



Government of Nepal  
Ministry of Health  
**National Centre for AIDS and STD Control**  
Teku, Kathmandu



**Integrated Biological and Behavioral Surveillance (IBBS) Survey among People Who Inject Drugs (PWIDs) in Eastern Terai Highway Districts of Nepal, 2017 (Round VII)**

**Brief Description of the Study**

HIV in Nepal is characterized as concentrated epidemic. Nepal is categorized as a country facing concentrated HIV epidemic. The National Centre for AIDS and STD Control (NCASC) has estimated that there were 32,735 people living with HIV (PLHIV) in Nepal in 2016 with adult HIV prevalence 0.17% (NCASC, 2016). One of the major components of Second Generation Surveillance (SGS), and also strategic direction of the national strategy, is to conduct Integrated Biological and Behavioural Surveillance (IBBS) among key populations at higher risk to HIV in selected high risk areas in regular interval based on the national plan on HIV and STI surveillance. This Integrated Biological and Behavioral Surveillance (IBBS) survey was carried out by Intrepid Nepal (INPL) under the leadership of the National Center for AIDS and STD Control (NCASC). People Who Inject Drugs (PWIDs) is considered as one of the key affected populations (KAPs) at a higher risk of spreading the HIV epidemic. This is the seven round of the IBBS study conducted among PWIDs in Eastern Terai highway districts of Nepal. In line with the objectives of the previous rounds of the IBBS, the Seven round of the survey was undertaken to determine the prevalence of HIV, HCV, HBV and STIs, assess HIV, HCV, HBV and STI related risk behaviours, explore the level of awareness and understanding of HIV/STIs, record STI symptoms, account incidence of violence, as well as assess exposure to HIV intervention programs and services among PWIDs in Eastern Terai highway districts of Nepal. Fieldwork for data collection was conducted from March to April, 2017.

**Methods**

This cross-sectional study was conducted among PWIDs in Eastern Terai Highway Districts namely Jhapa, Morang, and Sunsari. For the purpose of this survey, PWIDs was "Male aged 16 years or above who had been injecting drugs for at least three months prior to the date of the survey." Two stage cluster sampling method was used to recruit 360 PWIDs. All together 30 clusters were selected from Eastern Terai highway districts. To ensure proper representation of the survey population from the selected clusters, 12 PWIDs were selected in each cluster using systematic random sampling method. This resulted in the selection of a total of 360 PWIDs. PWIDs were interviewed after obtaining witnessed oral consent followed by pre-test counseling and blood sample collection for HIV, HCV, HBV and Syphilis. A structured questionnaire was used to collect background characteristics, knowledge on HIV and AIDs, sexual behavior, condom use, violence and access to HIV services. Rapid test kits: Determine HIV 1/2 test, Uni-Gold test and Stat pack test kits were used for testing for the presence of antibodies against HIV in the serum. Rapid test kits were used for testing for the presence of antibodies against HIV, HCV and HBV in the serum whereas Syphilis was tested using Rapid Plasma Regain (RPR) and was confirmed by Treponema Pallidum Particle Agglutination (TPPA) tests. Data were analyzed using SPSS. Ethical approval for this survey was permitted from Nepal Health Research Council (NHRC).

**Key Findings**

***HIV prevalence is decreasing trend and less than four percentage***

Current HIV prevalence among PWIDs is 3.3 percent (1.81% to 5.90% at 95% CI). HIV prevalence among PWIDs soared from 35.1 percent in 2003 to 3.3 percent in 2017 (Figure 1).

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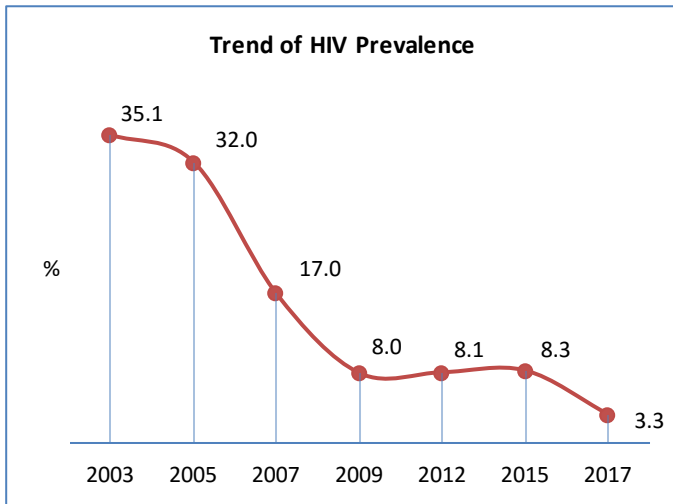
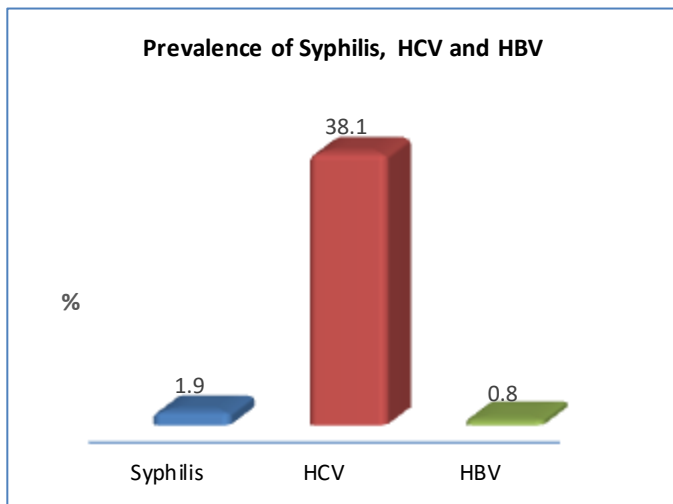


