



**National AIDS/STD Programme**  
Directorate General of Health Services  
Ministry of Health and Family Welfare  
Government of the People's Republic of Bangladesh



**Behavioral Surveillance Survey 2006-07**  
*Technical Report*

*July 2008*



DRAFT

## Acknowledgments

RTM International conducted the Behavioral Surveillance Survey (BSS) 2006-07 on behalf of the Bangladesh National AIDS and STD Programme (NASP), the Directorate General of Health Services (DGHS) and the Ministry of Health and Family Welfare (MoHFW). Family Health International (FHI), Bangladesh, with financial support from USAID, provided technical assistance for the BSS. Many individuals and organizations at various levels contributed to the successful completion of the survey. A large number of field personnel made the most important contribution. Without their commitment and hard work the survey of different risk-practicing groups would not have been possible. A team of short-term technical assistance (STTA) consultants guided the design of the survey, the analysis of the findings and the preparation of the report.

We are grateful to the Surveillance Advisory Committee (SAC) for endorsing the activities of BSS 2006-07 and providing valuable advisory support. We especially thank Major General (Rtd.) A.S.M. Matiur Rahman, the then-chairperson of Technical Committee-National AIDS Committee (TC-NAC) and chief HIV/AIDS Advisor, MoHFW, and Advisor to the current caretaker government of the People's Republic of Bangladesh for his support. We also thank Dr. Md. Shahjahan Biswas, Director General, DGHS, for ensuring institutional support at various levels. We are grateful to NASP officials who contributed to the improvement of data-collection instruments and in drafting the report. We thank Dr. Md. Hanif Uddin, Deputy Program Manager, NASP, for his cooperation and support to the BSS team in conducting the survey.

We greatly appreciate the members of the surveillance working group who routinely reviewed the technical aspects and monitored the progress of the assignment. The members of the working group were: Dr. Md. Hanifuddin, Deputy Program Manager, NASP; Dr. Tasnim Azim, Head HIV and AIDS program, ICDDR,B; Dr. Imtiaz Ashraf Chowdhury, Curator, Institute of Epidemiological Disease Control and Research (IEDCR); Dr. Ahmed Al-Kabir, Chief Executive, RTM International; and Ms. Diane Lindsey, Deputy Director, FHI Bangladesh.

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Finally, we are extremely grateful to the hundreds of individuals for giving their valuable time to the interviewers and for the cooperation they extended to us.



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## Acronyms

AIDS	Acquired Immune Deficiency Syndrome
BAP	Bangladesh AIDS Program
BBFSW	Brothel-based Female Sex Workers
BCC	Behavior Change Communication
BSS	Behavioral Surveillance Survey
DGHS	Directorate General of Health Services
DIC	Drop-in Center
FHI	Family Health International
FSW	Female Sex Workers
GoB	Government of Bangladesh
HBFSW	Hotel-based Female Sex Workers
HIV	Human Immunodeficiency Virus
HS	Heroin Smoker
HSS	HIV Serological Surveillance
ICDDR,B	International Centre for Diarrhoeal Diseases Research, Bangladesh
IEDCR	Institute of Epidemiological Disease Control and Research
IDU	Injecting Drug User
IHC	Integrated Health Centre
MARP	Most-at-risk Population
MoHFW	Ministry of Health and Family Welfare
MSM	Males who have Sex with Males
MSW	Male Sex Workers
NEP	Needle/syringe Exchange Program
NASP	National AIDS and STD Programme
NGO	Non-Government Organization
PSU	Primary Sampling Unit
RP	Rickshaw Puller
RTM	Research, Training and Management, International
SAC	Surveillance Advisory Committee
SBFSW	Street-based Female Sex Workers
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
STTA	Short-term Technical Assistance
ToR	Terms of Reference
UNAIDS	United Nations Joint Programme on HIV and AIDS
USAID	United States Agency for International Development
WHO	World Health Organization

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## Executive Summary

For the Government of Bangladesh (GoB), the Behavioral Surveillance Survey (BSS) is a significant step in understanding and monitoring the levels of risk behavior associated with HIV infection within selected, most-at-risk populations (MARPs) in the country. The current BSS, under the umbrella of an internationally recognized second-generation HIV-surveillance system documents the risk behaviors of the selected MARP groups leading to vulnerability for HIV infection. It also focuses on the situation analysis of the MARP risk behaviors between behavioral surveillance rounds.

As in the previous rounds, the country was divided into six geographical locations, as per administrative divisions. BSS 2006-07 included 10 different groups of MARP:

- injecting drug users (IDU)
- heroin smokers (HS)
- brothel-based female sex workers (BBFSW)
- street-based female sex workers (SBFSW)
- hotel-based female sex workers (HBFSW)
- males who have sex with males (MSM)
- male sex workers (MSW)
- Transgender (*hijra*)
- rickshaw pullers (RP)
- truckers

BSS 2006-07 adopted a two-stage cluster sampling technique with time-location sampling at the first stage and a “fixed” or “take all” approach at the second stage. Due to the diverse characteristics of the different populations, different time-locations were followed for each risk group. This particular methodology was applied to all the selected MARP groups, except for the brothel-based female sex workers. For the brothels, the simple random sampling approach was taken, in which the desired number of sex workers was selected from a list of brothels following a proportional allocation technique. BSS-VI (2006-07) interviewed 7,167 respondents from all the selected MARP groups through structured questionnaires.

### ***Risk Behavior of Drug Users***

**IDU:** HIV is transmitted among injecting drug users (IDUs) primarily through the sharing of infected injecting equipment - needles, syringes and other paraphernalia. The results of the BSS 2006-07 reveal that 61.7 percent to 80.1 percent of the IDUs in all four study locations: Dhaka, Rajshahi, Chapainawabganj, and Chandpur, either lent or borrowed used needles/syringes in their last injection within a two-month period. The median size of sharing networks in Dhaka, Rajshahi and Chapainawabganj was four, while in Chandpur it was two during the last injection. Moreover, 66.4 percent of IDUs in Dhaka and 55.6 percent in Chandpur had sex with female sex workers in the last year. Nearly one-half of the IDUs in Rajshahi and Chapainawabganj had similar sexual behaviours. Buying sex from female sex workers in all locations increased in BSS 2006-07, as compared with previous BSS rounds. Consistent condom use by IDUs with female sex workers also increased in BSS VI (2006-07), as compared with previous rounds. Almost all (99.2 percent) of the IDUs in Chandpur and the majority of IDUs in Dhaka (82.3 percent), Rajshahi (76.4 percent) and Chapainawabganj (77.9 percent) reported involvement in HIV/AIDS intervention programs in the last year. However, the coverage decreased in Dhaka, Rajshahi and Chapainawabganj

in BSS VI (2006-07), as compared with BSS Round V (2003-04), indicating the potential threat of an increase in IDU's risk behaviors.

**HS:** Heroin smokers in Dhaka are generally young and a significant proportion (30.3 percent) live on the street. More than one-fifth of HSs had ever injected drugs. The risk behavior related to the transmission of HIV, such as in injecting drugs and having sex with commercial sex partners, declined significantly compared with the previous round and, at the same time, the most positive behavior of consistent condom use and exposure to various intervention programs significantly increased.

### ***Risk Behavior of Female Sex Workers***

**Brothel-based female sex workers:** Interviews with brothel-based sex workers (BBSW) in all 14 brothels throughout the country indicated that they initiated their first sex act in their early teens. On average, a brothel-based sex worker had 19 clients in the week preceding the survey. The average number of clients per week increased over the rounds. In general, brothel-based sex workers requested their clients to use condoms during sex in the last week. The use of condoms during last sex with both new and regular clients increased significantly in BSS 2006-07, as compared with the previous round of BSS. Among brothel-based sex workers, only 3.7 percent perceived themselves to be at high risk of HIV/AIDS, yet 63 percent reported at least one symptom of an STI during the last year. Most (75.4 percent) sex workers in the study acknowledged that they had participated in NGO intervention programs, although participation decreased in BSS VI (2006-07) compared with earlier rounds of BSS.

**Street-based female sex workers:** The street-based sex workers were interviewed in three cities: Dhaka, Chittagong and Khulna. The mean number of clients per week for street-based sex workers is 14 in Dhaka, 15 in Chittagong and 8 in Khulna. The use of condoms during the last sex act with new and regular clients was high, particularly for sex workers in Chittagong. Moreover, sex workers' consistent use of condoms was unusually high in Chittagong (76.7 percent reported always used condoms during the week preceding the survey). In Dhaka, it was 43.3 percent and Khulna 23.7 percent. The percentage of street-based sex workers reporting at least one STI symptom in the last year was 67.2 percent in Khulna followed by 43.7 percent in Dhaka and 19.4 percent in Chittagong. The percentage of street-based sex workers complaining of at least one STI symptom in the last year decreased significantly over the BSS rounds. An overwhelming majority (87.3 percent) of the street-based sex workers in Chittagong participated in NGO intervention programs, while almost one-half of the sex workers in Dhaka and Khulna did not participate in programs. Participation in NGO intervention programs in Dhaka and Khulna fell in Round VI (2006-07) as compared with Round V (2003-04).

**Hotel-based female sex workers:** Hotel-based sex workers were surveyed in three cities: Dhaka, Chittagong and Sylhet. The mean number of clients per week is high for hotel-based sex workers, particularly in Chittagong, where each sex worker reported roughly 61 clients in the last week. In addition, 61.4 percent of them reported having more than 20 clients in the last week. In Chittagong, consistent condom use during sex with different clients in the last week was significantly lower among the hotel-based sex workers. The percentage of hotel-based sex workers reporting at least one STI symptom in the last year is also high. Furthermore, the percentage of hotel-based sex workers participating in NGO intervention programs has steadily decreased from 72 percent in Round IV (2002-03) to 20.4 percent in Round VI (2006-07). The decline is sharper among the same group in Chittagong.

### ***Risk Behavior of Male Sex Workers and Hijra***

**MSW:** In general male sex workers are young; their average age ranges between 22 years in Dhaka and 20 years in Chittagong. MSWs in Dhaka had approximately 10 clients (new or regular) in the last week, while in Chittagong it was 4. The use of condoms during last anal sex with both new and regular clients declined slightly among MSWs in Dhaka during Round VI (2006-07) as compared with Round V (2003-04), while it increased in Chittagong over the same period. Only a small proportion of MSW consistently used condoms during anal sex with new clients in the last week. More than one-third of the MSWs reported at least one STI symptom in the preceding year. Among them, nearly one-half did not seek any formal medical treatment. Nearly half had participated in HIV/AIDS intervention programs in the preceding year, although the percentage during the last year declined in BSS 2006-07 as compared with the previous round in Dhaka and Chittagong. Nearly a quarter of the MSWs in Dhaka and 17.5 percent in Chittagong reported that their clients injected drugs.

**Hijra:** On average, *Hijras* in Dhaka had their sexual initiation at 12 years of age. They sell sex 6 days a week. *Hijra* had nearly 30 clients in the last week. In Dhaka, the number of both new and regular clients of *Hijra* is high. The average number of regular clients of *Hijra* sex workers has steadily increased over the rounds of BSS. Almost all the *Hijras* reported having new clients (male/other *Hijra*) in the last week. Nearly two-thirds used condoms with new clients during sex in the last week. The *Hijras* use of condoms with both new and regular clients increased significantly during BSS 2006-07 compared with the previous BSS rounds. Even then, only a small proportion of *Hijra* consistently used condoms during anal sex with new clients in the last week. More than one-third of the *Hijra* reported at least one STI symptom in the preceding year. Among them, nearly one-half did not seek any formal medical treatment. The participation of *Hijra* in HIV/AIDS intervention programs increased to 37.3 percent in BSS 2006-07 from 15.4 percent in Round V (2003-04) and 35.1 percent in Round IV (2002-03).

### ***Risk Behavior of Males Who have Sex with Males***

**MSM:** The males who have sex with males (MSM) in Dhaka and Sylhet reported approximately five partners of all types in the preceding month. More than one-tenth of the MSM also reported having group sex in the last month. The mean number of partners was five during group sex. The use of condoms among MSM is low. The use of condoms during last sex with male sex worker or *Hijra* in Dhaka and Sylhet decreased notably in Round VI (2006-07) compared with Round V (2003-04). Only 7.0 percent of MSM in Dhaka reported consistent use of condoms during sex with male sex workers. Consistent use of condoms with *Hijra* is even lower. In Sylhet, however, among *Hijra* and female sex workers, consistent use of condoms decreased in BSS 2006-07 compared with Round V (2003-04), while it increased with male sex workers over the BSS rounds. Although all MSM interviewed were aware of HIV/AIDS, most of them were not aware of the risks associated with unprotected anal sex with multiple partners. In the preceding year, only 14.9 percent of MSM in Dhaka and 10.6 percent in Sylhet participated in NGO intervention programs. In Dhaka and Sylhet, the percentage of MSM exposed to any HIV/AIDS intervention programs decreased in BSS 2006-07 compared with the previous BSS rounds.

