Program Implications and Recommendations

**Implication:** The high annual turnover among IDUs is contributing to the decrease in prevalence of HIV and may suggest that new injectors have less exposure to HIV infection. Some new IDUs may be more aware of the associated risk for HIV, however, this awareness may not imply safer practices.

**Recommendation:** Continue to educate IDUs through outreach and counseling about the importance of regular VCT and knowing their HIV status.

**Implication:** The increasing trend in testing for HIV should be maintained.

**Recommendation:** Strengthen access to information for IDUs, particularly focusing on risk perception and increasing knowledge on the importance of VCT.

**Implication:** About one third of the IDUs are married and about one quarter of them are having sex with sex workers. This increases the risk of transmission between FSWs and IDUs and their sex partners.

**Recommendation:** Programs on safer sex should be strengthened to reach IDUs and their sex partners.

**Implication:** In Kathmandu, the reach to IDUs by PE or OE and visits to DICs has decreased over time.

**Recommendation:** New and comprehensive community and peer-based strategies and approaches are required to reach unreached IDUs with education on safer injecting and safer sexual practices.

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Brief Description of Survey

The fifth round of Integrated Biological and Behavioral Surveillance (IBBS) surveys among male injecting drug users (IDUs) covered a sample of 685 respondents in Kathmandu valley-Kathmandu, Lalitpur and Bhaktapur districts (n=340) and Pokhara valley (n=345), henceforth referred to as Kathmandu and Pokhara. The previous rounds of IBBS surveys were conducted among the same sub-population in 2002/2003, 2005, 2007 and 2009 in Kathmandu and Pokhara. The surveys were carried out primarily to track the trends in the prevalence of HIV and syphilis infection among male IDUs 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.

It was conducted 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. The survey was conducted in accordance with human rights standards and ethical approvals were obtained from Nepal Health Research Council (NHRC) and the Protection of Human Subjects Committee (PHSC), FHI 360’s ethical review board.

**Methods**

Resident driven sampling (RDS) method was used to draw a representative sample of 340 IDUs from Kathmandu and 345 IDUs from Pokhara. IDUs were defined as: Males aged 16 years or above who were injecting drugs for at least three months prior to the date of survey.

Survey participants were interviewed after obtaining witnessed oral consent followed by pre-test counseling and blood sample collection for HIV and syphilis. A structured questionnaire was used to collect background data along with information on knowledge, behavior and access to services. Rapid test kits: Determine HIV 1/2 test, Uni-Gold test and SD Bioline HIV 1/2 test kits were used for testing for the presence of antibodies against HIV in the serum. Syphilis was tested using Rapid Plasma Reagin (RPR) and was confirmed by Treponema Pallidum Particle Agglutination (TPPA) tests. Survey participants received HIV test results, with post-test counseling, syndromic treatment for STIs and treatment for syphilis based on the spot RPR screening. Data were analyzed using Respondent Driven Sampling Analysis Tool (RDSAT).

Key Findings

HIV prevalence among IDUs has continued to decrease over the years: HIV prevalence has gradually decreased in both Kathmandu and Pokhara since 2002 and 2003 respectively. The declining trend in HIV prevalence is significant in both sites. The prevalence of HIV among IDUs in Kathmandu is 6.3% in 2011, decreased from 6.8% in 2002 and in Pokhara it is 4.6% in 2011, decreased from 22% in 2003 (Figure 2).

Figure 1: Trend of HIV prevalence among IDUs in Kathmandu and Pokhara, 2002/3-2011

The IDU turnover rate is high and in Kathmandu turnover is increasing over time: The percentage of IDUs who have started to inject drugs in less than a year can be considered as the annual turnover rate. Around 22% in Kathmandu and 16% in Pokhara reportedly started injecting within the past year. Figure 2, shows the trend in the turn over of IDUs who started injecting less than two years ago. The trend is significantly increasing for Kathmandu. Higher turnover rates result in less exposure to HIV infection and this can be considered one of the major causes of the rapid decline in HIV prevalence among IDUs, along with positive changes in other risk behaviors.

