Integrated Biological and Behavioral Surveillance (IBBS) Survey among People Who Inject Drugs (PWIDs) in the Kathmandu Valley Round VI –2015

Brief Description of Study

Under the leadership of the National Center for AIDS and STD Control (NCASC) according to the National HIV Surveillance Plan for generating the strategic information needed for guiding and monitoring the national response to HIV and AIDS, since 2002 Nepal has been successfully carrying out IBBS surveys among People Who Inject Drugs (PWIDs).

The latest round (round VI, 2015) of the IBBS survey was conducted among PWIDs within the Kathmandu Valley with coverage of 340 sample size, funded by TI Pooled Fund, under the leadership of NCASC and in close collaboration with key stakeholders. The survey was carried out primarily to track the trends in the prevalence of HIV and syphilis infection among male PWIDs and to assess their sexual and injecting behaviors. The surveys also explored the respondents' knowledge of HIV and sexually transmitted infections (STI), the presence of STI symptoms, sexual and injecting behaviors, and exposure to HIV programs. For the first time in IBBS history this round has introduced Hepatitis C (HCV) and Hepatitis B (HBV) test and its prevalence among PWIDs.

Methods

The definition for PWIDs is "*Current males who inject drugs aged 16 years or above who have been injecting drugs for at least three months prior to the date of survey*".

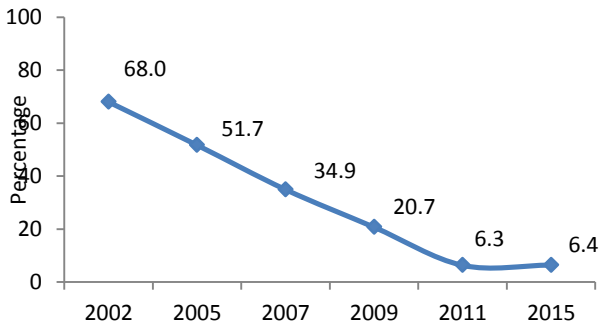
The respondent-driven sampling (RDS), a form of a chain-referral sampling, specifically targeted for hard to reach populations was used to recruit participants.

Key Findings

HIV prevalence had decreased over years

HIV prevalence among PWIDs has been decreased significantly since the first round in 2002 to 2015, 68 to 6.4 percent respectively however prevalence level of last round found to be almost similar (6.3 & 6.4) **(Figure-1)**.

Figure-1: Trend of HIV Prevelance (p-value <0.0001)



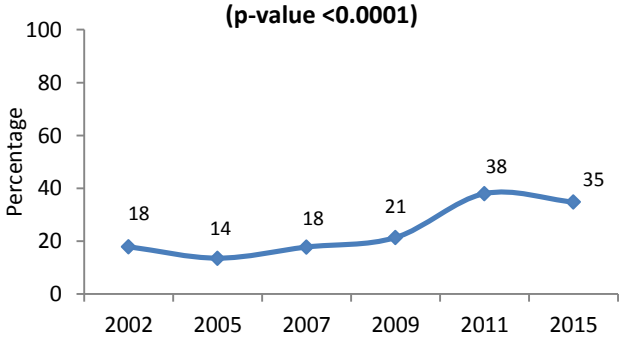
Prevalence of Syphilis, HCV and HBV

Out of a sample size of 340 PWIDs, none had a history of Syphilis and no one had been diagnosed with a current active case of these morbidities. There was no indication of HBV prevalence among the PWIDs while 22 percent, ranging from 17.3 to 27.0 at a 95 percent confidence interval, were found to be infected with HCV.

Turnover Rate[1]

The PWIDs turnover rate found to be decreased compared to the last round of IBBS in 2011. About 9 percent PWIDs reportedly started injecting drugs less than a year. However it was around 22 percent in the last round of IBBS in 2011. **Figure-2** shows the trend in the turnover of PWIDs who started injecting less than two years.