### ***Risk Behavior of Rickshaw Pullers and Truckers***

**RP:** The rickshaw pullers in Dhaka and Chittagong are also young and few are permanent residents of the city in which they were interviewed. Their mean age at first sex ranged from 16 to 17 years. Nearly two-thirds of rickshaw pullers in both locations had sex with female sex workers in the preceding year. The mean number of female sex workers was five. Less than one-tenth of this group had sex with male sex workers/*Hijra* in the preceding year. More than one-quarter of respondents experienced group sex in the previous year. Of the rickshaw pullers who had sex with commercial sex partners in the preceding year, 53 percent reported using condoms. Among the rickshaw pullers in Dhaka and Chittagong, the use of condoms during last sex with female sex workers in the last year increased remarkably in BSS 2006-07 compared with previous BSS rounds. The frequency of condoms use in the preceding year shows that about 7 percent to 12 percent consistently used condoms. Consistent condom use among RPs in both Dhaka and Chittagong also increased over the rounds of BSS. Rickshaw pullers are almost universally aware of HIV and AIDS. Nevertheless, slightly less than two-thirds knew that one could reduce the risk of HIV transmission by avoiding anal sex. Less than three percent of RPs perceived that they were at high risk of HIV transmission. None of the rickshaw pullers in Chittagong had been exposed to any intervention.

**Truckers:** Few of the truckers in Dhaka are permanent residents of the city in which they were interviewed. For this group, the mean age at sexual debut was 18 years. An overwhelming majority (87.8 percent) of the truckers had sex with female sex workers in the preceding year. For them, the mean number of female sex workers was eight. Nearly one-tenth (9.5 percent) of the truckers had sex with male sex workers/*Hijra* and 28.4 percent experienced group sex in the previous year. Of the truckers who had sex with commercial sex partners in the preceding year, 23 percent reported using condoms. The frequency of condom use in the last year shows that only 6.9 percent consistently used condoms. Condom use by the truckers increased in Round VI (2006-07) compared with Round V (2003-04). The truckers are almost universally aware of HIV and AIDS. However, only 19 percent of them knew that one could reduce the risk of HIV transmission by avoiding anal sex. Only 1.5 percent of the truckers perceived that they were at high risk of HIV transmission. Only 11 of 473 truckers were exposed to intervention programs.

### ***Conclusion and Discussion***

Information from the BSS 2006-07 indicates risky behavior of the sampled MARP. Although there have been improvements in the selected indicators with some specific groups in selected areas, they were not consistent over the BSS rounds. Moreover, there has been little internalization of the risk of their behavior. More importantly, these risk behaviors exist despite the presence of many intervention programs for HIV prevention. Consequently, simply expanding the existing programs may not be adequate to produce a positive impact. A critical assessment of what needs to be done is required to ensure that the MARP groups have adequate information, knowledge and access to commodities to practice safer behaviors.

## Section 1: Introduction

### 1.1 Background

HIV/AIDS is a well-known and much-discussed issue in the world today due to its devastating impact on society. Poverty, gender inequality, social exclusion, illiteracy, lack of information about HIV/AIDS and ways of self-protection continues to be key determinants of the demography and geography of the epidemic. HIV/AIDS has major health, social, economic, political and legal consequences that impact almost all aspects of human life. These in turn threatens national development efforts to improve quality of life. Although Bangladesh is a low prevalence country for HIV infection with less than one percent prevalence among high risk populations, from an epidemiological perspective, the epidemic is evolving rapidly in the country (GoB 2004, 05).

Like many other countries in the world, Bangladesh has taken several steps to understand the HIV epidemic, including the Behavioral Surveillance Survey (BSS). Since 1998, Bangladesh has had an internationally recognized second-generation HIV surveillance system in place based on the UNAIDS/WHO guidelines. The current practice of monitoring behavioral surveillance in Bangladesh helps the government understand the levels of risk behavior associated with HIV infection within the selected groups of most-at-risk populations (MARPs) in the country.

### 1.2 Literature Review

#### 1.2.1 HIV and AIDS in Bangladesh

Bangladesh has been conducting serological surveillance and behavioral surveillance surveys since 1998-99. These national-level data provide necessary information for better understanding and addressing the HIV situation at both national and sub-national levels, and thereby designing prevention, treatment, care and support programs. Since 1999, the serological surveillance surveys of MARPs have been conducted approximately every second year. The behavioral surveillance surveys (BSS) were also conducted almost at equal intervals with the serological surveillance surveys up to 2003-04. There was a disruption of the BSS and the last BSS (6<sup>th</sup> round) was conducted in 2006-07, the findings of which have been presented in this report.

HIV infection in Bangladesh remains at relatively low levels in MARP groups, with the exception of injecting drug users (IDUs) among whom prevalence increased during the last few years. Although national HIV prevalence remains under one percent among the general population in Bangladesh, risk factors could fuel the spread of HIV among high-risk populations. The first case of HIV/AIDS in Bangladesh was detected in 1989. However, at the end of 2006, the Government of Bangladesh (GoB) estimated that 7,500 Bangladeshi adults and children could be living with HIV and AIDS.

**Table 1.1: HIV and AIDS: Bangladesh Situation**

Identified Cases	2006	Total
HIV Cases	216	874
AIDS Cases	240	374
AIDS Death	109	183
<i>Estimated HIV cases:</i>	<b>7,500</b>	

**Source:** Report on World AIDS Day, NASP, 2006



Data from the seventh round of serological surveillance (2006) in Bangladesh showed an overall prevalence of 0.9 percent among MARP. Although the overall prevalence of HIV in Bangladesh is still low, there is no reason to be complacent, as the prevalence is higher in some groups who practice high-risk behavior like IDUs, sex workers and MSM.

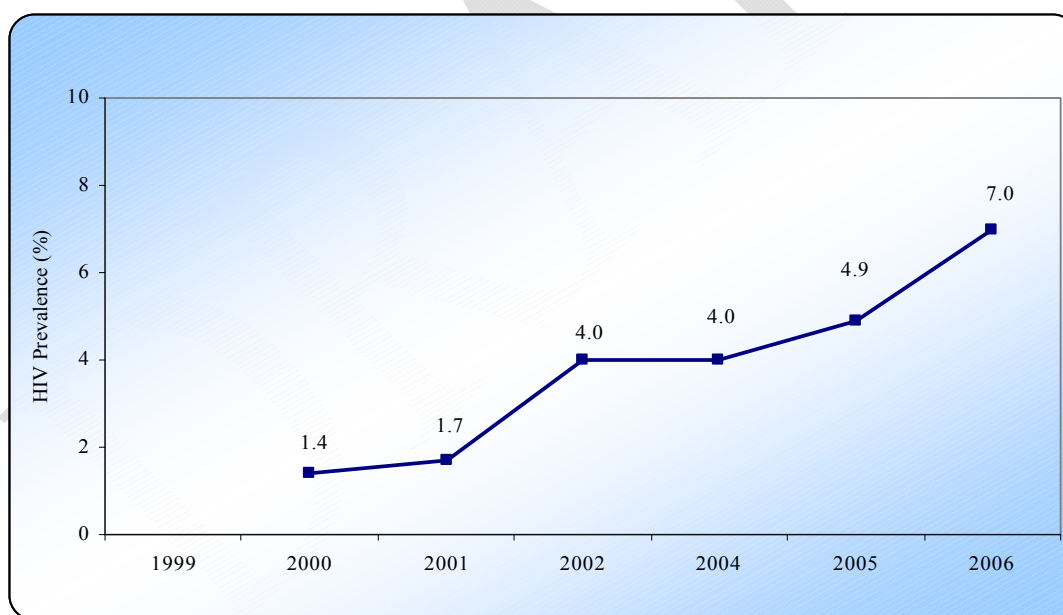
**Table 1.2: HIV Prevalence in Bangladesh among MARPs**

Sero-surveillance Rounds	Year	HIV (%)
1st round	1998 – 1999	0.4 (< 1%)
2nd round	1999 – 2000	0.2 (< 1%)
3rd round	2000 – 2001	0.2 (< 1%)
4th round	2002 – 2003	0.3 (< 1%)
5th round	2003 – 2004	0.3 (< 1%)
6th round	2004 – 2005	0.6 (< 1%)
7th round	2006 – 2007	0.9 (< 1%)

Source: NASP, 2007.

Although overall infection levels among MARP have remained below one percent, injecting drug users (IDUs) accounted for almost nine in ten HIV-positive cases found in the 2006 sero-surveillance survey. Among male IDUs in Dhaka city, HIV prevalence increased from 1.4 percent in 1999 to 7.0 percent in 2006 (Figure 1.1).

**Figure 1.1: HIV Prevalence Among Male IDUs in Dhaka 1999-2006**



Source: NASP, National HIV Sero-surveillance surveys, 1999-2006.

The trend of infection among the IDUs poses the greatest risk, as the infection can spread rapidly within the group due to their needle/syringe sharing behaviours and then to the general population through their sexual partners. Other South and Southeast Asian countries have experienced the same phenomena. Sharing of drugs, needles and syringes is a common occurrence among IDUs in Bangladesh.

Despite the low prevalence of HIV, the national Behavioural Surveillance Survey (BSS) has reported some of the highest risk levels in Asia (NASP, 2001). Sharing of needle/syringe by the IDUs is still very high. The other high-risk group is the female sex workers. The hotel

based female sex workers (HBFSW) in Dhaka consistently report working 4 days a week with 7 to 10 clients per day. Essentially all the MSM report anal sex. Consistent condom use among these groups is still very low (NASP, 2005a).

The country is vulnerable to an expanded HIV epidemic; major risk factors include:

- Large commercial sex industry
- Low levels of consistent condom use
- Increasing rate of untreated sexually transmitted infections
- Large-scale needle sharing among injecting drug users
- Lack of proper knowledge among the general population
- Presence of stigma and discrimination
- Porous (semi open), long borders with India and Myanmar

### **1.2.2 GoB Response to HIV and AIDS**

To ensure policy direction and to promote multisectoral effort on HIV/AIDS, the National AIDS Committee (NAC) was set up in 1985 with the Honorable President as the Chief Patron and the Honorable Minister, Ministry of Health and Family Welfare (MoHFW) as Chairman. Since then the NAC, comprising representatives of various government departments, civil organizations, business community and self-help groups, has been playing as an active national body (NASP, 2005b).

In 1995, the Directorate General of Health Services (DGHS) of the Ministry of Health and Family Welfare formed a Task Force convened by the Technical Committee of the National AIDS Committee (TC-NAC). The Technical Committee of the NAC (TC-NAC) is comprised of experts from various fields relevant to the prevention and control of HIV and STDs. With political support from the National AIDS Committee and technical support from the TC-NAC, the Task Force led the process of developing a National Policy on HIV and AIDS, which was endorsed by the cabinet in 1997 (NASP, 2005b).

Following the recommendations of the National Policy on HIV and STD the National AIDS/STD Program (NASP) was established in 1998 under the Directorate General of Health Services (DGHS), MoHFW. The NASP is charged with the responsibility to facilitate the overall coordination and stewardship role for the national response to HIV/AIDS. In 2004, a six year National Strategic Plan (2004-2010) was approved. The National AIDS Communication Strategy (2006-2010) was also developed and launched (NASP, 2006a).

As a sign of its commitment to deal with HIV/AIDS and other STIs, Government enlisted and secured a five year (2001-2005) US \$ 40 million World Bank Credit and US \$ 10 million DFID Grant to support a mix of interventions under the HIV/AIDS Prevention Project (HAPP). However as a result of low implementation rate, the project had to be restructured with both its duration and amount reduced by half. The revised project is being implemented with technical and management support from UN Agencies as follows: UNICEF; 5 Large packages for interventions targeted at most vulnerable groups, small grant fund to NGOs of US \$ 20,000 each and communication and advocacy strategy: UNFPA; Institutional capacity strengthening of NASP and condom procurement: WHO; Blood safety (NASP, 2005c).