Figure 2: Trend in IDU turnover (less than two years) in Kathmandu and Pokhara, 2002/2003 - 2011
Many IDUs are young, start injecting at a young age and are unmarried: Around 48% of IDUs in Kathmandu and 55% in Pokhara are less than 25 years of age. In both sites, more than 60% of the IDUs had started injecting before the age of 20 years. The proportion of unmarried IDUs was similar at both sites (73% in Kathmandu and 69% in Pokhara).

Figure 3: Selected Characteristics of IDUs in Kathmandu and Pokhara, 2011

Key Findings

The frequency of injecting drugs in the past week has decreased over time: The overall trend of IDUs injecting drugs more than once a day has decreased significantly in both Kathmandu and Pokhara (Figure 4). In Kathmandu, the proportion decreased from 72% in the 2002 to 19% in 2011, while in Pokhara, this proportion decreased from 64% in 2002 to 12% in 2011. However, average frequency of injecting drugs in the past week has declined slowly both in Kathmandu (from 4.6 in 2002 to 3.9 in 2011) and Pokhara (from 4.0 in 2003 to 3.6 in 2011). Figure 4: Trend of IDUs injecting drugs more than once in a day in Kathmandu and Pokhara, 2002-2011

Unsafe injecting behavior has decreased over time: A considerable proportion of IDUs had avoided unsafe injecting behavior in the week preceding the survey in Kathmandu and Pokhara. Risk-high behavior such as using or sharing used needles/syringes and using syringes left in public places has significantly decreased in both survey sites (Figure 5).

Key Findings

Knowledge about HIV testing facilities and HIV testing practice has further increased: The knowledge amongst the IDUs in Kathmandu and Pokhara on the availability of a confidential HIV testing facility in their community has been increasing over the past five IBBS rounds. Although the awareness on the availability of confidential HIV testing facilities is high, the practice of testing for HIV is relatively lower at both the study sites. However, HIV testing among IDUs has increased significantly from 35% in 2002 to 51% in 2011 in Kathmandu and from 27% in 2003 to 63% in 2011 in Pokhara (Figure 6).

Key Indicators

Key Finding

Comprehensive knowledge on HIV has not increased over time: The proportion of respondents who had comprehensive knowledge* on HIV and AIDS is more or less unchanged both in Kathmandu (66% in 2007 to 64% in 2011) and Pokhara (73% in 2007 to 76% in 2011). However, except for the misconception on HIV transmission from a mosquito bite (around 70% in Kathmandu and 83% in Pokhara) the other indicators are above 90%.

*Being faithful, condom use and with no misconceptions on HIV in healthy looking person, HIV transmission by mosquito bite and sharing food utensils

Participation in HIV related programs declined: In Kathmandu, the proportion of survey participants who interacted with an outreach educator (OE) or peer educator (PE) has significantly decreased from 86% in 2007 to 47% in 2011. The proportion reached by an OE or PE in Pokhara increased significantly from 67% in 2007 to 83% in 2011. IDUs visiting drop-in-centers (DICs) has decreased over time in both study sites from 70% in 2007 to 61% in 2011 and from 87% in 2007 to 71% in 2011 in Pokhara (Figure 8). However, the percentage of respondents participating in HIV and AIDS awareness raising programs and community events has increased significantly in both the study sites.

Figure 8: Participation in HIV related programs in the past year among IDUs in Kathmandu and Pokhara, 2002-2011

Key Indicators

Key Finding

Figure 9: Exposure to HIV programs in the past year by IDUs in Kathmandu and Pokhara, 2011

Key Findings

Kathmandu Pokhara

Knowledge of HIV and STI

Ever heard of HIV 100 100
Comprehensive knowledge 64 71
Know that HIV is transmitted through 95 98
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