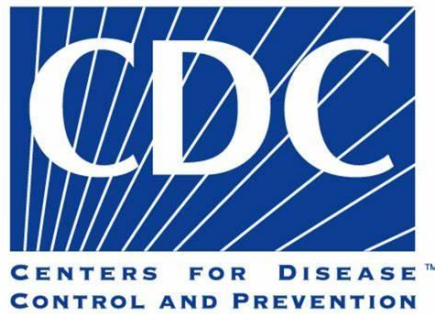




Republican AIDS Center of the
Ministry of Health and Social
protection of the Population of
Tajikistan



BIO-BEHAVIOR SURVEY AMONG FEMALE SEX WORKERS IN TAJIKISTAN

**20
22**

BACKGROUND:

- There are an estimated 17,600 (14,400-21,000) female sex workers (FSW) in Tajikistan.¹
- FSW BBS 2018 identified the following prevalence of HIV and syphilis among FSW population in BBS locations:¹
 - ✓ Dushanbe: HIV - 1.5% and active² syphilis - 0%
 - ✓ Bokhtar: HIV - 3.9% and active syphilis – 2.9%
 - ✓ Kulob: HIV – 1.2% and active syphilis – 1.3%
 - ✓ and Khudjand: HIV – 7.2% and active syphilis - 0%.³
- HIV prevention interventions are carried out in the country, which reached 57% (10,075) of an estimated country FSW population with the minimum package of services, including testing for sexually transmitted infections and provision condoms and/or counseling on correct condom use and safe sex in 2021.⁴
- Over the past 10 years, the main mode of reported HIV transmission in Tajikistan has shifted from injection drug use to sexual. In 2021, sexual transmission of HIV increased to 83.7% of all newly diagnosed people living with HIV (PLHIV) compared to 43.7% in 2011.⁵ A considerable part of this transmissions potentially could occur from either HIV positive FSW to their clients or from HIV positive clients to FSW but not reported as such given stigma associated with commercial sex work. Therefore, HIV transmission through unprotected commercial sex contacts (1% of newly diagnosed PLHIV in 2021)⁵ is most likely underestimated.
- In line with UNAIDS and WHO recommendations, information on the burden of HIV, behavioral risks, access to HIV related services, and knowledge about HIV among key population groups, including FSW needs to be updated every 3-5 years to assess progress towards achievement UNAIDS 95-95-95⁶ global targets for epidemic control and to inform program design and implementation.

PURPOSE:

To assess the burden of HIV, risk behaviors, and access to services e. g. 95-95-95 among FSW in selected four locations of Tajikistan, including Dushanbe, Bokhtar, Kulob, and Khudjand.

¹ Отчет о результатах интегрированного био-поведенческого исследования по ВИЧ и оценки численности работниц секса и лиц, употребляющих инъекционные наркотики в Республике Таджикистан, Душанбе, 2018.

² CHEMBIO DPP® syphilis screen & confirm rapid test kit was used which allowed detection of active syphilis.

³ FSW BBS 2018 was implemented in eight locations in Tajikistan but here we mentioned only those locations in which FSW BBS was also implemented in 2022.

⁴ Progress update & disbursement request to GF, HIV/TB project of UNDP Tajikistan, Feb 2022.

⁵ Republican AIDS center statistics as of Dec 31, 2022.

⁶ UNAIDS targets: 95% of PLHIV are aware of HIV status, among those aware, 95% receiving ART, and among those on ART, 95% have HIV viral suppression.

METHODS:

Respondent-driven sampling (RDS) was used to recruit FSW aged 18+ years in four cities in Tajikistan.

Trained survey interviewers collected information on demographics, risk behaviors, and access to HIV as well as other sexually transmitted infections (STIs) and Hepatitis C (HCV) prevention, testing and counseling, and treatment services. Blood samples were tested at survey sites using rapid tests for HIV, HCV, syphilis, and recent HIV infection (if respondent tested positive for HIV). All respondents with reactive HIV and/or HCV antibody rapid test results were escorted to the respective AIDS center for HIV viral load (VL) and HCV RNA testing on either Qiagen or GeneXpert platform.

Weighted population estimates were generated using the 'Giles SS' estimator in RDS-Analyst software.