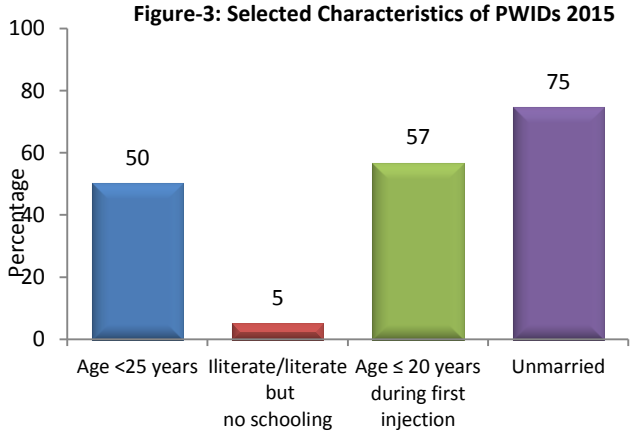
Figure-2: Trend in PWIDs turnover (less than two years) (p-value <0.0001)



Demographic Information

Many PWIDs are young, started injecting at a young age and are unmarried: Half, 50 percent of PWIDs are less than 25 years of age. Almost 60 percent had started injecting drugs at or before the age of 20. The proportion of unmarried PWIDs was found to be three fifth (75%) out of total sample 340 **(Figure 3).**

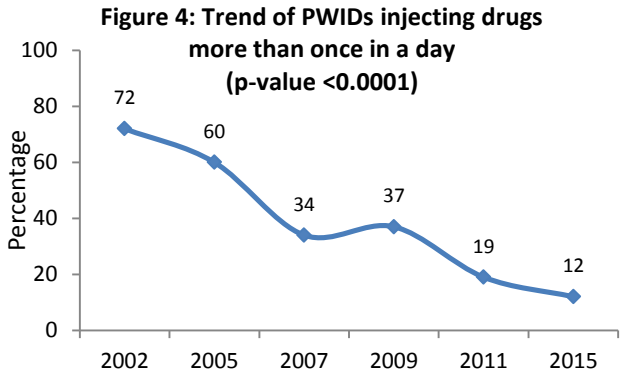
Figure-3: Selected Characteristics of PWIDs 2015



[1] *The percentage of PWID who have started to inject drugs in less than a year can be considered as the annual turnover rate*

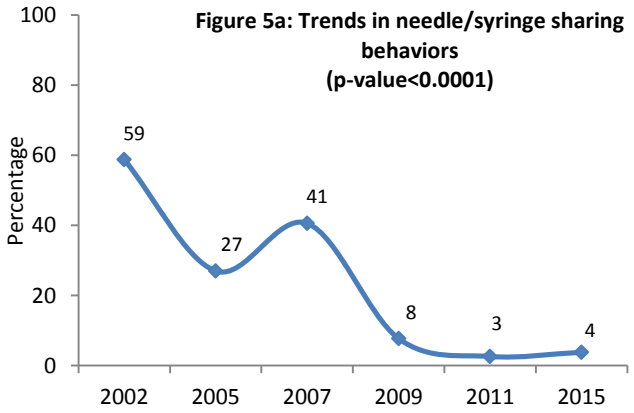
Injecting Practice

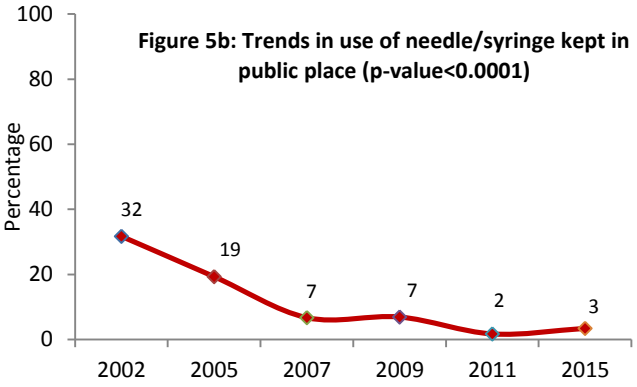
The frequency of injecting drugs in the past week has decreased over time: The overall trend of PWIDs injecting drugs more than once a day has decreased significantly **(Figure 4).** The proportion decreased from 72 percent in the 2002 to 12 percent in 2015. In addition, average frequency of injecting drugs in the past week has found to be declined (4.6 in 2002 to 4.1 in 2015).

