



National Integrated Biological and Behavioral Surveillance (IBBS)

Survey among People Who Inject Drugs (PWID) in Nepal-2020

BRIEF DESCRIPTION OF STUDY

Under the leadership of the National Center for AIDS and STD Control (NCASC) and in close collaboration with key stakeholders, the National Surveillance Plan on HIV (2016-2021) conducted Integrated Biological and Behavioral Surveillance (IBBS) surveys in 2020 in all seven provinces to measure HIV, hepatitis C virus (HCV), hepatitis B virus (HBV) and sexually transmitted infection (STI) knowledge, related risk behaviors, injecting practices, and prevalence. Since 2002, Nepal has successfully conducted several rounds of IBBS surveys among People Who Inject Drugs (PWID).

The 2020 national IBBS survey in Nepal was conducted among 1840 (males=1690; females=150) PWID.

STUDY METHODS

The IBBS survey population was defined as: Nepalese citizens, 15 years and older, who injected drugs for non-medical purposes at least once in past six months and live in the Province where the survey is conducted. All participants underwent screening and provided consent.

Formative research was conducted in all Provinces of Nepal to assess PWID's underlying network structures and network sizes, RDS acceptability (peers recruiting peers) and to identify survey sites and potential PWID seeds (initial recruits).

The sample size of 1690 male PWID was calculated using population size adjustments, a design effect of between 1.5 and 3, 95% confidence and 80% power. Given that network structures among female PWID differ from those of males, it was decided to conduct separate surveys of females using convenience sampling. One hundred and fifty female PWID, combined, were sampled in Province 1, Bagmati Province and Gandaki Province.

To ensure that findings were representative across Nepal, survey sites were randomly selected from the provinces. The final Provinces and sample sizes selected were: Province 1 (200 Males; 30 Females); Province 2 (200 Males); Bagmati Province (470 Males; 60 Females); Gandaki Province (350 Males; 60 Females); Lumbini Province (250 Males); Karnali Province (100 Males); and Sudurpaschim Province (120 Males). Data for

Male PWID from each survey site were combined and weighted by network and population size. Data for female PWID were not adjusted.

SURVEY SITE

The following districts from each Province were randomly selected for the study sites: Morang, Sarlahi, Kathmandu, Kaski, Rupandehi, Surkhet and Kailali. Respondents who visited from other districts within a province were allowed to participate. For example Morang is selected from province 1 which covers the respondents of Jhapa, Morang and Sunsari.

KEY FINDINGS

Demographic characteristics

Males

The majority of PWID are ≥ 25 years (59%), unmarried (57%), in the advantaged caste/ethnic group (57%) and have an education of Secondary Education Examination (SEE) or higher (42.2%).

Females

The majority of females were ≥ 25 years (54%), married (55%), are in the advantaged caste/ethnic group (53%), and have an education of secondary education examination (SEE) (39.3%).

Comprehensive HIV knowledge

Males

Overall, the comprehensive HIV knowledge among male PWID was below 50%. The composite score indicators for correct HIV knowledge were defined as two categories: "Abstinence from sexual contact", "Being faithful to one partner", and "Consistent condom use" (ABC) and "Being faithful to one partner", "Consistent condom use", "A healthy looking person can be infected with HIV", "A person can get the HIV virus from mosquito bite", and "Sharing a meal with an HIV infected person transmit HIV" (BCDEF). Forty percent of male PWID were aware of ABC (province 5 respondents were least aware) and 34% correctly identified BCDEF (province 1 respondents were least aware).

Females

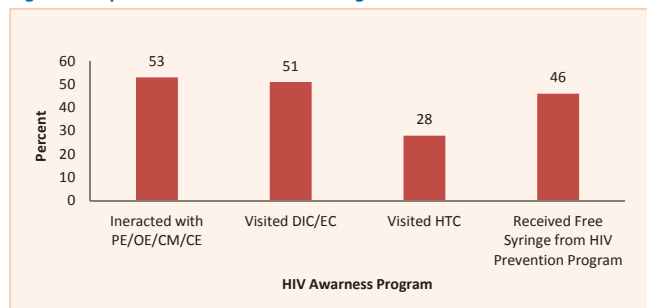
Female PWID had poor comprehensive HIV knowledge: Only 37% knew about ABC and 16% knew about BCDEF.

