behavioural characteristics and HIV status.



Fieldwork team during a break at one study site

	N (%)
Ever experienced violence	130 (61.6%)
Experienced violence in past 3 months	45 (21.3%)
Moderate to severe psychological distress (past 30 days)	42 (19.9%)
PTSD symptoms (score ≥4/5)	43 (20.4%)
Ever attempted suicide	50 (23.7%)
Recent suicide attempt (past 6 months)	21 (10.0%)

Table 3: Violence experiences and mental health

	n (%)
Ever engaged in sex work	145 (68.7%)
Recently engaged in sex work (past 30 days)	107 (50.7%)
Ever accepted more money for not using condoms	29 (13.7%)

Table 4: Participation in sex work

Multivariable Poisson regression analysis estimating the prevalence of HIV acquisition. Adjusted for age and education, participants who reported accepting more money for not using condoms during sex work were more likely to test positive for HIV acquisition (PR = 1.50, 95% CI: 1.01 – 2.23). Recent sex work alone was not significantly associated with HIV acquisition.

### **Conclusions:**

HIV burden among Peruvian young transgender women sampled was alarmingly high. Findings show the multiple mental health and psychosocial vulnerabilities faced by YTW, that can intersect to fuel HIV vulnerability and STI co-morbidities in YTW and need to be further studied. Furthermore, these findings emphasize the necessity to design and evaluate programmes addressing the root systems driving HIV vulnerabilities in young transgender women. Healthcare awareness must be heightened for unhindered access to HIV/STI testing, prevention, and care. Effective programmes in Peru must be youth-oriented, developmentally informed, and gender-affirming.

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