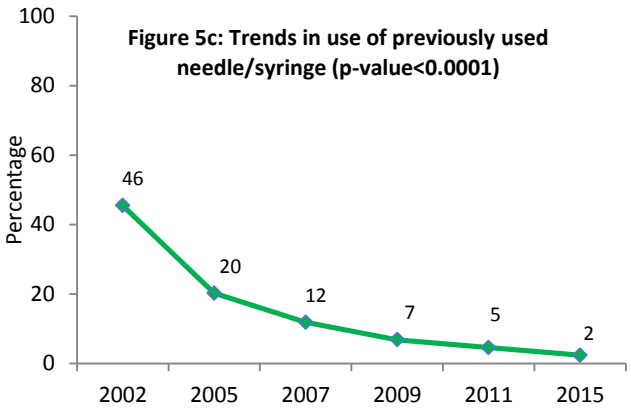


Changes in Injecting Behavior

Unsafe injecting behavior has decreased over time: A significant proportion of PWIDs had avoided unsafe injecting behavior in the week preceding the survey. High-risk behavior such as using or sharing previously used needles/syringes have found to be decreased than previous round, 5 percent in 2011 to 2 percent in 2015. Similarly using syringes left in public places has found to be no big changes, 2 percent in 2011 and 3 percent in 2015. However, slightly increased on sharing needle/syringe with others (3% in 2011 and 4% in 2015) **(Figure 5a, 5b and 5c)**.

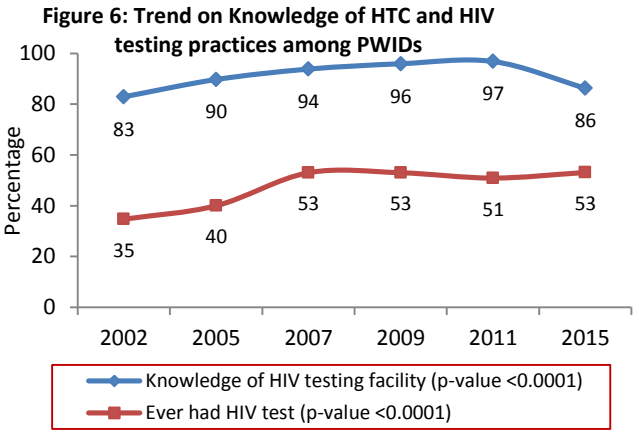






HIV testing facilities and HIV testing practice

The knowledge amongst the PWIDs on the availability of a confidential HIV testing facility in their community has been increasing over the past five rounds of IBBS. However, this knowledge found to be decreased by 11 percent in this round than previous round (97% in 2011 and 86% in 2015). Although the awareness on the availability of confidential HIV testing facilities is high, the practice of testing for HIV is relatively lower among the population. Furthermore, HIV testing among PWIDs has increased significantly from 35 percent in 2002 to 53 percent in 2015 **(Figure 6).**

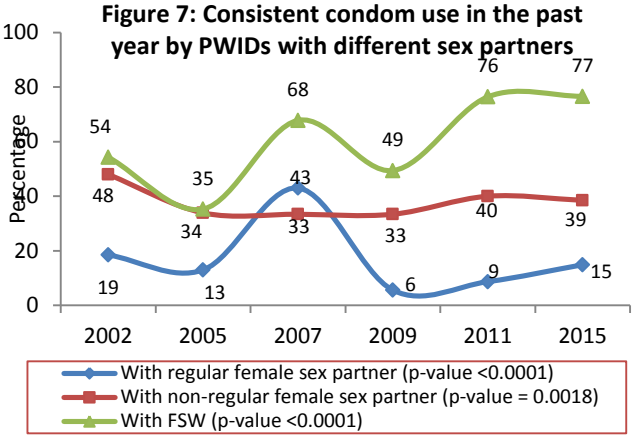


Consistent condom use with different partners

Consistent condom use with female sex workers (FSWs) in the past 12 months has increased significantly in 2015 compared to the 2002, while, the proportion has found to be almost similar in the two rounds continuously, 76 percent in 2011 and 77 percent in 2015. Further, consistent condom use with non-

regular female sex partner in the past 12 months has found to be remained similar with the previous round (40% in 2011 and 39% in 2015). However, consistent condom use with regular female sex partners in the past 12 months is lower than with non-regular female sex partners and shows no clear trends over the time **(Figure-7).**