In addition to HAPP, Bangladesh successfully applied for funding from GFATM for an HIV/AIDS intervention project targeting the youths and received US \$ 59.7 million under

two separate grants Round-2 (2004-2009) and Round-6 (2007-2012) with budget \$ 19.7 million and \$ 40 million respectively.

Besides, FHI, with financial support (\$14 m) from USAID, implemented the IMPACT project in Bangladesh from 2000-2005. Since July 2005 FHI has been implementing Bangladesh AIDS Program (BAP) to provide HIV prevention, testing and care and support to most vulnerable (FHI, 2008). Total budget of BAP is around \$ 12.5 million.

HIV/AIDS prevention activities are being carried out to a large extent by the various NGOs with coordination, monitoring and policy support from NASP. To complement government efforts NGOs working on HIV/AIDS have set up the AIDS/STI Network that seeks to improve coordination among them and enhance their contribution to deal with the epidemic.

### 1.3 Objectives

The primary objective of the BSS 2006-07 is to document the risk behaviors of the selected MARPs that lead to HIV infection vulnerability. BSS 2006-07 also focuses on the situation analysis of the MARP risk behaviors over the rounds of surveillance. The specific objectives of BSS are as follows.

- Document the behaviors of MARP groups;
- Determine behavior trends over the rounds of surveillance;
- Provide feedback to policy makers, implementing organizations and MARP members;
- Ensure widespread awareness of the current situation; and
- Activate future policy/strategy and program efforts to advocate for increased resources in prevention and interventions.

### 1.4 Study Team, BSS 2006-07

#### ***Core Team Members:***

The core team of the BSS 2006-07 is comprised of a group of renowned and proficient Bangladeshi researchers. The core team members are:

- Mr. Ahmed Al-Kabir, Ph.D – Project Director  
*Chief Executive, RTM International*
- Mr. Jamil H. Chowdhury – Principal Investigator  
*Director, Research and Evaluation, RTM International*
- Mr. Mohammed Nazmul Huq, M.Sc. – Statistician  
*Assistant Professor, Department of Statistics, Jahangirnagar University*
- Ms. Dipika Paul, M.Sc. – Data Management and Analysis Officer  
*Data Management Specialist (Statistician), RTM International*

**Short-term Technical Assistance (STTA) Consultants/Staff:**

Recognizing the need for utilizing the experiences gained from previous BSS and other well-known national and international research in the field, the core study team also sought support from a group of highly qualified and experienced consultants. The STTA resources include:

- Dr. Tasnim Azim  
*Head, HIV/AIDS Program, ICDDR,B*
- Dr. Md. Shah Alam  
*Field Research Manager, HIV Surveillance, ICDDR,B*
- Mr. Masud Reza  
*Operations Researcher (Statistician), HIV Program, ICDDR,B*
- Mr. Humayon Kabir  
*Field Coordinator, HIV Program, ICDDR,B*
- Mr. A.S.M. Amanullah, Ph.D  
*Associate Professor, Department of Sociology, University of Dhaka*

**FHI Technical Assistance Team:**

- Mr. Robert Kelly, Ph.D  
*Country Director, FHI Bangladesh*
- Ms. Diane Lindsey, MPH  
*Deputy Director, FHI Bangladesh*
- Mr. Ashish K Datta, M.Sc.  
*Technical Officer, FHI Bangladesh*

## Section 2: Methodology and Technical Approach

### 2.1 The Risk Groups

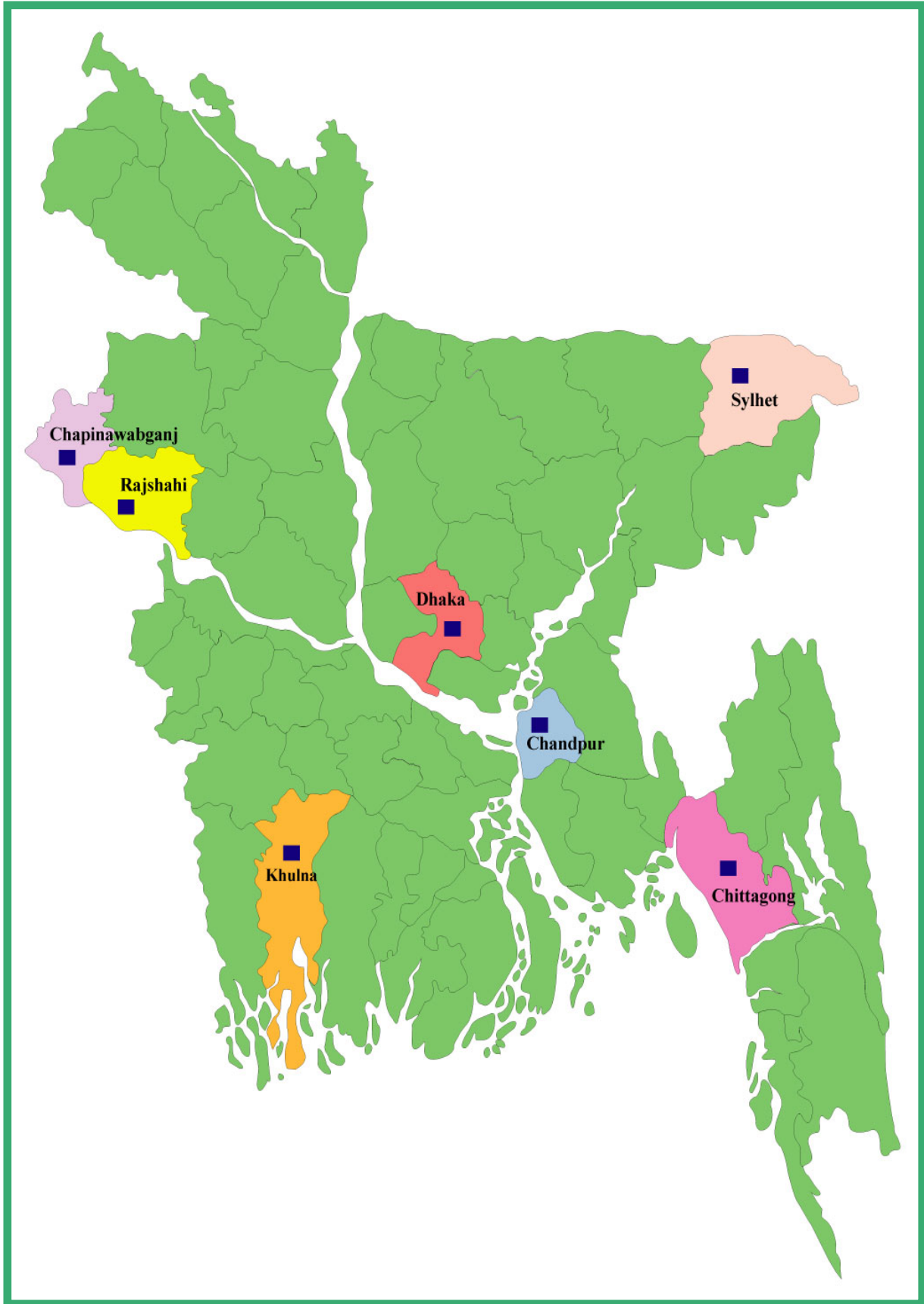
The selection of population groups for BSS 2006-07 is based on the evidence suggesting which groups are likely to be more vulnerable to HIV. For BSS 2006-07, population groups are selected based on the same factors as those of the fifth round but expanded to achieve better coverage of geographical areas. MARPs and geographical regions considered for the surveillance are finalized in consultation with Family Health International (FHI) and Surveillance Advisory Committee (SAC). The MARPs, along with their geographical locations under BSS 2006-07, are presented **Table 2.1**.

**Table 2.1: Population Groups for BSS 2006-07**

Serial No.	MARP	Geographical Areas
<i>Drug users</i>		
1	Injecting drug users (IDU)	- Dhaka (Central-A) - Rajshahi (Northwest-A) - Chapainawabganj (Northwest-B) - Chandpur (Southeast-D)
2	Heroin smokers (HS)	- Dhaka (Central-A)
<i>Female sex workers</i>		
3	Brothel-based female sex workers (BBFSW)	- Nation wide
4	Street-based female sex workers (SBFSW)	- Dhaka (Central-A) - Chittagong (Southeast-A) - Khulna (Southwest-A)
5	Hotel-based female sex workers (HBFSW)	- Dhaka (Central-A) - Chittagong (Southeast-A) - Sylhet (Northeast-A)
<i>Males who have sex with males (MSM)</i>		
6	Male sex workers	- Dhaka (Central-A) - Chittagong (Southeast-A)
7	Male non-sex workers	- Dhaka (Central-A) - Sylhet (Northeast-A)
<i>Transgender</i>		
8	<i>Hijras</i>	- Dhaka (Central-A)
<i>Transport workers</i>		
9	Rickshaw pullers	- Dhaka (Central-A) - Chittagong (Southeast-A)
10	Truckers	- Dhaka (Central-A)

Source: BSS 2006-07.

As in the previous rounds, the country is divided into six geographical regions according to the administrative divisions. The geographical coverage of BSS 2006-07 is presented below.



In BSS 2006-07, each of the selected MARP groups is defined based on the previous rounds of behavioral surveillance surveys (BSS). The definitions of each behavioral surveillance population sub-groups are outlined below:

**Drug Users:**

*Injecting drug users (IDU):* Males who injected drugs within the last two months and were accessible through public injecting/shooting spots.

*Heroin smokers:* Those who were primarily heroin smokers and had not injected more than six times in the previous six months.

**Female Sex Workers:**

*Brothel-based female sex workers (BBFSW):* Those who were contracted by clients in a brothel setting, with the sex act generally taking place in brothels.

*Street-based female sex workers (SBFSW):* Those who were contracted by clients on the street, with the sex act taking place in a public space or other venues.

*Hotel-based female sex workers (HBFSW):* Those who were contracted by clients in a hotel setting, with the sex act taking place in hotels.

**Males Who have Sex With Males:**

*Male non-sex workers (MSM):* Males who had male sex partners but did not sell sex.

*Male sex workers (MSW):* Males who were selling sex to other males.

**Transgender:**

*Hijra:* The *Hijras* are those who identified themselves as belonging to a traditional *Hijra* sub-culture.

**Transport Worker:**

*Rickshaw pullers (RP):* Men currently working as rickshaw pullers.

*Truckers:* Men currently working as truck drivers or their helpers.

## 2.2 Spots/PSUs

A spot is a location where individuals belonging to a particular MARP group are available and accessible. These locations or spots are also considered primary sampling units (PSU). The definitions of spots/PSUs for each MARP are outlined in **Table 2.2**.

**Table 2.2: Definitions of Spots/PSUs**

Serial No.	MARP	Definition of Spots/PSUs
<i>Drug users</i>		
1	Injecting drug users (IDU)	A spot/PSU is a specific location where at least 3 IDUs were found injecting drugs in a specific time frame
2	Heroin smokers (HS)	A spot/PSU is a specific location where at least 5 HS were smoking drugs or resting in a specific time frame
<i>Female sex workers</i>		
3	Brothel-based female sex workers	A spot/PSU is a specific room used in a brothel for selling sex
4	Street-based female sex workers	A spot/PSU is a specific location where at least 3 sex workers were found in a specific time frame

Serial No.	MARP	Definition of Spots/PSUs
5	Hotel-based female sex workers	A residential hotel where at least 5 sex workers were found in a specific time frame who sold sex there
<i>Males who have sex with males (MSM)</i>		
6	Male sex workers	A spot/PSU is a specific location where at least 3 MSW gathered in a specific time frame
7	Male non-sex workers	A spot/PSU is a specific location where at least 3 MSM gathered in a specific time frame
<i>Transgender/Third gender</i>		
8	<i>Hijras</i>	A spot/PSU is a specific house where at least 3 <i>Hijra</i> are living
<i>Transport workers</i>		
9	Rickshaw pullers	A spot/PSU is a specific location where at least 10 rickshaws were found in a specific time frame
10	Truckers	A truck stand where at least 5 trucks were found in a specific time frame

Source: BSS 2006-07.

