



## Integrated Biological and Behavioral Surveillance (IBBS) Survey among Female Sex Workers in Kathmandu Valley Round VI, 2017

### Brief Description of the Study

This Integrated Biological and Behavioral Surveillance (IBBS) survey was carried out by National Institute for Development and Research (NIDR) under the leadership of the National Center for AIDS and STD Control (NCASC). The existing National HIV and AIDS Strategy (2016-2021) identifies Female Sex Workers (FSWs) as one of the key affected populations (KAPs) at a higher risk of spreading the HIV epidemic. This is the sixth round of the IBBS survey conducted among FSWs in Kathmandu Valley. The survey is a part of the National HIV Surveillance Plan (2012) and National HIV and AIDS Strategy (2016-2021). In line with the objectives of the previous rounds of the IBBS surveys, the sixth round of the survey was undertaken to determine the trends of HIV and STIs prevalence,

assess HIV and STI-related risk behaviors, 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 FSWs in Kathmandu Valley. Fieldwork for data collection was conducted from February to March 2016.

### Methods

This cross-sectional study was conducted among FSWs in three districts Kathmandu, Lalitpur and Bhaktapur of Kathmandu Valley. For the purpose of this survey, FSWs were defined as 'women aged 16 years and above reporting to have been paid in cash or kind for sex with a male within the last six months.' Two-stage cluster sampling method was

Used to select the required FSWs. Three categories of FSWs i.e. street based, establishment based and home based FSWs were identified on the basis of their contact point of clients. Altogether 99 clusters were identified from the survey area and 50 clusters were selected to ensure proper representation of allocated 500 survey population by using proportional to population size (PPS) method. From the each selected clusters, 10 FSWs were selected using systematic random sampling method. FSWs were interviewed after obtaining witnessed oral informed consent followed by pre-test counseling and blood sample collection for

HIV, Syphilis. A structured questionnaire was used to collect background characteristics, knowledge on HIV and AIDS, sexual behavior, use of condom, violence, social support and depression and access to HIV services. Rapid test kits: Determine HIV ½ test, Uni-Gold ½ test, and Stat pack test kits were used to test the presence of antibodies against HIV in the serum. Syphilis was tested using Rapid Plasma Regain (RPR) and was confirmed by Treponema Pallidum Particle Agglutination (TPPA) tests. Data were obtained in tabloids and analyzed using SPSS and STATA. Ethical approval for the survey was obtained from Nepal Health Research Council.

### Key Findings

#### *Prevalence of HIV*

The prevalence of HIV infection among FSWs was 2.2 percent (95%CI= 1.1, 4.1). There was slight increase

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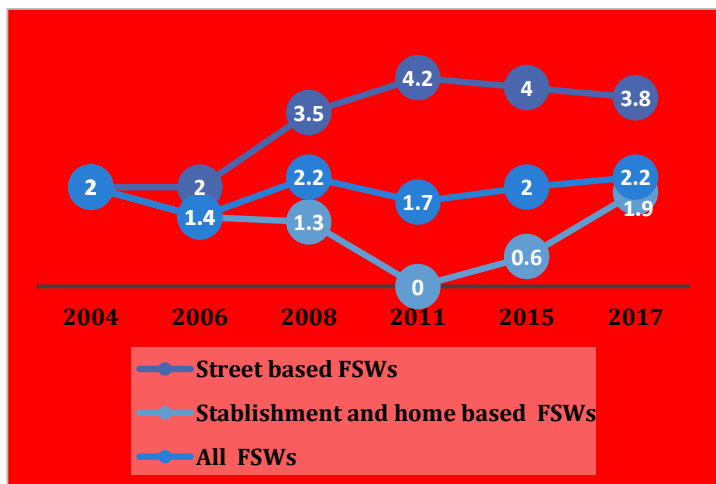
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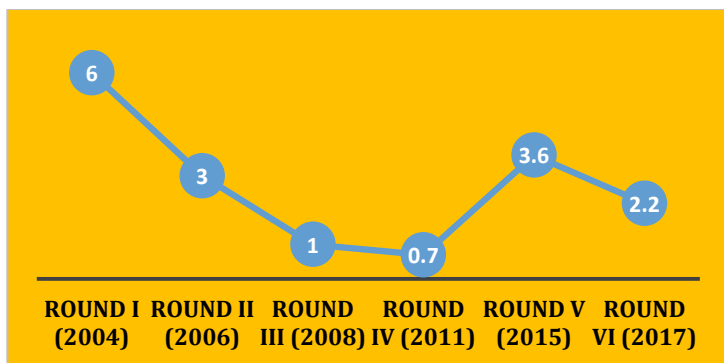
on HIV prevalence among FSWs from 2011 to 2015; however HIV prevalence among street based FSWs decreased in recent year whereas HIV prevalence among establishment based FSWs increased in recent year.