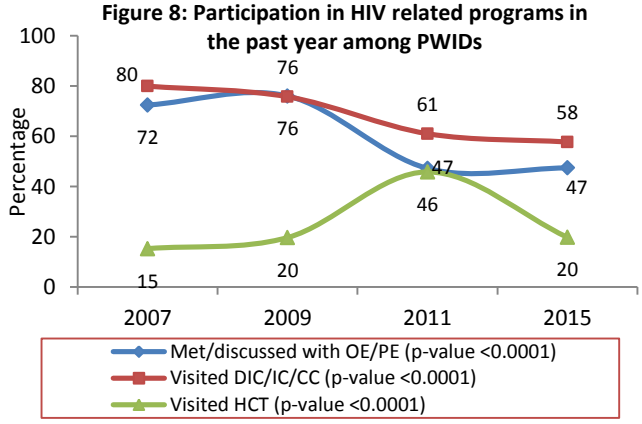
Figure 7: Consistent condom use in the past year by PWIDs with different sex partners



Participation in HIV related program

The proportion of survey participants who interacted with an outreach educator (OE) or peer educator (PE) has significantly decreased from 72 percent in 2007 to 47 percent in 2015. PWIDs visiting drop-in-centers (DICs) has decreased over the time, while comparing with the previous round in 2011 it has found to be around 60 percent (61% in 2011 and 58% in 2015). Furthermore, the proportion of the respondents visiting HIV Testing and Counseling (HTC) centers has found to be increased over the time. However the proportion of visiting in HTC has found decreased compare to the previous round **(Figure-8).**

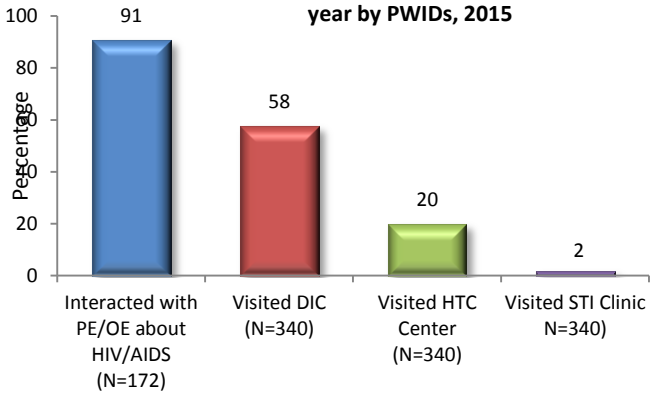
Figure 8: Participation in HIV related programs in the past year among PWIDs



Exposure to HIV programs in the past year

Among those who had met and discussed with OE, more than 90 percent claimed that they had discussed/interacted about HIV and AIDS. Furthermore, in this round of IBBS 58 percent of the study participants claimed to be visited in DIC, while 20 in HTC. Likewise, 2 percent of the respondents claimed to be visited in STI clinic in the past 12 months prior to the survey **(Figure-9).**