## 2.3 Sampling Technique

Like the previous BSS rounds, BSS 2006-07 adopted the two-stage cluster sampling technique with time-location sampling at the first stage and a “fixed” or “take all” approach at the second stage. Furthermore, due to the diverse characteristics of the different populations, different time-locations have been followed for each risk group. After the mapping exercises, PSUs were selected using a systematic-cluster sampling procedure. The sampling interval was then estimated and a random number (starting point) was drawn between zero and the sampling interval. In any PSU, when the size of a particular MARP group was small, the “take-all” approach was used and all the respondents of that particular group were interviewed. In contrast, a “fixed” number of respondents from a PSU was selected when the size of the MARP was relatively large. This particular methodology was applied to all the selected MARP groups, except for the brothel-based female sex workers. For brothels, a simple random sampling approach was considered where the desired number of sex workers was selected from a list of brothels following a proportional allocation technique.

The entire exercise was done in two different phases. In the first phase, mapping of all spots/PSUs, with an estimated number of MARP available at different time frames, was conducted. In the second phase, the desired number of MARPs, by spot was selected for interviews.

### 2.3.1 Method of Mapping

Mapping the members of each selected MARP group was conducted separately in the selected areas. In the exercise, the team mapped out locations where each of the MARP groups was likely to be found. Mapping also estimated the size of the spots. The following methods were used to map/list the selected MARP at the selected geographical locations:

- **Key Informants Interview (KII):** The field investigators held discussions with a number of key informants to identify the MARP spots/PSUs. During the mapping exercise, the health workers, police, members of the community, and members of the respective MARP were consulted to ensure the accuracy of the information.
- **Observation of Mappers:** The field investigators also applied their own observation technique to estimate the MARP size and time-location. The field team finalized the PSUs with time-locations after matching their observations with the information collected from the key informants.



The results of the mapping exercise provided the basis for determining the sample size for each of the selected MARP. For most of the MARP, mapping was conducted at a specific time and location, because these individuals were known to be available at those locations at a certain time (e.g. street-based female sex workers are usually found in the evening). However, as behaviors of MARP may differ at different times even in the same location, mapping for those groups was conducted during more than one time frame (e.g., for IDUs, the same spot was mapped in the morning and in the afternoon as they are available at both these times). The number of PSUs with time frames is presented in **Table 2.3**.

**Table 2.3: Distribution of Number of PSUs and Time-location by MARP**

Serial No.	MARP	Geographical Areas	Time Frame	Number of PSUs Identified	Population Seen during Mapping	Population per PSU
<b>Drug users</b>						
1	Injecting drug users (IDU)	Dhaka (Central-A)	7am-11am & 2pm-6pm	236	2,045	9
		Rajshahi (Northwest-A)	7am-11am & 2pm-6pm	112	701	6
		Chapainawabganj (Northwest-B)	7am-11am & 2pm-6pm	32	387	12
		Chandpur (Southeast-D)	7am-11am & 2pm-6pm	73	294	4
2	Heroin smokers (HS)	Dhaka (Central-A)	7am-11am & 2pm-6pm	291	4,419	11
<b>Female sex workers</b>						
3	Brothel-based female sex workers – nation-wide random sampling with proportional allocation					
4	Street-based female sex workers	Dhaka (Central-A)	5pm-10pm	151	732	5
		Chittagong (Southeast-A)	6pm-10pm	64	313	5
		Khulna (Southwest-A)	6pm-10pm	88	383	4
5	Hotel-based female sex workers	Dhaka (Central-A)	8am-8pm	83	1,777	21
		Chittagong (Southeast-A)	8am-8pm	10	108	11
		Sylhet (Northeast-A)	8am-8pm	55	100	2
<b>Males who have sex with males (MSM)</b>						
6	Male sex workers	Dhaka (Central-A)	6pm-10pm	134	583	4
		Chittagong (Southeast-A)	6pm-10pm	58	151	3
7	Male non-sex workers	Dhaka (Central-A)	6pm-10pm	134	760	6
		Sylhet (Northeast-A)	-	445	19	-
<b>Transgender/Thirdgender</b>						
8	Hijras	Dhaka (Central-A)	8am-8pm	394	1,446	4
<b>Transport workers</b>						
9	Rickshaw pullers	Dhaka (Central-A)	7am-11am & 6pm-10pm	1907	20,119	11
		Chittagong (Southeast-A)	7am-11am & 6pm-10pm	1108	11,397	10
10	Truckers	Dhaka (Central-A)	7am-11am & 2pm-6pm	263	2,486	9

Source: BSS 2006-07.

### 2.3.2 Data Collection Period

Data for BSS 2006-07 were collected during November 2006 to February 2007. The following table shows the groupwise data collection period.

**Table 2.4: Groupwise Data Collection Period**

MARP	Nov,06	Dec,06	Jan,07	Feb,07
IDU	√	√	√	√
Heroin Smoker	√	√		
BBFSW	√	√	√	√
HBFSW	√	√	√	
SBFSW	√	√	√	√
MSM	√	√	√	√
MSW	√	√		
Hijra	√	√	√	
Rickshaw Puller	√	√	√	
Truckers	√	√		

### 2.3.3 Sample Size and Coverage

After the mapping exercise, the desired number of respondents were selected from the listed spots/PSUs. The required sample size for the selected MARP was calculated according to the *Guidelines for Repeated Surveys in Population at Risk of HIV* (FHI, 2000). The sample sizes were calculated to detect 10 percent to 25 percent changes in behavior over time based on 95 percent confidence interval, with 80 percent power and design effects 0.5 to 3.5. While analyzing the data, corrections were made using sampling weights. The sample size for each MARP group was determined by using the following formula:

$$n = \frac{\left[ Z_{1-\alpha} \sqrt{2P(1-P)} + Z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)} \right]^2}{(P_2 - P_1)^2} \times D$$

Where:

- $P_1$  = estimated proportion at the time of the first survey
- $P_2$  = target proportion at some future date
- $P$  =  $(P_1 + P_2)/2$
- $Z_{1-\alpha}$  = Z-score corresponding to desired level of significance
- $Z_{1-\beta}$  = Z-score corresponding to the desired level of power
- $D$  = Design effect

The estimated sample sizes for the BSS 2006-07 with specific approach for each MARP group is presented in **Table 2.5**.

**Table 2.5: Sample Sizes and Technical Approach by MARP**

Serial No.	MARP	Geographical Areas	Sample Covered in Previous BSS		Sample Size and Approach in Current BSS	
			BSS IV (2002)	BSS V (2003-04)	BSS V (2003-04)	Approach
<b>Drug users</b>						
1	Injecting drug users (IDU)	Dhaka	500	483	425	Fixed-4
		Rajshahi	675	474	403	Take-all
		Chapainawabganj	150	190	209	Fixed-7
		Chandpur	150	141	159	Fixed-3
		Charnarendrapur	-	84	-	-
2	Heroin smokers (HS)	Dhaka	-	353	339	Fixed-3
<b>Female sex workers</b>						
3	Brothel-based female sex workers	National	675	680	683	Proportional allocation
4	Street-based female sex workers	Dhaka	500	340	438	Fixed-4
		Chittagong	300	369	314	Take-all
		Khulna	-	341	314	Take-all
5	Hotel-based female sex workers	Dhaka	325	300	337	Fixed-5
		Chittagong	-	89	108	Take-all
		Sylhet	-	-	151	Take-all
<b>Males who have sex with males (MSM)</b>						
6	Male sex workers	Dhaka	350	325	416	Fixed-5
		Chittagong	325	363	383	Take-all
7	Males who have sex with males	Dhaka	400	420	418	Fixed-4
		Sylhet	325	390	425	Take-all
<b>Transgender/Third gender</b>						
8	Hijras	Dhaka	350	410	426	Fixed-3
<b>Transport workers</b>						
9	Rickshaw pullers	Dhaka	400	403	431	Fixed-3
		Chittagong	300	315	315	Fixed-3
10	Truckers	Dhaka	450	441	473	Fixed-6
11	Dormitory-based college/university students	Dhaka	339	-	-	-
Total sample size over the rounds			6,514	6,954	7,167	-

## 2.4 Techniques of Data Collection

To assess the existing status of risk behavior of the study groups vulnerable to HIV infection, one-on-one interviews were conducted with selected members of each MARP group through a structured questionnaire. Separate data collection instruments were developed for each of the selected at-risk populations.

Following UNAIDS/WHO ethical principles, interviews were undertaken in areas that assured adequate privacy, where possible. All participants received a simple explanation and gave verbal consent for the interviews.

## 2.5 Data Management and Analysis

The data processing work of the BSS VI (2006-07) consisted of office editing, coding, data entry and checking inconsistencies found by the computer programs. To ensure the accuracy and reliability of data, double entry of data was completed on using Visual FoxPro. In

addition, validity range of each response and consistency checks were incorporated in the data-entry screens. After completing double entry, data were compared by clipper53 program. Cleaned data files were then converted into STATA data files format by using STATA transfer version 7. For data analysis, STATA version 8 was used. Descriptive statistics, such as weighted proportions for categorical data and weighted mean and medians for numerical variables were reported. Confidence intervals were also reported for proportions and means. Categorical variables were compared between different geographical locations and over different rounds of BSS using chi-square test, and continuous variables were compared by adjusted Wald-test.

## **2.6 Limitations**

As the previous BSS acknowledged, the surveillance system in Bangladesh is not without limitations. The results of BSS are not representative of Bangladesh because the surveillance survey does not cover all geographic areas of the country, except for the brothel-based female sex workers. The results are more representative of specific risk groups in a particular geographical location.

Many of the findings of BSS 2006-07, as well as the impact of the program interventions, could be temporarily affected because of some of the limitations. For example, before initiation of BSS 2006-07, the Rapid Action Battalion (RAB) started patrolling many parts of the cities and towns in the BSS sample area. This was followed and aggravated by political programs, including a Dhaka blockade, and intensified deployment of law enforcement agencies in different parts of the country. These actions resulted in the spots where IDUs and HS injected being dismantled and the movement of street-based sex workers, MSW and MSM being restricted. Due to the unstable political situation, as well as resistance from the local community, some IDUs and HS shifted to residences for injecting and smoking. BSS fieldwork was also delayed by a fortnight due to political unrest.

## Section 3: Risk Behaviors of Drug Users – Injecting Drug Users and Heroin Smokers

### 3.1 Injecting Drug Users

HIV is transmitted among injecting drug users (IDU) primarily through the sharing of contaminated injecting equipment, which includes needles, syringes and other paraphernalia, such as "cookers" (spoons or containers for dissolving the drug), "cottons" (filters) and wash water used to rinse needles and syringes and dissolve drugs (McCoy and Inciardi, 1995; Chitwood et al. 1990). When a user injects drugs intravenously, contact between the paraphernalia and the user's blood is virtually guaranteed (McCoy and Inciardi 1995). As a result, the needle/syringe-sharing practices among IDUs greatly contribute to HIV risk, as do the sexual behavior and practices of IDUs.

To assess the risk behaviors of IDUs and to monitor the behavioral changes overtime, Dhaka, Rajshahi, Chapainawabganj and Chandpur were covered during BSS 2006-07. The findings on IDUs are presented in the following sections.

#### 3.1.1 Socio-demographic Characteristics

##### *Demographic characteristics*

Generally, IDUs in selected locations are middle-aged, although the IDUs in Chandpur are younger (median age is 28 years). The median age of IDUs in Chapainawabganj is higher, 36 years. In general, the level of education of the selected IDUs is low. More than half of them in Chapainawabganj had no formal education, while almost all the IDUs in Chandpur had some schooling. The majority of IDUs in Dhaka (74 percent) and Rajshahi (97 percent) were currently living with their families or relatives. In Dhaka, about 33 percent of the respondents lived in the street and 15.9 percent lived alone.

More than three-quarters of the IDUs in Chapainawabganj and nearly two-thirds in Chandpur were currently married or living with their regular sex partners, which is significantly higher than those living in Dhaka. The mean age at first sex ranges between 16 and 18 years. This is similar for IDUs from all locations (**Table 3.1**).

##### *Sources of income*

In Chapainawabganj, 54 percent of IDUs are rickshaw pullers. In Dhaka, 31 percent are rag pickers or *tokai*. Another 28 percent of IDUs from Chandpur are businessmen. A typical IDU in Dhaka, on average, earns Taka 5,974 per month. The average income of IDUs in Dhaka is higher than that of their counterparts in other locations.

The IDUs also sell their blood for extra income with which to purchase drugs. The percentage of IDUs selling blood in Dhaka is significantly higher than the percentage of IDUs from other locations who sell blood. Approximately one in every five IDUs in Dhaka sold blood for money during the year preceding the survey (**Table 3.1**).