Exposure to HIV Awareness Programs in the past 12 months

Males

Fifty three percent of male PWID met with a Peer Educator (PE), Outreach Educator (OE), Community Mobilizer (CM) or Community Educator (CE), 51% visited a drop in/exchange center (DIC/EC), 28% visited HIV testing and counseling (HTC) and 46% received free new needles/syringes in the past 12 months from an HIV prevention program.

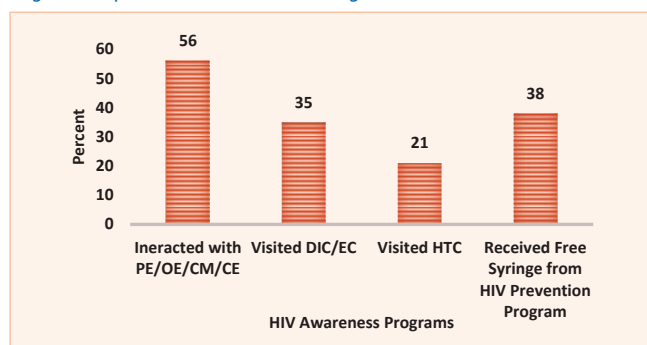
Figure 1: Exposure to HIV Awareness Programs, male PWID (n=1690), 2020



Females

Fifty six percent of female PWID met with a PE/OE/CM/CE, 35% visited a DIC/EC, 21% visited HTC and 38% received free new needles/syringes in the past 12 months from an HIV prevention program.

Figure 2: Exposure to HIV Awareness Programs, female PWID (n=150), 2020

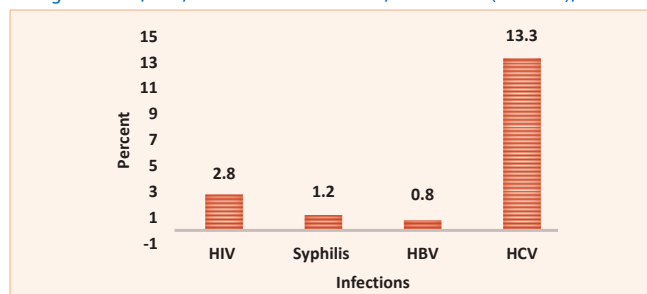


HIV, HBV, HCV and STI Prevalence and HIV, HCV and HBV co-infection

Males

HIV prevalence among male PWID in Nepal is 2.8% (the highest prevalence is in Bagmati province, 4.6%). Among those who are HIV seropositive (n=34), all positive cases were HIV long term infection (LTI). HCV prevalence is 13.3% (the highest being in Sudurpaschim province, 26.8%). Syphilis prevalence is 1.2%. Among those who are HIV seropositive (n=37), 72% are co-infected with HCV, 4% are co-infection with HBV and 4% are coinfected with both HCV and HBV.

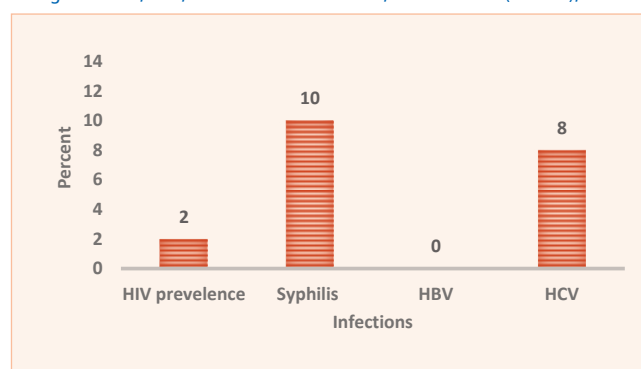
Figure 3: HIV, HBV, HCV and STI Prevalence, male PWID (n=1690), 2020



Females

HIV among female PWID in Nepal is 2%; all positive cases were HIV LTI. HCV and Syphilis prevalence are 8% and 10%, respectively.