RESULTS:

Table 1. Demographic, HIV, HCV, and syphilis serological prevalence, behavioral practices, access to HIV prevention and testing services and attitudes data among FSW population in four cities of Tajikistan, BBS 2022.

<i>Features (estimated in % [95CI])</i>	<i>Dushanbe N = 596</i>	<i>Bokhtar N = 451</i>	<i>Kulob N = 424</i>	<i>Khujand N = 482</i>
Age, years Mean (standard deviation)	33.3 (8.9)	31.4 (7.8)	36.7 (7.4)	36.7 (8.4)
Total female adult (15+) population*	403,900	38,437	67,379	65,811
BIOLOGIC MARKERS				
HIV prevalence among all (%)	3.5 (1.6–5.4)	3.9 (2.1–5.8)	1.5 (0.3–2.8)	2.2 (0.8–3.6)
HIV prevalence among those who ever injected drugs (%)	76.8	0.0	56.52	65.35
Syphilis prevalence (%)	10.0 (6.8–13.2)	10.6 (8.1–13.1)	8.6 (5.8–11.3)	9.5 (6.7–12.2)
HCV prevalence (anti-HCV) (%)	3.7 (2.1–5.4)	2.1 (0.7–3.5)	1.7 (0.6–2.8)	1.1 (0.3–1.9)
HCV prevalence (anti-HCV) among those who ever injected drugs (%)	42.7	65.8	100	47.96
RNA HCV among anti-HCV positive	49.7 (22.7–77.4)	100	48.6 (7.3–92.1)	82.9 (69.5–100)
RNA HCV among all respondents (%)	1.9 (0.6–3.1)	2.1 (0.8–3.5)	5.8 (3.3–8.3)	0.9 (0.2–1.6)
RISKY BEHAVIORS				
Condom use at last sex with <i>regular partner</i> (%)	43.7 (36.9–50.4)	80.4 (75.9–84.6)	30.8 (24.9–36.8)	39.7 (31.5–49.2)
Condom use at last sex with <i>random partner</i> (%)	73.9 (69.3–78.4)	91.6 (87.8–95.4)	87.0 (81.4–92.3)	92.5 (85.8–100)
Condom use at last sex with <i>commercial partner</i> (%)	73.9 (70.5–77.3)	98.0 (96.4–99.6)	87.4 (83.7–91.0)	84.2 (81.0–87.4)