**Table 3.1: Socio-demographic Characteristics**

Indicators %(95 % CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Mean age (in years)	32.2(31.5-32.9) M=32	34.6(33.9-35.3) M=34	36.3(35.3-37.3) M=36	28.1(27.3-28.9) M=28
Percent who had no schooling	30.3(24.8-36.4) n=416	45.3(40.8-49.8) n=400	52.7(45.3-60.1) n=203	0.5(0.1-3.6)
Duration of stay in this city	n=423			
Whole life	86.5 (82.4- 89.8)	97.0(95.0-98.2)	99.1(96.4-99.8)	98.4(95.0-99.5)
≤10 years	2.5(1.3-4.4)	1.7(0.8-3.5)	0.6(0.1-3.9)	1.1(0.3-4.3)
>10 years	8.9(6.3-12.5)	1.2(0.5-3.0)	0	0.5(0.1-3.9)
Could not remember	2.1(1.1-4.2)	0	0.3(0.04-2.6)	0
Current living status :				
Alone	15.9(12.9-19.7)	12.9(10.2-16.2)	1.6(0.5-4.7)	0
With relatives	39.6(33.5-46)	73.7(69.1-77.8)	96.4(93.7-97.9)	91.8(85.5-95.5)
Friends	8.4(6.1-11.6)	4.2(2.6-6.7)	0.7(0.2-3.5)	7.4(4.3-12.6)
On the street	33.8(27.7-40.4)	8.9(6.3-12.5)	1.2(0.3-4.3)	0.8(0.1-5.6)
Others*	2.3(1.3-3.9)	0.2(0.03-1.8)	0	0
Average income (in Taka) last month	5973.6(5570.6-6376.5) M=5000 n=423	4232.7(4018.6-4446.7) M=4000 n=401	4794.8(4457.4-5132.2) M=4000 n=208	4806.1(4356.3-5255.9) M=4000
Source of income in last 6 months :				
Rickshaw pullers	10.8(7.7-14.9)	26.6(21.9-31.8)	54.3(48.5-60.1)	20.5(14.8-27.8)
Mobile sellers (small business using mobile vans)	4.9(3.1-7.6)	6.2(4.1-9.3)	0.6(0.1-4.0)	3.3(1.4-7.7)
Service	4.9(3.3-7.4)	9.4(7.1-12.4)	7.0(4.6-10.7)	17.6(12.4-24.3)
Tokai (rag pickers)	30.8(24.6-37.7)	6.0(3.9-8.9)	1.4(0.4-4.8)	7.1(3.9-12.5)
Stealing/robbery	9.5(6.7-13.3)	4.7(2.9-7.6)	0	3.2(1.1-8.6)
Business	11.6(8.7-15.4)	19.9(16.1-24.2)	25.9(21.9-30.3)	27.6(20.2-36.4)
Household work	4.7(2.7-8.3)	6.5(4.3-9.5)	1.9(0.8-4.7)	6.8(3.7-12.2)
Others**	22.7(17.8-28.4)	20.8(17.1-25.2)	8.8(5.7-13.5)	14.0(8.9-21.2)
Percent sold blood for money in last 12 months	21.4(17.2-26.3) n=419	10.7(7.5-15.2) n=401	9.7(6.7-13.7)	2.5(0.9-6.9) n=154
Percent who were currently married	36.1(29.7-43.1)	54.3(48.8-59.8)	77.1(69.8-83.1)	62.8(54.9-70.1)
Percent currently living with wife or other regular sex partners	43.0(35.4-51.04)	56.6(50.9-62.1)	78.6(71.8-84.1)	62.9(54.9-70.2)
Age at first sex (in years)	16.5(16.1-16.8) M=16 n=416	18.9(18.5-19.2) M=18 n=392	16.6(16.1-17.1) M=16	17.4(17.003-17.9) M=17.5 n=158

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** shop, drug seller, with family, on the roof

\*\* **Others stated:** helper, driver, day labor, guard, meat seller, sweeper, pimps, electronic work/ labor, ticket broker, beggar, boatman, community police, politics, extortion, house rent/shop rent, ampoule seller, farmer, agent, working in shop, shoe maker, artist, key repair, returned expatriate.

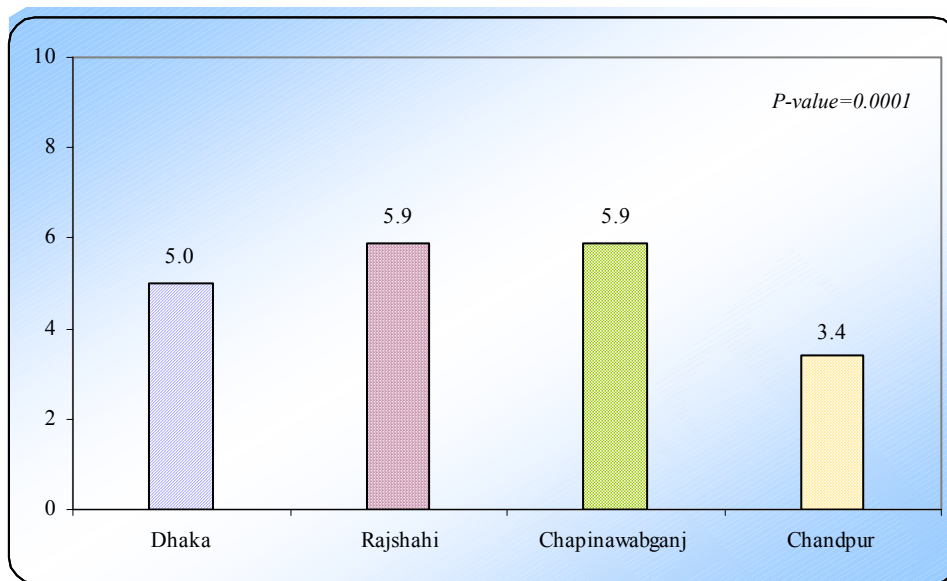
### 3.1.2 History of Drug Use and Injection Practices

#### History of drug use

IDUs usually take other drugs before injecting. The IDU respondents have between 7 to 16 years of experience using any drugs; the average duration of injecting drug is at least three years. The IDUs of Dhaka and Northwest locations have a longer history of injecting drugs compared with those in Chandpur. In Rajshahi and Chapainawabganj, an IDU, on average,

has been injecting drugs for the last 5.9 years, in Dhaka 5.0 years and in Chandpur 3.4 years (Figure 3.1).

**Figure 3.1: Mean Duration (in years) of Injecting Drugs**



The IDU in Dhaka started injecting drug at a slightly younger age than those in other locations (Table 3.2).

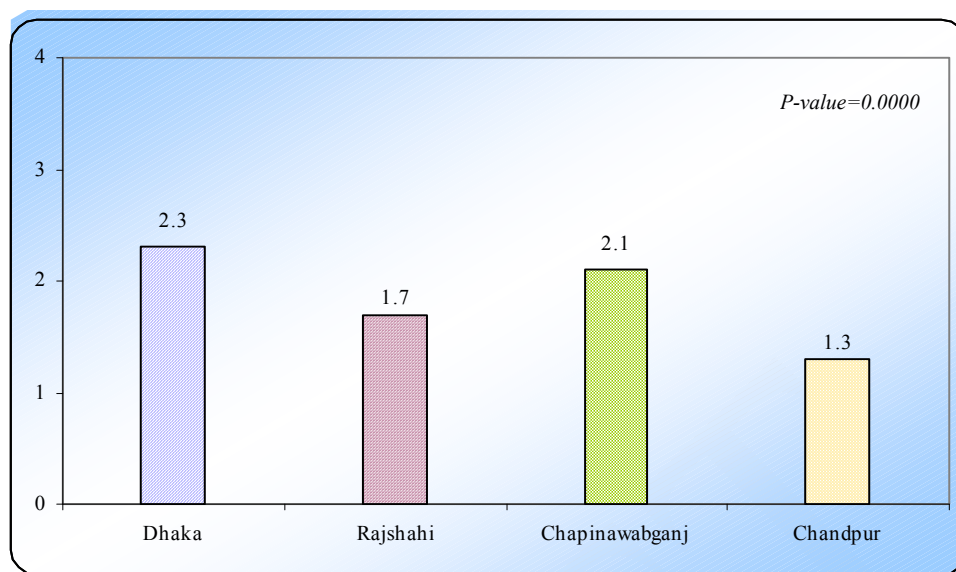
**Table 3.2: History of Drug Use**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Mean duration of taking any kind of drugs (in years)	12.7(12.1-13.3) M=11	14.0(13.3-14.7) M=13	16.0(15.3-16.6) M=15	7.7(7.2-8.2) M=7
Mean age of starting any drugs (in years)	19.4(18.8-20.1) M=18	20.6(20.2-21.1) M=20	20.3(19.5-21.1) M=20	20.4(19.7-21.2) M=20
Mean duration of injecting drugs (in years)	5.0(4.6-5.4) M=4	5.9(5.5-6.2) M=5	5.9(5.4-6.4) M=5	3.4(3.1-3.7) M=3
Mean age of starting injections (in years)	27.2(26.5-27.9) M=27	28.8(28.1-29.4) M=27	30.4(29.4-31.5) M=30	24.7(24.0-25.4) M=24

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### ***Practice of injecting drugs***

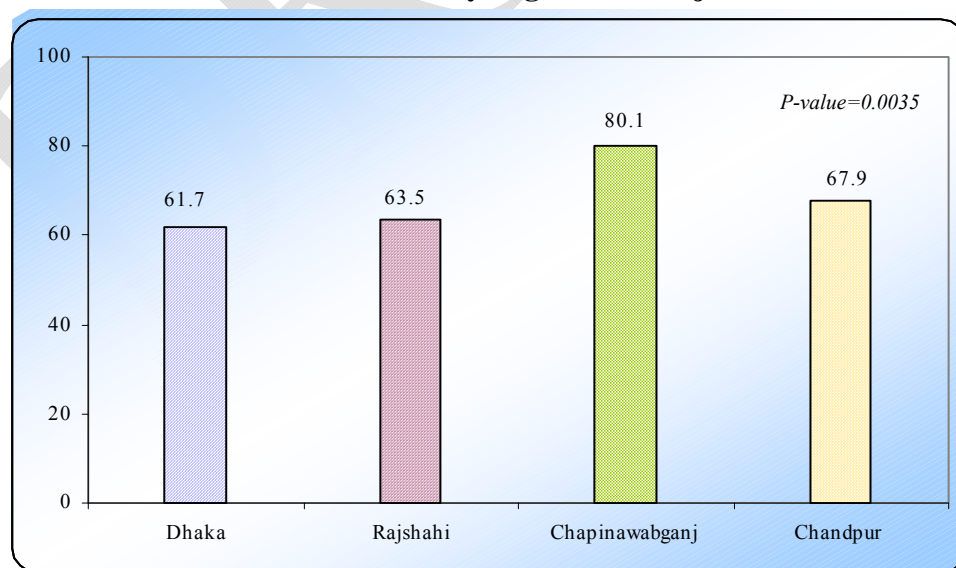
In the month preceding the survey, 91 percent to 100 percent of IDUs, in all selected locations, had taken Buprenorphine. Cocktailing major injecting drugs with other elements was practiced among 86 percent of IDUs in Chandpur and 62 percent in Dhaka. Except for the IDUs of Chandpur, the IDUs in all other locations, on average, injected twice a day. In Chandpur, 70.4 percent of IDUs had injected once on the day preceding the interview (Figure 3.2).

**Figure 3.2: Mean Number of Injections Taken Yesterday**

Nearly 57 percent of IDUs in Chapainawabganj and one-fifth in Rajshahi reported that they were injected by professional injectors during the last shooting episode. In Dhaka and Chandpur, 10 percent or less reported the same practice (**Table 3.3**).

#### **Sharing practices**

More than three-fifths of IDUs in all four locations reported having either lent (active sharing) or borrowed (passive sharing) used needles/syringes during their last injections within a two-month period. Sharing is comparatively higher among IDUs in Chapainawabganj, where the majority (80.1 percent) reported having lent or borrowed needles/syringes during last injections (**Figure 3.3**).

**Figure 3.3: Percent Shared Used Needle/Syringe at Last Injection in Last Two Months**

During the last time they injected, the median size of the sharing networks in Dhaka, Rajshahi and Chapainawabganj was 4 and in Chandpur it was 2 (**Table 3.3**).