Figure 9: Exposure to HIV programs in the past year by PWIDs, 2015



Key Indicators

Selected Key Indicators	Total (N=340)
HIV	6.4%
Active Syphilis	0.0%
Syphilis History	0.0%
Hepatitis B	0.0%
Hepatitis C	22.0%
Median age (Range)	25 (16-55)
Literate	98.3%
Ever Married	25.4%
Consumed alcohol everyday	4.7%
Ever been imprisonment	66.4%
Duration (in months) of Injecting Drugs Mean ± SD/Median(Range)	63.5±56.15/48 (3-300)
Median age (Range) of first drug Injection	20 (14 - 39)
People injecting more than once every day	11.6%
Shared needle in the past week	3.8%
Used non sterile syringe/needle in past month	4.0%
Used non sterile injecting equipment in past month	4.3%
Premarital sex (N=340)	91.4%
Consistent condom use with regular female sex partners in the past year (n=86)	14.9%
Consistent condom use with FSW in the past year (n=81)	76.6%
Consistent condom use with non-regular female sex partner in past year (n=156)	39.0%
Knowledge of all three indicators: ABC	31.6%
Knowledge of all five indicators: BCDEF	49.4%
Ever had HIV test	53.1%
Met/Interacted with PE/OE/CM	47.4%
Visited DIC	57.7%
Visited HTC Center	19.8%
Received OST Services	7.1%
Needle obtained from needle exchange program	49.9%

Program Implications and Recommendations

Recommendation 1:
Specific program activities that target youths and adolescents should be designed to provide information, awareness, education and services with behavior and lifestyle change communication related to drug use, sexual reproductive health and HIV/AIDS interventions in a mutually reinforcing manner through contemporary electronic and social media coupled with peer based community in reach for the most hard to reach young populations. Different mediums of communications such as hotlines, websites, print media, radio/television and social media should be wide utilized to reach these groups.

Recommendation 2:
Increase the access to and availability of clean and sterile needle and syringe exchange programs by incorporating low dead space needle and syringes.

Recommendation 3:
Interventions of behavioral change activities should be continued and scaled up to cover more PWIDs. Harm reduction initiatives should also be continued and expanded further to promote the transition from drug injecting practices to clinically supervised Opioid/Oral substitution therapies with a balanced mix of both Methadone and Buprenorphine and drug treatment programs to provide a comprehensive range of choices for service recipients.

Recommendation 4:
Implementation of "combined" prevention programming, including condom social marketing to significantly increase consistent condom use for primary sexual partners and for casual partners. Cumulative implementation of combined prevention programming for PWID has been associated with substantial decreases in sexual risk behavior among HIV sero-positives.

Recommendation 5:
Increase awareness about confidential HIV testing facilities in the community and increasing HIV test uptake is of crucial importance. Provision of client-friendly service during HIV-test and STI treatment should be strengthened to increase HIV and STI test intake. Bearing in mind that testing is the entry point to treatment, Peer/outreach educators are good contact points to disseminate necessary information to expand coverage HTC.

Recommendation 6:
It is necessary to increase the geographical and demographical coverage of hard to reach groups through innovative approaches by the insertion of program activities into mainstream health services with a strong accompanied referral and follow-up mechanism to address the compartmentalization of HIV related services within the public health sector. In order to achieve this it is also recommended to increase the human resource allocation component for OE/PE to increase the overall awareness about the availability and access service even remotely linked with HIV services. Further it is recommended to integrate a number of services to create a "one stop shop" solution.

Recommendation 7:
Testing for Hepatitis C and B among the PWIDs was introduced for the first time in IBBS survey. Blood samples were collected for the detection of Hepatitis B and Hepatitis C. Since drug injecting behavior has been linked with HCV infection in Nepal and elsewhere, the current finding shows that interventions are urgently required. HBV prevalence was found to be lower than reported previously on PLHIV populations. However, it is important to note that since although HBV vaccine is available, it is also a blood borne pathogen therefore constant surveillance with vaccination strategy should be implemented in this population to prevent future increase in infection and prevalence. Therefore more awareness programs should be conducted among PWIDs focusing on improving their knowledge on Hepatitis B as well as Hepatitis C.

Recommendation 8:
Periodic IBBS with sub-population will help design and implement timely intervention strategies and monitor the changes in diversity of and effectiveness of the interventions in controlling the epidemic. By reviewing the available evidence from research-driven protocols or evaluations of interventions conducted under specific field conditions (effectiveness studies), where insufficient evidence exists, evaluation studies may need to be implemented to support evidence-based decision-making. This is an important step, although it is often not sufficiently funded. It is recommended that resource allocation should be prioritized at the national and policy levels for the generation of strategic information in order to render interventions effective.

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