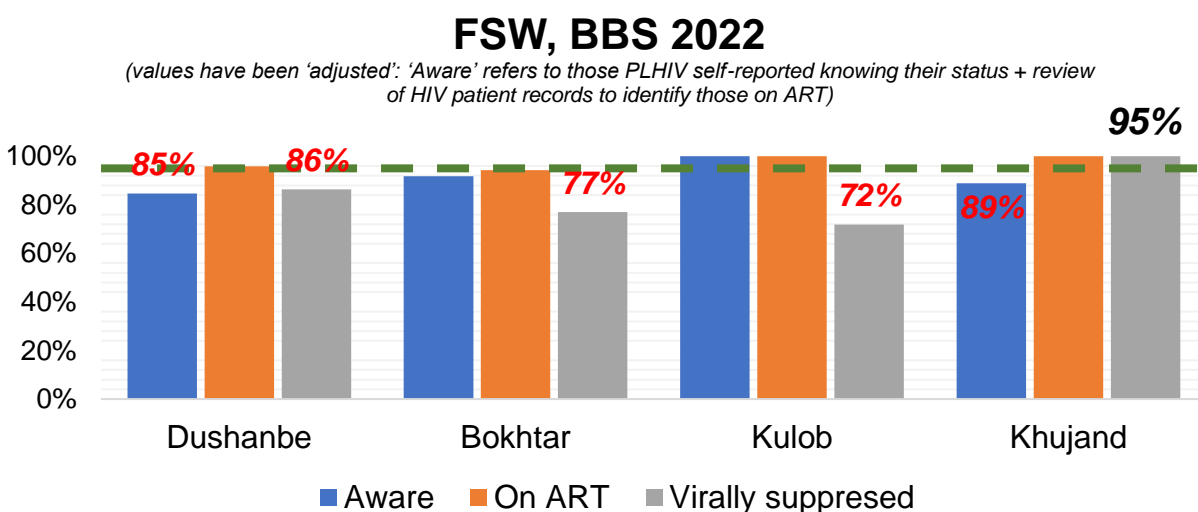
Condom use at last vaginal sex (%)	81.8 (78.5–85.0)	86.0 (82.5–89.5)	73.7 (69.4–77.9)	74.8 (71.4–78.3)
Condom use at last anal sex (%)	43.0 (29.8–55.6)	33.1 (11.4–54.3)	81.6 (71.8–89.1)	93.2 (88.4–98.6)
SERVICE ACCESS/UPTAKE				
Received HIV prevention services (%)**	25.5 (22.2–28.8)	18.2 (14.8–21.5)	61.9 (57.5–66.4)	15.1 (11.9–18.3)
Received HIV test ever (%)	54.3 (50.2–58.4)	61.9 (57.2–66.5)	90.4 (87.2–93.5)	65.3 (61.1–69.5)
Received HIV test <i>in the last 12 months</i> (of all excluding those diagnosed prior to survey participation) (%)	42.4 (38.2–46.5)	56.0 (51.4–60.6)	81.3 (77.3–85.2)	46.2 (41.9–50.4)
PrEP awareness (%)	32.1 (28.6–35.7)	3.1 (1.6–4.5)	10.0 (7.5–12.5)	13.1 (10.4–15.9)
Received PrEP out of those aware (%)	62.2 (56.4–68.1)	35.0 (7.1–64.2)	2.0 (0.0–2.8)	4.5 (0.0–27.7)
Received PrEP out of all respondents (%)	20.0 (16.9–23.1)	1.1 (0.2–2.0)	0.2 (0.1–0.3)	0.6 (0.0–1.2)
STIGMA				
Ever avoided seeking health care services because of being FSW (%)	2.7 (1.5–4.0)	3.8 (2.0–5.6)	11.4 (8.6–14.3)	1.0 (0.2–1.8)
Ever felt needed to hide being FSW when sought health care (%)	2.3 (1.0–3.6)	10.5 (7.4–13.5)	28.1 (24.0–32.2)	21.1 (17.9–24.3)
Ever has been treated unfairly or denied health care because of being FSW (%)	1.2 (0.2–2.2)	3.0 (1.5–4.6)	0.8 (0.2–1.4)	1.0 (0.2–1.8)

*Population size of the Republic of Tajikistan as of January 1, 2022 (stat.tj)

**Respondent was counted as covered by HIV prevention interventions if she reported being tested for sexually transmitted infections and receiving at least one other intervention, including condoms and lubricants and/or counseling on condom use and safe sex in the past three months

Figure 1.

HIV services cascade (95-95-95) in percentage among FSW in BBS locations in Tajikistan, BBS 2022.⁷



⁷ These values have been 'adjusted': 'Aware' refers to those PLHIV self-reported knowing their status + review of HIV patient records to identify those on ART.

Table 2.

HIV services cascade (95-95-95) with 95% CI among FSW in BBS locations in Tajikistan, BBS 2022⁷

Location	Estimate for 1 st 95			Estimate for 2 nd 95			Estimate for 3 rd 95		
	(%)	95% CI		(%)	95% CI		(%)	95% CI	
Dushanbe	84.7	79.0	90.4	95.9	87.6	100.0	86.3	72.1	100.0
Bokhtar	91.7	86.1	96.7	94.2	90.5	98.2	77.0	65.1	90.5
Kulob	100.0			100.0			71.9	40.2	100.0
Khudjand	88.8	79.1	97.5	100.0			100.0		

CONCLUSION:

- HIV prevalence among FSW population ranged from 1.5 to 3.9% across BBS locations, which represent: 1) almost the same prevalence for Bokhtar and Kulob: 2) 133% increase and 69% decrease in HIV prevalence among FSW population in Dushanbe and Khudjand accordingly compared to the results of 2018 FSW BBS 2018.
- Proportion of FSW who ever injected drugs varied across BBS sites from 0.3 to 1.3%. This subgroup has significantly higher HIV (up to 76.8%) and HCV (from 42.7 to 100% across the sites) prevalence.
- An estimated exposure to syphilis infection is high in all four locations (8.6% - 10.6%). High prevalence of antibodies to syphilis in all four BBS locations may serve as a marker of risky sexual behavior among FSW population which correlates with suboptimal condom use rate at the last vaginal sex by location (73.7% - 86%).
- In Kulob, 90.4% and 81.3% of FSW population received HIV test ever and in the last 12 months accordingly, which may explain the highest achievement of the 'first 95' target in this location. Other BBS locations have considerably lower HIV testing coverage (54.3% - 65.3% received HIV test ever AND 42.4% - 56% received HIV test in the last 12 months), which may explain lower achievement of the 'first 95' target (85% - 92%) among FSW population at these locations.
- ART coverage among those FSW/PLHIV that knew their status is almost or exceeds 95% in all four BBS locations. Viral suppression rate among HIV positive FSW receiving ART is sub-optimal and may indicate poor adherence and patient monitoring, or HIV drug resistance in Dushanbe, Bokhtar, and Kulob which in turn may undermine the impact of 'treatment as prevention' as patient-level outcomes of treatment.
- The low rate of condom use at last sex with commercial partner (73.9% in Dushanbe), at last vaginal (73.7% in Kulob), with anal sex (33.1% in Bokhtar), the high exposure to syphilis infection (prevalence of syphilis antibodies 8.6% - 10.6%), lack of PrEP awareness by location (3.1% - 32.1%) and uptake (2% - 62% among those aware of PrEP) suggest possible high level of risk of HIV and STI transmission within FSW community and from them to the general population through "bridge population" such as FSW clients.
- There are two problems related to PrEP, including low awareness (3.1-32.1%) and low uptake even among those who are aware (in two locations below 5%).

RECOMENDATIONS:

1

These findings indicate an increased risk for HIV, HCV, and STIs among FSW in Tajikistan and support the evidence for expanding the availability of patient-centered prevention, HIV testing and counseling, and care and treatment programs for this population.

2

Locally appropriate and innovative HIV testing strategies programs should be scaled up for HIV screening, early initiation of treatment, care, and support for FSW/PLHIV. These may include: HIV self-testing, community-based testing, network-based testing approaches, and extended hours in testing facilities.

3

PrEP expansion including community-based PrEP, as a key HIV prevention measures among this group of population should be considered. Demand creation for PrEP among groups most at risk of HIV is an important next step to rollout this evidence-based and effective prevention intervention. Tajikistan should consider development of PrEP communication strategy which would outline how to increase demand for PrEP among groups most at risk of HIV, including FSW.

4

Expand access to STI treatment, promote condom use, and PrEP uptake as these interventions will likely reduce the risk of HIV transmission in the FSW community and potentially in the general population.

5

Design female-oriented harm reduction programs that include needle exchange program, demand generation for PrEP, opioid substitution therapy, and HIV testing and counseling.

**BIO-BEHAVIOR SURVEY
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TAJIKISTAN, BBS 2022**

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Appendix: Information for UNDP (HIV Grant) annual reporting

Impact Indicators	Category	Result			Comments on results on indicators and data sources, and any other comments***
		N#*	D#*	%**	
HIV I-10 ^(M) Percentage of female sex workers who are living with HIV	All	54	1,953	2,9	This proportion represents the median of the RDS adjusted FSW population level estimates across four survey sites.
HIV O-5 ^(M) Percentage of female sex workers reporting the use of a condom with their most recent client	All	1,574	1,935	82,2	This proportion represents the median of the RDS adjusted FSW population level estimates across four survey sites.
HIV I-10 ^(M) Percentage of female sex workers who are living with HIV	25+	53	1,655	3,3	This proportion represents the median of the RDS adjusted FSW population level estimates across four survey sites.
HIV I-10 ^(M) Percentage of female sex workers who are living with HIV	<25	1	298	0,0	This proportion represents the median of the RDS adjusted FSW population level estimates across four survey sites.
HIV O-5 ^(M) Percentage of female sex workers reporting the use of a condom with their most recent client	25+	1,340	1,638	81,5	This proportion represents the median of the RDS adjusted FSW population level estimates across four survey sites.
HIV O-5 ^(M) Percentage of female sex workers reporting the use of a condom with their most recent client	<25	234	297	69,5	This proportion represents the median of the RDS adjusted FSW population level estimates across four survey sites.

*N# and D# represent that actual survey recruitment sizes for the respective populations.

**Confidence bounds are available upon request.

***Protocol and datasets are available upon request.