Figure 1: Trends of HIV prevalence

**Syphilis, Hepatitis C (HCV) and Hepatitis B (HBV)**

Prevalence of Syphilis, HCV and HBV among PWIDs is 1.9, 38.1 and 0.8 percent respectively, in this round of IBBS



2017 (Figure 2).

Figure 2: Prevalence of Syphilis, HCV and HBV

**Age, literacy, cast/ethnicity and marital status**

A majority of the PWIDs (71.7%) were below 30 years old and few (6.4%) were illiterate. The representation of economically disadvantaged Janajatis ethnic groups and Brahmin/Chettry groups were high (49.2%) and (22.8%) respectively. Nearly half (48.6%) of PWIDs were ever

married. Among them 29.1 percent of PWIDs had married below age 20.

**Consistent condom uses with different partners in the past 12 months**

The consistent condom use with regular female sex partners of PWIDs in the past year was 32 percent. About the same percent of PWIDs consistently used a condom with non-regular female sex partners in the past year. More than half of PWIDs (58%) had consistently used a condom with FSW in the past year. The trend of consistent use of condom with non-regular partner was not significantly changed over the years. However, with regular female sex partners and FSW, behaviour of using condom found increased over the year. In the first round of IBBS among PWIDs in 2003, consistent condom use with Regular partner was 12 percent and 32 percent in the latest, 2017. Further, in the same aforementioned point of time, 41 percent PWIDs used condom with FSW and over the years, it has increased up to 58 percent in 2017 (Figure 3).

Figure 3: Trends of consistent condom use with different partners in the past 12 months

**Comprehensive knowledge on HIV**

Overall, 60 percent of the PWIDs correctly identified all three of the major knowledge indicators (i.e. ABC) as HIV-preventative measures. In addition, 49 percent of PWIDs were aware of all of the five major indicators (i.e. BCDEF) as major modes of HIV transmission. The percent of PWIDs who were aware of all three ABCs slightly decreased from 65 percent in 2007 to 60 percent in 2017. Similarly, comprehensive knowledge about HIV and AIDS (BCDEF) also decreased from 95 percent in 2007 to 49 percent in 2016. However, in this current round of survey, knowledge of both indicators has increased compare to the last round (Figure 4).

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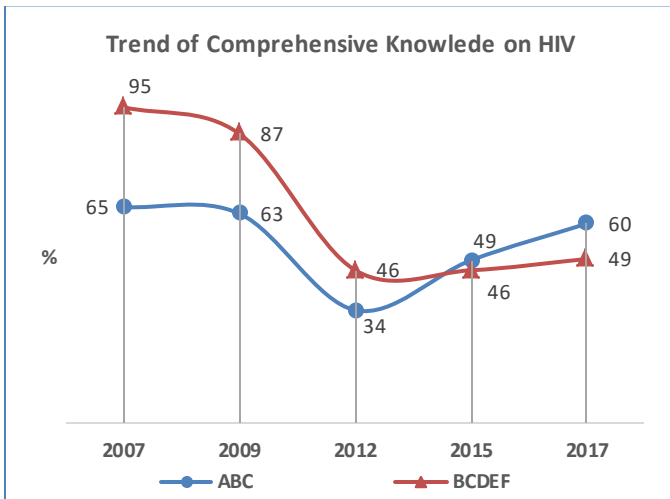


Figure 4: Prevalence of Syphilis, HCV and HBV

**Exposure to HIV Awareness Programs in the past 12 months**

Almost 14 percent of PWIDs had met with a PE/OE in the last 12 months. Little more than one third of PWIDs (34.7%) had visited a DIC/IC/CC in the past year. About 2 percent of PWIDs visited a STI clinic in the past year. Less than two percent of PWIDs visited HTC centers in the last year (Figure 5).