**Cleaning needles/syringes**

Although a large majority (60 percent to 87 percent) of IDUs in all selected locations reported that they cleaned needles/syringes when they borrowed them, the mentioned methods of cleaning were not effective. Most IDUs used clothes and water for cleaning, and a considerable proportion cleaned equipment by blowing on the needles or syringes (**Table 3.3**).

**Table 3.3: Behaviors and Practices of IDUs**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Types of drugs taken last month				
Buprenorphine	92.3(86.4-95.7)	91.0(87.1-93.8)	100	91.8(85.7-95.4)
Pethidine	6.8(4.2-10.9)	0.7(0.2-2.3)	0	4.9(2.1-11.0)
Heroin	6.5(3.6-11.7)	0.5(0.1-2.0)	0	0.5(0.1-3.4)
Cocktail	62.1(55.8-68.0)	35.4(29.9-41.4)	35.4(28.2-43.3)	85.7(76.6-91.7)
Others (Avil, Easium, Mardraz, Bonojarric)	10.9(7.4-15.9)	11.2(7.3-16.9)	1.9(0.5-6.7)	11.7(7.0-18.9)
Mean number of injections taken yesterday	2.3(2.1-2.4) M=2	1.7(1.6-1.8) M=2	2.1(1.9-2.2) M=2	1.3(1.2-1.4) M=1
Mean number of injections taken last week	16.2(15.3-17.2) M=16 n=424	12.3(11.7-13.0) M=14 n=400	16.6(15.7-17.5) M=15	8.4(7.7-9.0) M=7
Frequency of injections taken in last month	n=420	n=399		
Once a day	13.3(8.7-19.7)	31.1(26.5-36.1)	14.6(10.9-19.4)	70.4(61.3-78.1)
2 - 3 times a day	79.5(73.4-84.5)	67.7(62.6-72.3)	79.9(72.4-85.7)	29.6(21.9-38.7)
4 times and above	7.3(4.6-11.4)	1.0(0.4-2.7)	5.5(2.6-11.3)	0
Don't know	0	0.3(0.03-1.8)	0	0
<b>Behavior in last time during last two months</b>				
Percent borrowed used needle/syringe last time in last two months	55.4(47.4-63.2)	48.9(43.1-54.8)	71.3(67.3-75.0)	61.6(50.8-71.3)
Percent lent used needle/syringe last time in last two months	60.1(51.8-67.9)	47.9(41.4-54.4)	74.5(70.0-78.6)	32.5(25.7-40.1)
Percent borrowed or lent used needle/syringe last time in last two months	61.7(54.0-68.8)	63.5(57.2-69.4)	80.1(75.6-83.9)	67.9(56.9-77.2)
Mean size of sharing network when IDU shared with different persons last time in last two months (Denominator is who lent/borrowed last time in last two months)	3.4 (3.2-3.7) M=4 n=282	2.9(2.7-3.1) M=4 n=256	4.0(3.6-4.4) M=4 n=168	2.0(1.8-2.2) M=2 n=108
Percent cleaned needle/syringe when borrowed last time in last two months (Denominator is who borrowed last time in last two months)	86.7(79.5-91.6) n=260	79.2(72.8-84.4) n=197	69.9(60.0-78.2) n=151	59.9(46.3-72.1) n=97
Method of cleaning when cleaned last time in last two months:	n=229	n=156	n=105	n=60
Water/hot water	45.8(38.2-53.5)	28.9(21.8-37.1)	35.5(24.2-48.7)	54.9(38.4-70.3)
Clothes	83.8(77.4-88.7)	82.1(74.4-87.8)	75.6(67.4-82.3)	24.6(14.2-39.0)
Leaves	26.8(20.7-33.8)	13.5(7.7-22.6)	43.8(37.0-50.8)	0
By blowing	62.1(53.6-69.9)	67.3(59.7-74.1)	40.4(32.7-48.6)	24.0(12.7-40.7)
Others (paper, alcohol, sprit, cotton) (Denominator is who borrowed and cleaned in last time in last two months)	29.8(24.3-36.0)	10.3(6.3-16.2)	2.7(0.7-9.2)	21.4(12.7-33.8)
Percent injected by professional injectors last time in last two months	10.0(7.0-14.0)	21.8(17.6-26.7)	56.5(48.1-64.7)	6.3(3.5-11.1)
<b>Behavior in last week</b>				
Percent borrowed used needle/syringe last time in	55.2(47.2- 63.0)	48.9(42.8-55.0)	73.8(69.7-77.6)	63.0(52.4-72.5)
Frequency of borrowing needle/syringe				
Always	8.1(5.1-12.8)	8.9(6.0-13.1)	5.9(2.7-12.6)	0.6(0.1-4.3)

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Sometimes	47.1(40.4-54.0)	40.0(34.4-45.8)	67.9(61.4-73.7)	62.4(51.8-71.9)
Never	44.4(36.5-52.5)	45.4(39.4-51.6)	25.6(21.5-30.1)	37.0(27.5-47.6)
Did not inject in the past week	0.4(0.1-3.1)	5.7(3.9-8.3)	0.6(0.1-4.0)	0
Frequency of borrowing needle/ syringe:	n=424	n=381	n=208	
Always	8.1(5.1-12.8)	9.4(6.3-13.9)	6.0(2.7-12.8)	0.6(0.1-4.3)
Sometimes	47.3(40.5-54.2)	42.3(36.4-48.2)	68.3(62.1-73.9)	62.4(51.8-71.9)
Never	44.5(36.7-52.7)	48.3(41.9-54.7)	25.7(21.8-30.2)	37.0(27.5-47.6)
(Denominator is who took injection in past week)				
Percent lent used needle/syringe last time	60.4(52.8-67.6)	56.6(49.9-63.0)	78.6(73.1-83.2)	64.1(52.6-74.1)
Frequency of lending needle/ syringe:				
Always	9.5(6.2-14.4)	9.9(6.9-14.1)	9.5(5.5-16.0)	0.6(0.1-4.3)
Sometimes	50.9(43.9-57.9)	46.7(40.6-52.8)	69.1(60.0-77.0)	63.5(52.1-73.6)
Never	39.1(32.0-46.8)	37.7(31.4-44.5)	20.8(16.4-26.0)	35.9(25.9-47.4)
Did not inject in the past week	0.4(0.1-3.1)	5.7(3.9-8.3)	0.6(0.1-4.0)	0
Frequency of lending needle/ syringe	n=424	n=380	n=208	
Always	9.6(6.2-14.5)	10.5(7.3-14.9)	9.6(5.5-16.2)	0.6(0.1-4.3)
Sometimes	51.1(44.1-58.1)	49.5(43.1-55.9)	69.5(60.8-77.0)	63.5(52.1-73.6)
Never	39.3(32.1-47.0)	40(33.3-47.1)	20.9(16.5-26.2)	35.9(25.9-47.4)
(Denominator is who took injection in past week)				
Percent borrowed/lent used needle/syringe last time	60.7(52.9-67.9)	58.3(51.7-64.6)	79.2(74.1-83.6)	66.4(55.4-75.8)
Percent injected by professional injectors last time	12.2(8.9-16.7)	26.1(21.3-31.4)	62.2(54.3-69.6)	11.6(7.1-18.3)
Frequency of taking injected by professional injectors:				
Always	0.2(0.03-1.6)	3.5(2.1-5.6)	6.9(3.2-14.3)	3.5(1.6-7.5)
Sometimes	12.0(8.7-16.5)	22.6(18.0-27.9)	55.3(46.5-63.8)	8.1(4.3-14.6)
Never	87.3(82.8-90.8)	68.2(63.0-73.1)	37.2(30.0-45.0)	88.4(81.8-92.9)
Did not inject in the past week	0.4(0.1-3.1)	5.7(3.9-8.3)	0.6(0.1-4.0)	0
Frequency of taking injection by professional injectors	n=424	n=380	n=208	
Always	0.2(0.03-1.6)	3.7(2.3-6.0)	7.0(3.2-14.4)	3.5(1.6-7.5)
Sometimes	12.1(8.7-16.5)	24.0(19.2-29.5)	55.6(47.0-63.9)	8.1(4.3-14.6)
Never	87.7(83.3-91.1)	72.4(66.8-77.3)	37.4(30.1-45.3)	88.4(81.8-92.9)
Percent shared with same persons (Denominator is who shared with same person last time)	40.8(33.2-48.8) n=275	45.3(38.5-52.3) n=234	19.8(15.1-25.5) n=165	61.3(50.8-70.8) n=105
Mean size of sharing network when IDU shared with different persons (Denominator is those who shared with different person last time)	5.2(4.6-5.8) M=5 n=146	4.9(4.3-5.5) M=4 n=126	9.1(7.9-10.2) M=12 n=135	4.2(3.7-4.8) M=4 n=40

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### **Knowledge about sources of needles/syringes**

Knowledge about the sources of availability of needles/syringes is universal among the IDU in all the locations. NGO workers and pharmacies were the most frequently cited sources of needles/syringes in all the locations. Nevertheless, a few also reported that needles/syringes were available with drug partners and at healthcare centers (**Table 3.4**).

**Table 3.4: Knowledge about Sources of Needles/syringes**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Percent know where new needles/syringes are available	99.9(99.0-100.0)	99.8(98.2-100.0)	99.6(96.7-100.0)	100
Sources of new needle/syringe	n=424	n=402	n=208	
Pharmacy	90.0(85.8-93.0)	99.3(97.7-99.8)	98.8(95.8-99.6)	97.2(92.2-99.0)
Healthcare center	4.9(3.1-7.8)	9.5(6.0-14.5)	9.0(5.0-15.9)	0
Friends	3.9(2.1-7.1)	1.7(0.8-4.0)	5.7(2.9-10.8)	2.9(1.0-7.7)
Drug partners	7.6(5.2-11.0)	12.4(9.5-16.1)	9.8(5.6-16.6)	1.6(0.5-5.0)
NGO workers	91.8(87.6-94.7)	86.8(82.7-90.1)	81.1(75.8-85.4)	98.0(93.8-99.4)
Drug sellers	2.5(1.3-4.9)	7.2(4.9-10.6)	0.9(0.2-3.6)	2.2(0.8-5.9)
Others*	1.3(0.4-4.4)	0	0	0
(Denominator is who knew where new needles/syringes were available)				

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

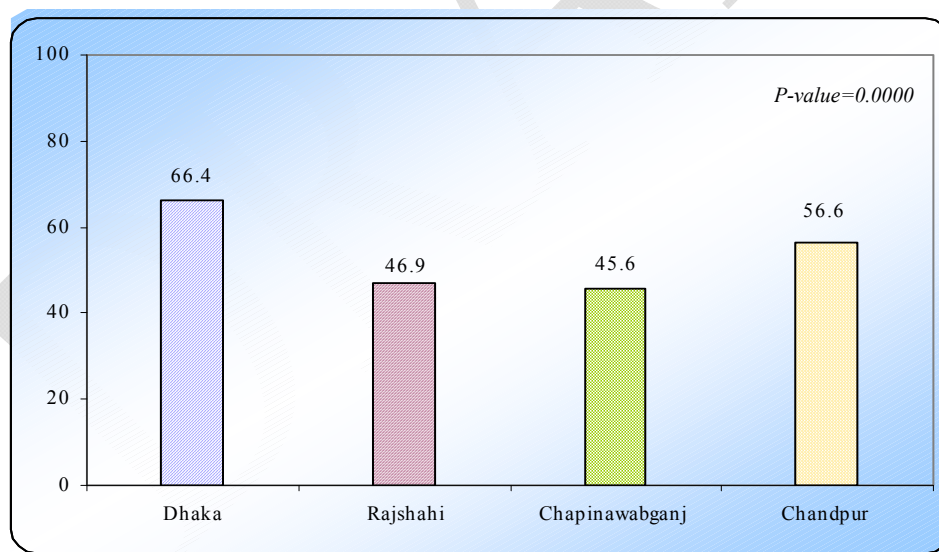
\*Others stated: DIC and hospital.

### 3.1.3 Sexual Behavior and Practices

#### Sex act

Nearly one-half of the IDUs in Rajshahi (46.9 percent) and Chapainawabganj (45.6 percent) had sexual experiences with female sex workers in the last year, and 56.6 percent of the IDUs in Chandpur had similar sexual experiences. The occurrence of sex with female sex workers was highest in Dhaka, where 66.4 percent of the IDUs had sex with female sex workers in exchange for money in the last year (**Figure 3.4**).