Figure 4: HIV, HBV, HCV and STI Prevalence, female PWID (n=150), 2020



Knowledge and practice on HIV testing

Males

Just under three quarters (74%) of male PWID know where to get an HIV test, 46% ever had an HIV test, among which 98% knew their HIV status. Among those whose most recent HIV test result was positive (42%), 100% are receiving antiretroviral therapy (ART).

Females

Forty-eight percent of female PWID know where to get an HIV test, among which all ever had an HIV test and all received their HIV test results.

Oral Substitution Therapy (OST)

Males

Ten percent of male PWID are under drug treatment, among which 62% received Buprenorphine, 38% received Methadone and 66% received Opioid Substitution Therapy (OST) for six months continuously. Among PWID currently under drug treatment, 43.2% are currently receiving OST.

Females

less than 1% of female PWID are under drug treatment; 3% had discontinued treatment. Of those who are under drug treatment, 60% received Buprenorphine, 40% received Methadone, and 60% received OST for six months continuously. No female PWID under drug treatment are currently receiving OST.

Condom Use during last sexual intercourse

Males

More than half (68%) of male PWID used a condom during their last sexual intercourse. Among those who reported having sex with a female sex worker (N=641), 54% used a condom. Sixty four percent who reported having a regular partner used a condom with that partner and 30% who reported having a casual partner used a condom with that partner.

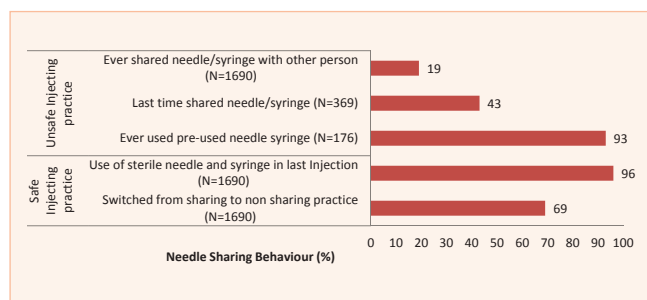
Females

Fifty-two percent of female PWID used a condom during their last sexual intercourse. Forty six percent who reported having a regular partner used a condom with that partner and 69% who reported having a casual partner used a condom with that partner.

Injecting Behavior

Males

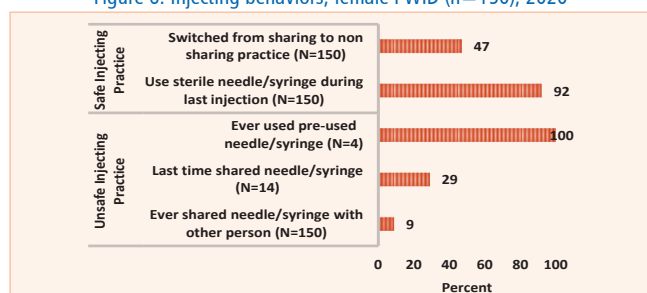
Nineteen percent of male PWID shared the same needle/syringe ever with another person, among which 43% shared the same needle/syringe with another person the last time they injected in the past month. Of those PWID who shared needles and syringes the last time when injecting drugs, 92.8% used pre used needle/syringes. Ninety six percent sterile needle to inject drugs the last time they injected and 69% switched from sharing needles/syringes to not-sharing needles/syringes in past 12 months.



Females

Nine percent of female PWID shared the same needle/syringe with another person, among which 29% shared the same needle/syringe with another person the last time they injected in the past month. Ninety two percent used sterile needle/syringe to inject drugs the last time they injected and 47% switched from sharing needles/syringes to not-sharing practice in the past 12 months.

Figure 6: Injecting behaviors, female PWID (n=150), 2020



Stigma and discrimination

Males

Twenty two percent of male PWID who accessed services for HIV testing, STI, ART or OI experienced stigma and

discrimination. Among those, 10% avoided seeking health care, 5% avoided seeking HIV testing and 3% avoided seeking HIV medical care due to fear of stigma and discrimination in the last 12 months.

Females

Twenty Four percent of female PWID who accessed services for HIV testing, STI, ART and OI experienced stigma and discrimination. Among those, 3% avoided seeking HIV testing due to fear of stigma and discrimination in the last 12 months.