**Figure 1: Trends of HIV Prevalence**

**Prevalence of syphilis**

There was noticeable decrease in the prevalence of active syphilis since the first to fourth round of survey (6% in 2004 and 0.7% in 2011) and peaked at fifth round (3.6 percent) then decreased in sixth round (2.2 %).



**Figure 2: Trends of Active Syphilis Prevalence**

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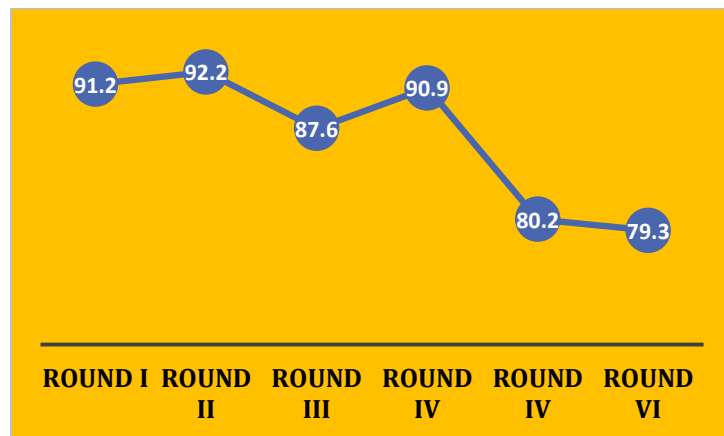
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**FSWs were old aged and Literate; prominent adolescent marriage**

More than one third (35.8%) of FSWs were the age of above 35 years with median age of 30. About 74 percent of FSWs were literate. Two third (66.2%) of FSWs were married. Exactly two third (75%) of FSWs had got marriage during adolescent age (19 years or below)

**High first sexual contact below 20 years and decreasing trend of recent sex trade entrance**

The percentage of FSWs reporting to have been engaged in first sexual contact at less than 20 years of age has been decreased from 80.2 percent in 2015 to 79.3 percent in this round. The proportion of the FSWs who entered in the sex trade recently i.e. less than one year preceding the survey has been decreased significantly (35.8% in 2015 to 25% in 2017) in this round.



**Figure 3: Trends of first sexual contact at the age of below 20 years**

**Increasing condom carrying practice**

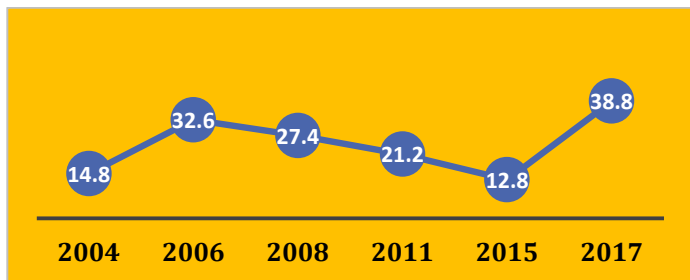
Condom carrying practice was in decreasing trend since 2006 (32.6 in 2006, 27.4% in 2008, 21.2% in 2011 and 12.8% in 2015) but increased in sixth round of survey (38.8% in 2017).