**Figure 3.4: Percentage Having Sex with Female Sex Workers in Last Year**



Approximately one-half of the IDUs in Dhaka (46.1 percent) and more than one-half of the IDUs in Rajshahi (57.3 percent) reported having sex with their regular sex partners during the last year. In Chapainawabganj, and Chandpur, respectively, 79.3 percent and 63.9 percent of the IDUs reported having sex with their regular sex partners. More than two-thirds of the IDUs in Dhaka and nearly three-fifths of the IDUs in Chandpur had sex with female sex workers.

Although a small portion of the IDUs in all locations reported sex with commercial male sex workers or *Hijras* in the previous year, 24.4 percent of IDUs in Dhaka and 21.5 percent in Chandpur reported having group sex in the year preceding the survey. By group sex, most

respondents in this survey meant serial sex with a common partner performed by a group of friends one after another (Table 3.5).

**Table 3.5: Sexual Behavior of IDUs**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Percent of IDU who had sex with non-commercial regular female partners in last year	46.1 (38.7-53.6)	57.3 (51.9-62.6)	79.3 (71.7-85.2)	63.9 (55.8-71.4)
Percent of IDU who had sex with non-commercial regular female partners in last month	40.9 (33.7-48.6)	53.6 (48.1-59.0)	66.1 (57.7-73.5)	62.9 (64.9-70.2)
Percent of IDU who had sex with commercial female partners in last year	66.4 (59.5-72.6)	46.9 (42.0-51.8)	45.6 (39.3-52.0)	56.6 (49.4-63.6)
Percent of IDU who had sex with commercial female partners or FSW in last month	51.1 (43.9-58.2)	33.0 (28.6-37.7)	36.4 (29.4-44.0)	35.4 (28.0-43.6)
Percent of IDU who had sex with commercial male/Hijras in last year	6.7 (3.6-12.0)	2.2 (1.2-4.2)	1.6 (0.5-4.7)	5.2 (2.6-9.9)
Percent of IDU who had sex with commercial male/Hijras in last month	1.1 (0.4-2.7)	0.7 (0.2-2.3)	0.8 (0.1-5.0)	0.8 (0.1-5.7)
Percent of IDU who sold sex in exchange of money of drugs in last year	0.8 (0.3-2.3)	1.5 (0.7-3.3)	0	0
Percent of IDU who had group sex in last year	24.4 (19.4-30.3)	9.2 (6.7-12.4)	15.1 (11.3-19.9)	21.5 (15.7-28.9)
Percent of IDU who had group sex in last month	4.8 (3.1-7.5)	4.9 (3.2-7.7)	3.8 (1.9-7.3)	1.3 (0.3-5.3)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

In Dhaka an IDU, on average, had more than 2 non-commercial sex partners in last one year. In all other locations this number ranged from 1 to 1.4. In regard to the number of commercial sex partners, the IDUs in all locations (except Chandpur) had sex with 8 to 9 female sex workers. In Chandpur, it was 3.6 in the last year (Table 3.6).

**Table 3.6: Sex Partners and Sex Acts**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
<b>Regular non-commercial sex partners</b>				
Mean number of regular sex partners in last one year	1.0 (0.7-1.4) M=0 n=417	0.6(0.6-0.7) M=1	1.1(0.9-1.2) M=1	0.7(0.6-0.8) M=1
Mean number of regular sex partners in last one year (Denominator is who had sex with non-commercial regular female partners in last year)	2.3(1.8-2.9) M=1 n=193	1.1(1.0-1.1) M=1 n=231	1.4(1.3-1.5) M=1 n=167	1.0(0.9-1.1) M=1 n=102
Mean number of sex acts with regular sex partners in last one month	2.0(1.5-2.5) M=0	3.2(2.8-3.6) M=1	3.5(2.9-4.1) M=2 n=208	6.2(5.0-7.2) M=5
Mean number of sex acts with regular sex partners in last one month (Denominator is who had sex with non-commercial regular female partners in last month)	4.9 (4.2-5.7) M=1 n=180	6.0(5.5-6.5) M=1 n=216	5.3(4.8-5.8) M=1 n=141	9.8(8.4-11.1) M=1 n=100
<b>Commercial female sex partners</b>				
Mean number of commercial female sex partners in last one year	5.8 (4.9-6.8) M=7 n=422	3.5(3.0-4.0) M=6	3.9(3.1-4.7) M=6 n=208	2.0(1.7-2.4) M=3
Mean number of commercial female sex partners in last one year (Denominator is who had sex with commercial regular female partners in last year)	8.8(7.9-9.7) M=7 n=284	7.5(6.7-8.3) M=6 n=189	8.6(7.1-10.1) M=6 n=99	3.6(3.2-3.9)M=3 n=90
Mean number of commercial female	1.1 (0.9-1.3)	0.7(0.6-0.9)	0.9(0.7-1.1)	0.5(0.3-0.6)

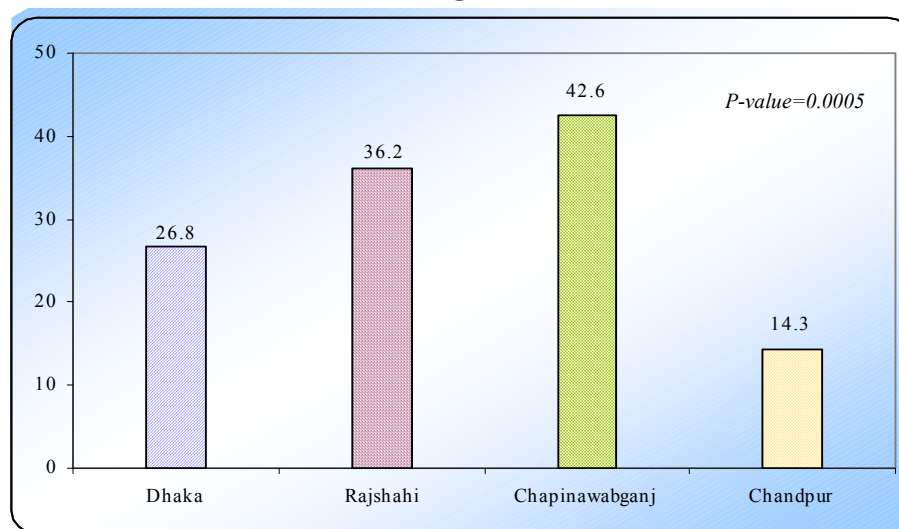
Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
sex partners in last month	M=3	M=3	M=3	M=2.5
Mean number of commercial female sex partners in last month (Denominator is who had sex with commercial regular female partners in last month)	2.1(1.9-2.3) M=2 n=228	2.2(1.9-2.4) M=2 n=133	2.6(2.2-2.9) M=3 n=82	1.3(1.1-1.4) M=2 n=56
Mean number of sex acts with commercial female sex partners in last month (Denominator is who had sex with commercial regular female partners in last month)	2.7(2.3-3.2) M=2 n=228	3.1(2.4-3.8) M=2 n=133	3.4(2.9-3.8) M=3 n=82	1.9(1.6-2.2) M=2 n=56
<b>Commercial male sex partners/Hijras</b>				
Mean number of commercial male sex partners/Hijras in last one year	0.2 (0.1-0.3) M=0	0.1 M=0	0.03(-.0-.06) M=0	0.1(0.02-0.1) M=0
Mean number of commercial male sex partners/Hijras in last one year (Denominator is who had sex with commercial male sex partners/Hijra in last year)	2.7(1.9-3.5) M=2 n=27	2.2(-0.04-4.5) M=1 n=9	1.8(0.8-2.8) M=2 n=3	1.6(0.8-2.3) M=1 n=8
Mean number of commercial male sex partners/Hijra in last month	0.01 M=0	0.007 M=0	0	0
Mean number of commercial male sex partners/Hijra in last month (Denominator is who had sex with commercial male sex partners/Hijra in last month)	1.3 (0.4-2.2) M=1 n=6	1.0(1.0-1.0) M=1 n=3	0	0
<b>Group sex</b>				
Mean number of sex partners during group sex in last one year (Denominator is who had group sex)	3.4(3.3-3.6) M=3 n=109	3.4(3.2-3.6) M=3 n=37	3.7(3.4-3.9) M=4 n=31	3.3(3.1-3.5) M=3 n=35
<b>Sex in exchange of money or drug</b>				
Mean number of sex partners to whom you paid money or drug	0.02 M=0	0.02(0.003-0.04) M=0	0	0
Mean number of sex partners to whom you paid money or drug (Denominator is who paid money or drug for sex)	2.1 (-1.6-5.8) M=1 n=4	1.5(0.6-2.4) M=1 n=6	0	0

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### Use of condoms

The use of condoms during last sex with a regular partner is extremely low in Chandpur, where only 8.4 percent of the IDUs reported using condoms. In Dhaka and Chapainawabganj, nearly two-fifths used condoms during last sex with their regular partners. In Rajshahi, more than one-quarter did so. Consistent condom use during sex with regular partners in the past year was very low in all locations; the highest condom use was nearly one-fifth in Dhaka (**Table 3.7**).

More than one-half of the IDUs in Rajshahi (52.9 percent) and Chapainawabganj (54.7 percent) and about 41.1 percent in Dhaka and 24.9 percent in Chandpur who had sex with female sex workers reported using condoms during their last sex in the past year (**Table 3.7**). The consistent use of condoms during last sex with female sex workers, however, is very low among IDUs in all locations, 27 percent in Dhaka, 36 percent in Rajshahi, 43 percent in Chapainawabganj and 14 percent in Chandpur (**Figure 3.5**).

**Figure 3.7: Consistent Condom Use during Sex with Female Sex Workers in Last Year**

Nearly one-half of the IDUs in Chandpur (49.9 percent) never used condoms during sex with female sex workers in the past year compared to 33.3 in Dhaka, 28.2 in Rajshahi and 41.9 in Chapainawabganj.

About one-half of the IDUs in Dhaka (49.1 percent), 54.4 percent in Chandpur, 42.1 percent in Rajshahi and 41.9 percent in Chapainawabganj reported never using condoms during sex with commercial female sex partners in the month preceding the survey. Data also indicate that 47.5 percent of the IDUs in Chapainawabganj who had sex with commercial partners during the same period had consistently used condoms. The same consistent use was 33.3 percent in Dhaka, 42.9 percent in Rajshahi and 22.7 percent in Chandpur. Consistent use of condoms was even less when IDUs reported having sex with other groups, e.g. male sex workers and *Hijra* (Table 3.7).

About one-quarter of the IDUs in Dhaka (24.4 percent) and Chapainawabganj (24.8 percent) and more than one-third in Rajshahi (35.1 percent) reported using condoms during their last episode of group sex in the past year. The percentage of condom use was much lower at 10.5 percent in Chandpur (Table 3.7).