PROGRAM IMPLICATIONS AND RECOMMENDATIONS

- HIV prevalence is 2.8% among male PWID and 2% percent among female PWID. Although this is below the concentrated HIV epidemic threshold percentages of 5%, inconsistent condom use, low knowledge of HIV transmission and the sharing of needles and syringes indicate further possibility of HIV transmission. The scale up of HIV focused prevention programs are needed to combat further spread of HIV among PWID, as well as to their injecting and sexual partners.
- Thirteen percent of male PWID and 8% of female PWID are infected with HCV. This is relatively low compared to other countries in the region. HCV is highly infectious and spread easily among those sharing injection paraphernalia. Enhanced efforts are needed to ensure that PWID have access to clean injecting paraphernalia and education and services related to HCV transmission.
- PWID are sexually active, have multiple sexual partners, and are engaged in risky sexual behaviors. Access to information about safe sex behaviors, the correct use of condoms and access to free condoms is necessary to ensure that PWID reduce their transmission risks for HIV and other STI.

KEY GLANCE OF IBBS SURVEY NATIONAL AND GLOBAL AIDS MONITORING (GAM) INDICATORS

IBBS indicators. Key Glance of National, GAM and AEM indicators												
	Males (Weighted %)										Females	
	Province 1	Province 2	Bagmati province	Gandaki Province	Lumbini Province	Karnali province	Sudurpaschim province	≤ 25 years	≥ 25 years	National	National	
N	200	200	470	350	250	100	120	773	917	1690	150	
Biological test result												
HIV Positive	1.5	-	4.6	1.2	0.7	-	1.5	1.0	4.3	2.8	2.0	
Syphilis	-	-	1.7	2.2	0.4	-	.2	1.8	0.8	1.2	10.0	
HBV Positive	-	0.3	1.0	0.8	-	1.3	2.7	0.9	0.7	0.8	0.0	
HCV Positive	17.7	1.8	16.7	10.7	2.9	-	26.8	10.6	15.3	13.3	8.0	
HIV and HCV co-infection	100.0	-	74.6	74.1	-	-	-	81.1	70.3	71.9	0.0	
HIV and HBV co-infection	-	-	2.5	25.9	-	-	-	-	4.3	3.6	0.0	
N	200	200	470	350	250	100	120	773	917	1690	150	