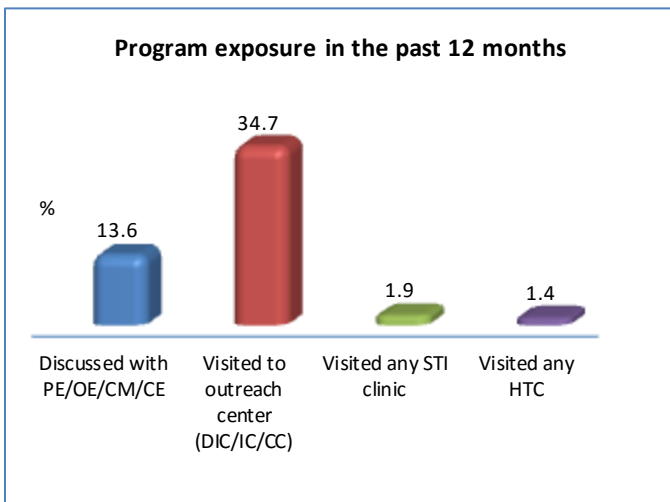
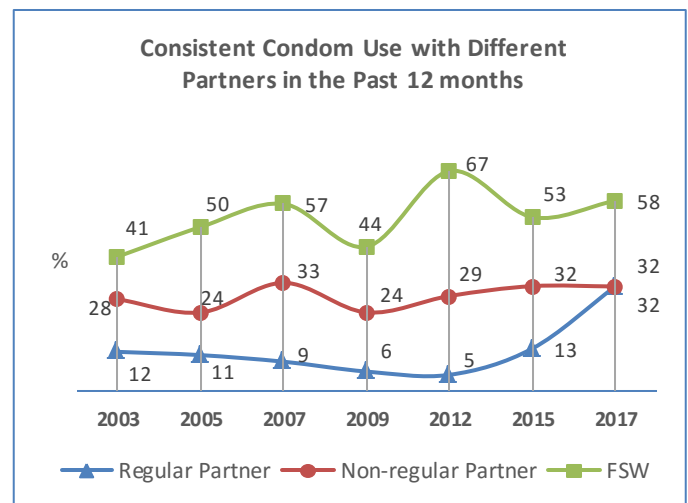


Figure 5: Program Exposure in the past 12 months



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### Key Indicators

Selected Key Indicators	N=360
HIV	3.3
Hepatitis C	38.1
Hepatitis B	0.8
Active Syphilis	1.9
Syphilis History	1.9
Median age	26
Literate	93.6
Ever Married	48.6
First sex below 20 years	83.9
Consistent condom use with FSW in the past year (n=50)	58.0
Consistent condom use with regular female partner in the past year (n=247)	1.6
Consistent condom use with non-regular female partner in past year (n=94)	31.9
Knowledge of all three indicators: ABC	60.0
Knowledge of all five indicators: BCDEF	49.4
Ever had HIV test	50.0
Met/Interacted with PE/OE/CM	13.6
Visited DIC	34.7
Visited STI Center	1.9
Visited HTC Center	1.4
Ever Enrolled to OST service	40.0

should be promoted among those PWIDs who engaged in risky sexual behaviors. *Similarly, STI treatment and HIV testing and counselling should be encouraged through interpersonal, intrapersonal, and mass communicational mediums. Further information on government and NGO health facilities providing STI treatment services should increase public visibility.*

- Comprehensive knowledge (ABC) and comprehensive knowledge and misconceptions (BCDEF) has an increase in 2017 when compared to data from 2015. But over the time these knowledge has decreased since 2007. *Therefore, comprehensive knowledge, education, and awareness regarding HIV/ should be promoted through multiple channels.*
- Exposure to structured HIV programs and services (peer education, DICs, HTC/STI clinics etc.) found to be declining in contrast to previous rounds of IBBS surveys. *Targeted intervention among PWID with the provisions of peer and outreach education, partnerships with HTC/STI clinics, and inclusion of care and support are necessary for increasing PWID exposure to HIV and AIDS programs and services.*

*Scaling up HIV and AIDS education and awareness programs, which incorporate material on these services, is essential for increasing comprehensive knowledge of HIV/AIDs among PWID.*

### Program Implication

Based on the findings from this survey, the following program implications and recommendations are mentioned as below.

- Although HIV prevalence among PWID decreased in recent rounds of IBBS surveys, there are still some PWID suffering from HIV infection. *Targeted outreach programs are needed to reach PWID and bring them for treatment to prevent HIV transmission.*
- Consistent condom use with different partners is considerably low. *The low incidence of condom uses among PWID and different partners may increase vulnerability for HIV, HCV, HBV and STI transmission. Programs should focus on promotion of consistent condom use with all types of partners.*
- Health seeking behaviors such as, STI treatment among PWID are not common. Treatment seeking behaviors

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