

Increased HIV prevalence and risk among women who inject drugs compared to men who inject drugs in Tajikistan

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Background

- New diagnoses of HIV continue to increase annually in Tajikistan with people who inject drugs (PWID) most affected by HIV.
- The estimated number of PWID in Tajikistan in 2014 was 23,000.
- To measure HIV prevalence and assess HIV risk behaviors among PWID, we conducted an integrated bio-behavioral survey (IBBS).

Methods

- Data were collected from April through June 2018.
- Respondent-driven sampling (RDS) was used to recruit adults aged ≥18 years who had injected drugs at least once in the last six months.
- Study sites included eight districts/cities in Tajikistan with the highest concentration of PWID.
- HIV testing was performed using a serial three-test algorithm.
- For those testing positive, enrollment in antiretroviral therapy (ART) and viral load suppression (VLS) were analyzed using routinely collected patient data from the national electronic HIV case management system.
- Study questionnaires were based on standard behavioral surveys adapted from other settings and previous surveys used in Tajikistan.
- Descriptive analysis and chi-square test of the crude estimates are reported.

Results

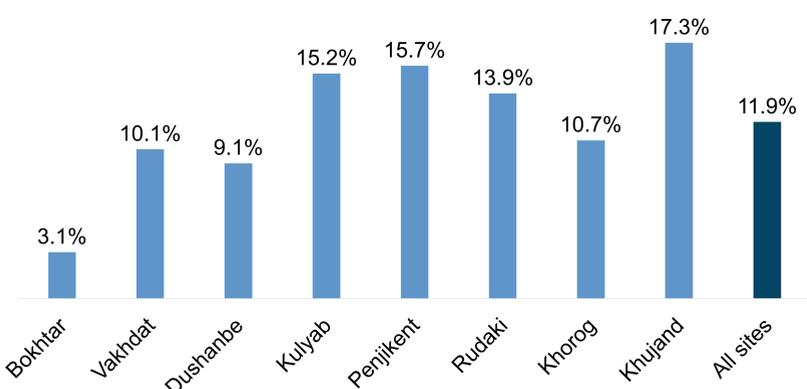
- The study included 23 men and 4 women as initial "seeds" for the RDS-based recruitment, 12 of whom were HIV-positive. The number of recruitment waves varied from 6 to 16.
- The median age of participants was 41 years for men (interquartile range (IQR) 33-48) and 37 year for women (IQR 30-42).
- The median number of years injecting drugs was 7 years for men (IQR 4-12) and 5.5 years for women (IQR 3-10).
- Heroin was the most commonly used drug.

Table 1. Study population

Site	Number of distributed coupons	Number of returned coupons	Number of people who were not eligible/did not consent	Number of respondents (males/females) who completed the study
Bokhtar	744	350	0	335/15
Vakhdat	334	200	0	196/4
Dushanbe	1126	517	17	441/59
Kulyab	538	351	1	343/7
Penjikent	264	200	0	189/11
Rudaki	562	254	14	239/1
Khorog	673	350	0	349/1
Khujant	255	201	1	182/18
Total	4,496	2,423	33	2,274/116

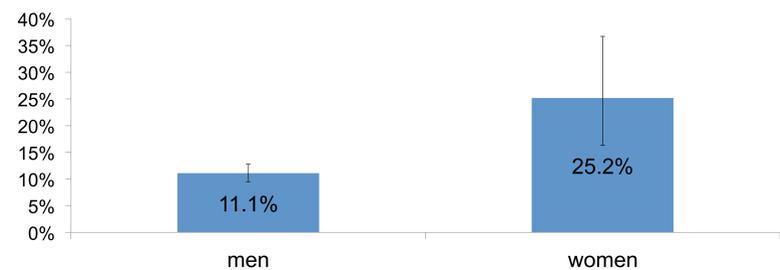
- The overall HIV prevalence among all participants was 11.9% (95%CI 10.3% - 13.7%) and ranged from 3.1% to 17.3% across sites.
- HIV prevalence among women was 25.2% (95%CI: 16.3%-36.7%) and significantly higher compared to men (11.1% (95%CI: 9.5%-12.8%)).
- 92.7% (95%CI: 88.2%-95.6%) of HIV-positive PWID were diagnosed and knew their status before the study.
- Among those who knew about their HIV positivity, 88.7% (95%CI 82.2%-93.1.4%) of PWID were on ART at the time of the study.
- Among those on ART, 57.3% (95%CI: 49.8%-66.1%) of PWID had VLS <1000 copies/mL.
- There was no difference in knowledge of HIV positivity, ART status and VLS by sex.