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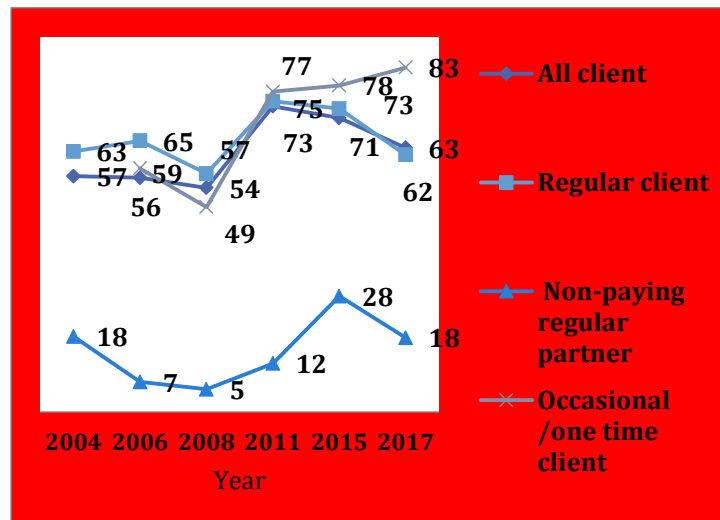


**Figure 4: Trend of condom carrying practice**

Four out of every five FSWs (80%) opined that confidential HIV test places are available in their community. Nearly two third (65.4%) of FSWs had knowledge of HIV testing. The population of FSWs who had ever tested themselves for HIV was 55.2 percent. Almost all of them (97.1%) who had tested HIV had received their test result whereas 2.6 percent of them did not receive the results because they were sure of not being infected (71.4%) and remaining (28.6%) did not feel the necessity of the results. The large majority (85.4%) of FSWs had their most recent HIV test within last 12 months before the survey.

**Consistent condom use**

There was marginal increase in the use of condom among FSWs with most recent client (83% in 2015 to 84.8% in 2017) but consistent/regular condom use in sexual intercourse with the clients in the past year has been decreased in sixth round of survey (70.6% in 2015 to 63.4% in 2017) and overall practice of consistent use of condom with regular sex clients in the past year has also been declined (72.8% in 2015 to 61.7% in 2017) significantly.



**Figure 5: Consistent use of condom with different clients**

**Comprehensive Knowledge of HIV**

There has been a noticeable decrease (47.6% in 2011 to 30.6%) in the proportion of FSWs with knowledge of ABC in this round of IBBS following the decreasing trend of previous years (55.2% in 2006, 58.4% in 2008 and 47.6 in 2011).

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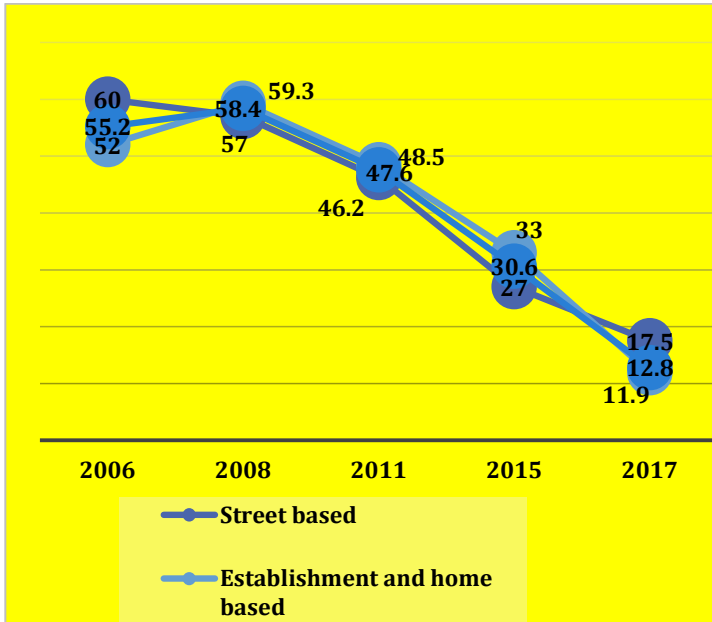
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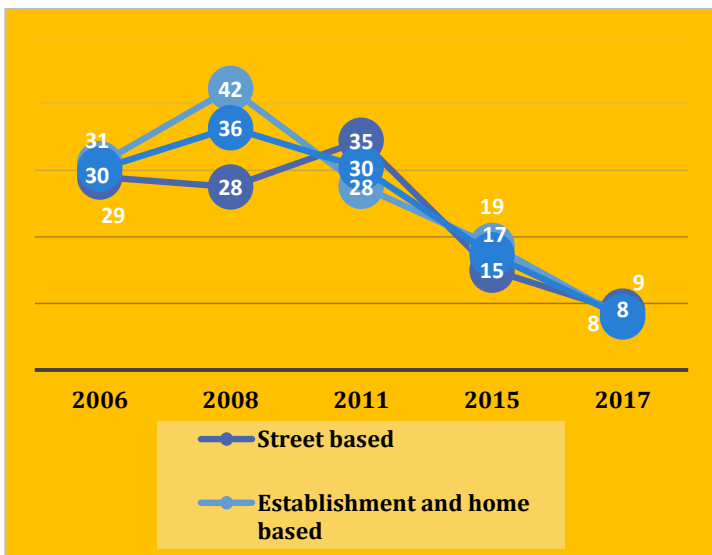
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**Figure 6: Knowledge of ABC**