Years of Injecting drugs at first time											
≤2 years	20.4	57.7	27.2	25.3	21.4	42.5	31.3	55.3	7.6	28.8	42.7
> 2 years	79.6	42.3	72.8	74.7	78.6	57.5	68.7	44.7	92.4	71.2	57.3
N	200	200	470	350	250	100	120	773	917	1690	150
Ever shared the same needle/syringe with another person	2.4	4.8	17.2	30.8	35.6	32.9	25.8	16.4	21.8	19.4	9.3
N	7	10	85	114	85	34	34	142	227	369	N=14
Shared a needle/syringe with another person, during last injection	-	36.5	28.8	23.5	91.5	80.9	43.3	53.8	37.1	43.4	28.6
N	-	6	24	26	78	26	16	78	98	176	14
Injected drugs with needle/syringe previously used by someone else, during last injection	-	89.1	85.7	82.6	100.0	87.1	100.0	95.6	90.3	92.8	28.6
N	200	200	470	350	250	100	120	773	917	1690	150.0
Using sterile syringe injecting	100.0	98.1	96.6	98.5	88.0	77.8	100.0	96.5	96.8	96.6	90.5
Switched from sharing to not-sharing needles/syringes in past 12 months	59.4	12.4	74.9	66.2	97.0	94.4	56.1	63.4	73.9	69.2	46.7
N	82	108	144	181	79	41	73	286	422	708	65
Condom use in last sexual intercourse in past month	71.1	93.5	74.2	58.9	42.9	51.6	38.1	76.3	62.1	67.6	27.0
N	200	200	470	350	250	100	120	773	917	1690	150
N	200	200	470	350	250	100	120	773	917	1690	150
Comprehensive HIV knowledge (ABC)	26.8	37.8	45.3	63.9	1.8	10.8	48.0	42.2	38.2	40.0	36.7
Comprehensive HIV knowledge (BCDEF)	14.4	13.3	32.0	47.0	55.6	58.8	20.1	30.4	36.1	33.6	16.0
Able to receive a confidential HIV test in the community	45.6	62.1	67.8	65.1	92.6	91.5	77.7	67.3	70.0	68.8	48.7
Awareness about HIV testing facility	45.1	65.3	71.6	85.0	93.3	84.7	87.0	71.1	76.2	73.9	66.7
Ever had HIV test	29.8	39.6	49.0	55.2	27.1	42.6	71.7	34.9	54.2	45.7	48.0
N	72	87	242	190	72	45	89	260	537	797	72
HIV test, past 6 months	11.2	38.7	42.6	36.3	21.1	31.9	47.0	51.2	31.5	38.2	43.1
HIV test, between 6-12 months	12.7	20.2	21.1	18.8	24.6	35.9	27.4	15.8	23.8	21.1	23.6
HIV test, >12 months	76.1	41.1	35.5	43.6	54.3	32.2	24.0	32.8	43.6	39.9	31.9
N	71	86	238	185	72	45	87	254	530	784	72
Disclosure of HIV positive status	98.8	98.5	98.4	97.2	100.0	100.0	98.6	97.9	98.6	98.4	100.0
Had a positive HIV test in the past	-	-	2.3	0.6	-	-	2.1	.2	2.2	1.5	0.0
N	200	200	470	350	250	100	120	773	917	1690	150
Received condoms from HIV prevention programme, past three months	7.6	53.1	20.2	39.6	45.5	47.8	40.0	27.3	29.8	28.7	20
Received counselling on condom use and safe sex from HIV prevention programme, past three months	7.0	55.4	32.7	39.3	46.6	50.7	63.2	35.2	37.6	36.5	45.3
Received new, clean needles/syringes, past three months	15.7	64.9	52.2	50.2	47.9	50.7	63.2	53.5	47.0	49.9	94.1
Received at least two of the above HIV prevention services	15.7	64.9	52.2	50.2	47.9	50.7	63.2	53.5	47.0	49.9	90
N	200	200	470	350	250	100	120	773	917	1690	150
Currently receiving treatment for drug injection	1.3	-	5.4	4.8	0.9	1.7	3.8	2.8	4.8	3.9	0.7
Received drug treatment, but not now	1.9	0.4	6.7	9.8	2.8	9.2	3.0	2.7	8.0	5.6	2.7
N	9	1	70	57	8	13	9	33	134	167	5
Receiving Methadone	76.5	-	31.6	63.5	-	12.3	57.0	38.3	37.6	37.8	40.0
Receiving Buprenorphine	23.5	100.0	68.4	36.5	100.0	87.7	43.0	61.7	62.4	62.2	60.0
N	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	5
Receiving Opioid Substitution Therapy (OST) for six months continuously	45.8	100.0	78.7	41.2	32.5	-	48.8	71.4	64.4	66.2	60
N	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1
Currently receiving OST	41.6	-	48.8	30.5	23.8	15.3	56.4	61.8	36.7	43.2	0.0
N	144	144	885	218	197	29	72	748	942	1690	150.0
Heard of PrEP	0.3	9.4	25.4	27.0	2.9	14.3	17.2	16.5	20.9	18.9	14.7
N		14	225	59	6	4	12	123	197	320	22.0
Taken PrEP, past six months			21.8	6.4				4.4	24.1	16.5	9.1
N	144	144	885	218	197	29	72	748	942	1690	150.0
Heard of PEP		33.4	15.9	20.1	10.8	17.2	54.2	15.2	19.6	17.7	12.0
N		48	143	44	21	5	39	116	185	301	18.0
Taken PEP, past six months		5.2	7.4	12.2			2.8	1.6	9.6	6.5	5.6
N	3	64	109	92	36	28	42	154	220	374	36
Avoidance of health care because of stigma and discrimination	-	3.6	7.7	15.0	8.6	1.2	27.3	9.3	10.1	9.8	0
Ever avoided seeking HIV testing, past 12 months	-	-	5.3	7.9	2.3	-	14.0	6.2	4.8	5.3	2.8
Ever avoided seeking HIV medical care, last 12 months	-	-	1.6	7.2	6.3	-	11.4	4.1	2.9	3.4	0

Note: The table above represent female population of three provinces only and as such can't be compared to male population represented herein.