Chart 1. RDS-A weighted HIV prevalence (by sites) and overall for the sample (in dark blue)



Results continued

Chart 2. HIV prevalence among PWID by sex, with 95% CIs



- Factors independently associated with higher odds of HIV positivity
 - female (OR=2.6, 95%CI: 1.6-4.3)
 - having an HIV-positive regular sex partner (OR=11.6, 95%CI: 6.1-22.1)
 - injecting drugs for more than 5 years (OR=2.5, 95%CI: 1.7-3.6)
 - having no regular job (OR=1.6, 95%CI: 1.2-2.0), and
 - having ever been in prison (OR=2.7, 95%CI: 2.0-3.5)

Chart 3. 90-90-90 among PWID, by sex, with 95% CIs

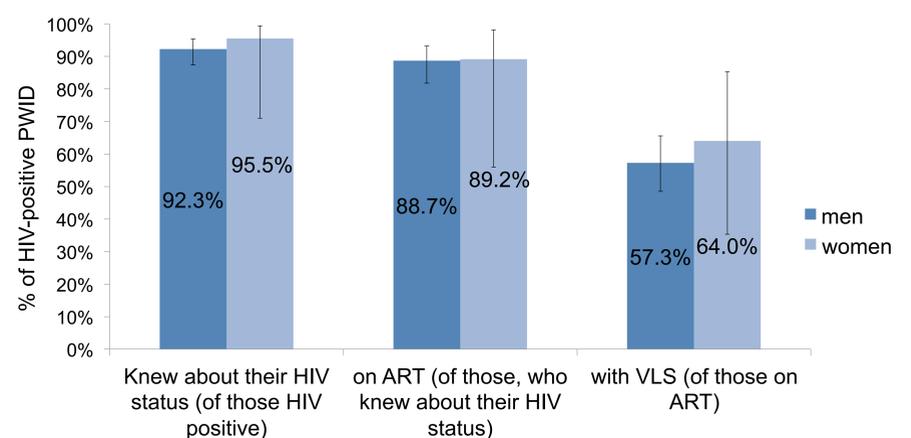


Table 2. Reported behaviors, by sex with 95%CI

	Men	Women
Reported a regular sex partner who also injected drugs*	3.1% (2.0%-4.7%)	37.4% (25.5%-51.0%)
Reported an HIV-positive regular sex partner*	2.8% (1.8%-4.2%)	8.2% (3.9%-16.6%)
Reported exchanging sex for money during the past 6 months*	15.1% (12.9%-17.4%)	24.8% (15.0%-38.1%)
Reported using condoms at last sex with any partner*	28.1% (25.4%-31.0%)	34.0% (23.2%-46.8%)
Reported sharing injection equipment in the past 30 days	58.7% (55.9%-61.5%)	56.2% (44.3%-67.5%)

* of those who reported at least 1 sex partner over the past 6 months

Conclusion

- In Tajikistan, women who inject drugs were more likely than men who inject drugs to be HIV-positive and have high-risk sex partners (PWID or HIV-infected), and sex for money.
- Developing gender-sensitive services and increasing access for all PWID to needed services, including safe sex and harm reduction programs, opioid agonist maintenance therapy, HIV testing, immediate initiation of ART, and effective adherence support, is crucial.