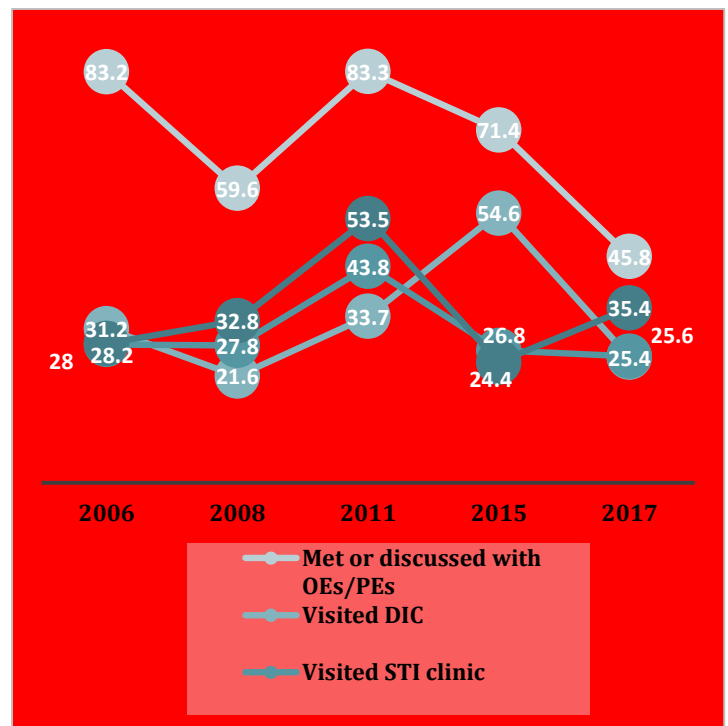
Comprehensive knowledge of BCDEF among FSWs has significantly dropped (17.3% in 2015 to 8% in 2017). This significant decline in BCDEF was mainly due to the sharp fall in the knowledge of B, C and F.



**Figure 7: Comprehensive knowledge of BCDEF Exposure of FSWs in HIV intervention programs**

The proportion of FSWs who had met or discussed with OEs /PEs in this round of survey has been declined sharply (71.4% in 2015 to 45.8% in 2017) though the considerable proportion of them did so in the previous round of years (83.2% in 2006, 59.6% in 2008, 83.3% in 2011).

A sharp increase in previous rounds (21.6% in 2008, 33.7% in 2011 and 54.6% in 2015) has been observed in DIC visiting practices but plunged significantly to 25.4 in this round of the survey. However, STI clinic visiting practice (26.8% in 2015 to 25.4% in 2017) was remained consistent but HTC center visiting practices (24.4% in 2015 to 35.4%) had been significantly inclined in this round of the IBBS survey.



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### **Figure 8: Exposure to HIV intervention programs Stigma and discrimination**

The study revealed that 85.6 percent of the FSWs do not hesitate to purchase goods from the HIV infected shopkeeper. Similarly, two third of the FSWs agreed that a student with HIV can sit together with other students in the classroom for the study. In case of discrimination, 23.6 percent of the FSWs had felt verbal abused, discriminated or threatened in the past 12 months. It was found that nearly half (47.1%) of the physically attacked FSWs were from the clients and 81.3% of them answered that they had responded against the forced sex. Similarly, 29.2 percent of the FSWs were refused by clients to pay money after having sex in last six months.

### **Program Recommendations**

**Provide life skill and vocation trainings to FSWs to feel them self-esteem:** More than two third of FSWs were under primary education including illiterate and married who were involving in sex trade. It is estimated that they were involved to fulfill their household needs because they did not have any other job opportunities in markets. It would great for them to provide life skills and vocational trainings as per their need through CBOs and provide necessary support such as seed money and instruments or equipment to start up their micro business. It helps them better option to earn money as well live within family as well as in society with self-esteem.

**Strengthen the capacity of Drop in Center (DIC):** Most of FSWs (66.2%) involved in sex trade and HIV prevalence is increasing over the period. So there is high risk of transmission of HIV and STI to their husband and newly born children. Thus provide counseling and

regular check and follow up to such FSWs by strengthening the capacity of Drop in Center (DIC).

**Establish service center and information board targeting street based FSWs:** It was found that the prevalence of HIV (3.9%) and active Syphilis (2.5%) is higher in street based than establishment and home based FSWs. However HIV prevalence was increasing for establishment based FSWs. So there is necessary to provide more program interventions and service center for example DIC with sufficient facilities (condoms, counseling and even blood testing facilities) and information board like hoarding or electronic board targeting HIV and STI disease and process of getting service if they HIV and STI.

**Provide some program intervention to the owners of Hotel/Lodges and Husband of FSWs on HIV:** More than 70 percent of FSWs had sex with their clients at hotels or lodges. Hotel/lodges owners have to bring under the program intervention by providing necessary trainings and awareness raising activities regarding HIV/STI for them. They can help to such sex workers who are coming in their hotels/lodges by providing information materials and condoms. Similarly more than 50 percent FSWs are living with their husband. So that they are at risk of HIV. Thus it is recommend to conduct some programme interventions for them also.

**Provide continuity on awareness activities:** It was found the knowledge and awareness level of respondents of respondents was increased. But also the awareness activities and DIC services are highly recognized for Key Affected Populations (KAPs) because of these populations are increasing day-by-day and entering in sex trade/market. Thus the awareness activities are necessary to provide continuity forever or up to reach zero HIV.

**Table 2: Major variable of the round 6<sup>th</sup> survey**

Variables	Values (%)
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<b>HIV</b>	<b>2.2</b>
<b>Active Syphilis</b>	<b>2.2</b>
<b>Syphilis History</b>	<b>2.6</b>
<b>Median age</b>	<b>30</b>
<b>Literate</b>	<b>74.4</b>
<b>Ever Married</b>	<b>66.2</b>
<b>Ever used FP</b>	<b>69.2</b>
<b>First sex below 20 years</b>	<b>20</b>
<b>Consistent condom use with clients in the past year</b>	<b>17.1</b>
<b>Consistent condom use with occasional clients in the past year</b>	<b>63</b>
<b>Consistent condom use with non-paying partner in past year</b>	<b>18</b>
<b>Consistent condom use with regular partner in past year</b>	<b>62</b>
<b>Knowledge of all three indicators: ABC</b>	<b>12.8</b>
<b>Knowledge of all five indicators: BCDEF</b>	<b>8</b>
<b>Ever had HIV test (n=476)</b>	<b>55.2</b>
<b>Met/Interacted with PE/OE/CM</b>	<b>45.8</b>
<b>Visited DIC</b>	<b>25.4</b>
<b>Visited STI Center</b>	<b>25.6</b>
<b>Visited HTC Center</b>	<b>35.4</b>

*Table1: Indicators for Global AIDS Monitoring*

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