**Table 3.7: Use of Condoms with Different Sex Partners**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj N=209	Chandpur n=159
<b>Regular non-commercial sex partners</b>				
Percent of IDU who used condom during last sex with non-commercial regular partner in last year (Denominator is who had sex with non-commercial regular partner in last year)	37.8 (28.9-47.4) n=201	27.3(22.5-32.7) n=231	39.8(32.0-48.2) n=167	8.4(3.8-17.6) n=102
Condom use during sex with non-commercial regular partner in last year:	n=200	n=231	n=167	n=102
Always	19.3 (12.9-27.8)	6.5(3.7-11.1)	15.3(9.2-24.2)	0.9(0.1-6.4)
Sometimes	35.4(27.2-44.4)	42.9(46.6-49.3)	35.6(28.1-43.9)	52.3(42.0-62.3)
Never (Denominator is who had sex with non-commercial regular partner in last year)	45.4(37.2-53.8)	50.7(44.1-57.2)	49.1(41.4-56.9)	46.8(36.7-57.2)
Condom use during sex with non-commercial regular partner in last month	n=180	n=216	n=142	n=100

Section 3: Injecting Drug Users and Heroin Smokers

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj N=209	Chandpur n=159
Always				
Sometimes	19.5(12.9-28.3)	12.9(8.9-18.3)	13.3(6.9-23.9)	1.9(0.5-7.1)
Never	27.1(19.7-35.9)	25.5(19.9-31.9)	29.9(23.7-36.9)	39.6(39.9-50.3)
(Denominator is who had sex with non-commercial regular partner in last month)	53.5(43.5-63.2)	61.6(55.0-67.7)	56.8(47.6-65.1)	58.5(46.6-69.5)
<b>Commercial female sex partners</b>				
Percent of IDU who used condom during last sex with commercial female partner in last year	41.1(33.6-49.1) n=286	52.9(45.8-59.9) n=189	54.7(45.4-63.6) n=100	24.9(15.4-37.9) n=90
Condom use during sex with commercial female partner in last year	n=287	n=188	n=100	n=90
Always	26.8(20.3-34.5)	36.2(29.8-43.1)	42.6(32.1-53.8)	14.3(6.6-28.2)
Sometimes	38.6(32.2-45.3)	35.6(28.9-42.9)	15.6(9.9-23.6)	35.8(26.2-46.8)
Never	33.3(27.5-39.6)	28.2(21.9-35.5)	41.9(32.7-51.6)	49.9(39.6-60.2)
Condom use during sex with commercial female partner in last month	n=227	n=133	n=82	n=56
Always	33.3(25.4-42.4)	42.9(33.7-52.5)	47.5(34.6-60.8)	22.7(10.9-41.2)
Sometimes	17.6(12.4-24.3)	15.0(8.9-24.1)	10.6(4.7-22.3)	22.9(12.8-37.6)
Never	49.1(40.2-58.0)	42.1(33.0-51.8)	41.9(30.9-53.7)	54.4(39.0-68.9)
<b>Commercial male sex partners/Hijras</b>				
Percent of IDU who used condom during last sex with commercial male/Hijra in last year (Denominator is who had sex with male/Hijra in last year)	21.7 (4.8-60.5) n=27	0	18.3(0.03-99.3) n=3	15.2(1.2-72.8) n=8
Condom use during sex with commercial male/Hijra in last year	n=26	n=9	n=3	n=8
Always	2.8(0.3-21.8)	0	18.3(0.03-99.3)	0
Sometimes	25.1(6.3-62.5)	0	0	15.2(1.2-72.8)
Never	72.2(36.3-92.2)	100	81.7(0.7-99.9)	84.8(27.2-98.8)
(Denominator is who had sex with male/Hijra in last year)				
Condom use during sex with commercial male/Hijra in last month	n=6	n=3		
Always				
Sometimes	0	0		
Never	0	0	0	0
(Denominator is who had sex with male/Hijra in last month)	100	100		
<b>Group sex</b>				
Percent of IDU who used condom during last group sex in last year (Denominator is who had group sex in last year)	24.2(16.1-34.8) n=109	32.4(19.2-49.2) n=37	27.4(12.9-49.1) n=31	7.5(2.2-22.3) n=35
Percent of group sex partners used condom during last sex in last year (Denominator is who had group sex in last year)	24.4(15.8-35.8) n=109	35.1(20.4-53.4) n=37	24.8(9.7-50.4) n=31	10.5(3.7-26.5) n=35
<b>Sex in exchange for money or drugs</b>				
Percent of IDU who used condom during last sex in exchange for money or drugs in last year (Denominator is who sold sex for money or drugs in last year)	0 n=4	50.0(9.1-90.9) n=6	0	0
Condom use during sex in exchange for money or drugs in last year :	n=4	n=6		
Always	0	66.7(14.9-95.8)	0	0
Sometimes	22.5(0.4-95.5)	0		
Never	77.5(4.6-99.6)	33.3(4.2-85.1)		
(Denominator is who sold sex with money or drugs in last year)				

Note: Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Access to condoms**

The knowledge of where condoms are available was universal among IDUs in all four locations. Nevertheless, easy access to condoms was reported by only one-third of the IDUs, 33.7 percent in Dhaka, 35.7 percent in Rajshahi, 42.7 percent in Chapainawabganj and 35.9 percent in Chandpur. On the contrary, large proportions of those who used condoms in the previous month reported easy access in all the locations (85 percent to 94 percent). Pharmacies were the most frequently cited source (64 percent to 75 percent) in all locations except Chandpur from where IDUs had procured condoms during the month preceding the survey. Although NGOs were the primary source of supply (69.5 percent) in Chandpur, in Dhaka about two-fifths and in Rajshahi and Chapainawabganj about one-fifth had mentioned this source. Shops were the second primary source for respondents of all locations (Table 3.8).

**Table 3.8: Knowledge about Access to Condoms and Experience in Condom Breakage**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Percent of IDU recognized male condom	100	100	100	100
Percent of IDU who had sexual experience recognized male condom	100 n=418	100 n=393	100 n=208	100 n=158
Percent of IDU who knew the place where condoms are available	97.4(93.3-98.9) n=422	99.0(96.8-99.7) n=402	99.4(95.9-99.9) n=208	99.5(96.1-99.9)
Percent of IDU who had sexual experience knew the place where condoms are available	97.9(93.4-99.3) n=415	98.9(96.7-99.7) n=392	99.4(95.9-99.9) n=208	99.5(96.1-99.9) n=158
Percent of IDU who had sexual experience but never used condom	30.3 (26.1-34.9) n=418	76.9(72.3-81.1) n=391	58.1(51.3-64.7)	65.8(57.4-73.3) n=158
Sources of condom during sex in last month	n=165	n=162	n=97	n=66
Shop	55.1(41.9-67.6)	39.5(31.6-48.0)	74.4(61.1-84.3)	27.8(17.7-40.9)
Pharmacy	64.7(53.4-74.6)	63.6(56.1-70.5)	75.4(66.6-82.6)	14.9(8.1-25.7)
Healthcare center	1.3(0.3-5.9)	6.2(2.8-12.9)	2.1(0.6-7.7)	0
Bar/guest house/hotel	21.9(15.3-30.3)	16.7(11.3-23.8)	8.4(3.6-18.3)	0
Friends	6.6(3.1-13.6)	1.9(0.6-5.4)	1.6(0.3-7.7)	3.2(0.7-12.9)
NGO workers	41.6(32.5-51.3)	21.6(15.6-29.1)	18.1(10.2-30.1)	69.5(58.3-78.8)
Others*	4.7(1.9-10.6)	0	3.6(1.2-10.3)	1.6(0.2-11.0)
(Denominator is who used condom in last month)				
Percent of IDUs reported easy access to condom (Denominator is who used condom in last month)	84.7 (75.8-90.7) n=165	88.9(83.3-92.8) n=162	94.0(87.3-97.3) n=97	89.4(74.8-95.9) n=66
Reasons for not having easy access	n=22	n=18	n=6	n=6
High cost	34.5(13.8-63.5)	55.6(29.8-78.7)	48.7(9.6-89.4)	0
Shop/pharmacy is far away	23.7(9.4-48.2)	38.9(17.6-65.5)	63.6(14.8-94.6)	0
Shop/pharmacy is closed	96.4(74.1-99.6)	44.4(23.1-68.0)	63.6(14.8-94.6)	11.0(0.4-80.8)
Feel ashamed to buy	25.8(10.9-49.5)	50.0(25.2-74.8)	73.1(22.7-96.2)	36.8(2.8-92.1)
Not willing to carry	17.4(5.8-41.7)	27.8(10.6-55.5)	42.4(3.7-93.4)	73.6(13.0-98.1)
Others**	53.6(28.9-76.7)	16.7(4.7-44.7)	15.9(1.1-76.3)	26.4(1.9-86.9)
(Denominator is who reported not having easy access to condoms)				
Percent of IDU who used condoms experienced condom breaking during sex in last month (Denominator is who used condom in last month)	2.5(1.1-5.8) n=165	4.3(2.1-8.8) n=162	1.2(0.1-8.1) n=97	1.6(0.2-11.0) 66

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** no sex work last month, did not use condom last one year, from sex worker, did not need.

\*\* **Others stated:** did not like to use, from NGO, no sexual intercourse without wife, no free supply.

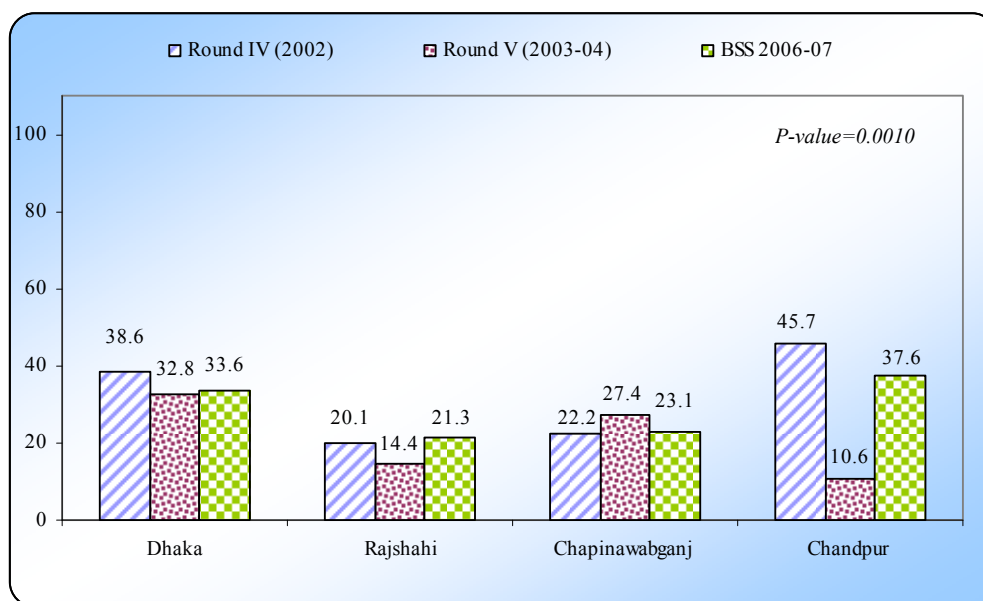


### 3.1.4 Issues of STIs and HIV/AIDS

#### STIs

More than one-third of the IDUs in Dhaka and Chandpur locations reported at least one STI symptom in the last one year. More than one-fifth of the IDUs in the other two locations reported the same (**Figure 3.6**). However, STIs among the IDUs who never used condoms during sex was significantly higher in Dhaka where approximately one-half (48.7 percent) of the IDUs reported at least one STI symptom in the last one year.

**Figure 3.6: Percentage Reporting At Least One STI Symptom in Last One Year**



Three-fourths (75.3 percent) of the IDUs of Chandpur and nearly one-half (46.4 percent) of the IDUs in Dhaka reported seeking treatment from NGO clinics for STIs. More than half of the IDUs in both the Northwest locations and another 34.1 percent in Dhaka consulted drug sellers (pharmacies) for STI treatment. On average, an IDU spent Taka 318 in Rajshahi, Taka 146.9 in Dhaka, Taka 235.2 in Chapainawabganj and Taka 105.3 in Chandpur for treatment of STI (**Table 3.9**).

**Table 3.9: Knowledge about STIs and Treatment-seeking Behavior**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
<b>Knowledge of STIs</b>				
Knowledge of STIs				
Discharge from penis	39.0(33.3-45.1)	29.0(24.6-33.9)	41.8(35.6-48.2)	45.6(34.7-56.8)
Burning pain on urination	71.3(64.4-77.3)	57.1(51.9-62.1)	64.8(58.1-71.1)	60.1(49.3-69.9)
Genital ulcers/sores	73.4(67.3-78.7)	80.9(76.4-84.7)	69.2(62.7-75.0)	70.9(59.9-79.8)
Swellings in groin area	22.2(17.3-28.0)	16.1(13.0-19.8)	17.3(11.9-24.4)	13.1(8.1-20.3)
Anal discharge	0.8(0.2-2.9)	0.5(0.1-2.0)	1.4(0.4-4.2)	0
Anal ulcers/sores	1.3(0.4-4.5)	0	0.9(0.2-3.7)	0
Others*	1.7(0.6-5.1)	0.2(0.03-1.8)	1.4(0.4-4.4)	8.6(2.7-24.2)
<b>Experience of STIs</b>				
Percent of IDUs reported STIs in last one year:	n=424			
Urethral discharge	11.5(8.6-15.2)	7.4(5.2-10.6)	9.9(5.8-16.7)	15.2(9.9-22.5)
Anal discharge	0.6(0.2-1.9)	0.2(0.03-1.8)	0.4(0.1-3.1)	2.0(0.8-5.4)
Genital ulcers/sores	28.8(22.5-35.9)	17.6(13.7-22.4)	16.1(10.5-23.9)	24.9(17.1-34.9)
Percent of IDUs reported at least one STI symptom in last one year	33.6(27.2-40.8)	21.3(17.2-26.2)	23.1(16.1-31.9)	37.6(29.5-46.4)

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Percent of IDUs who had sexual experience and never used condom reported at least one STI symptom in last one year	48.7(38.3-59.2) n=135	28.9(20.2-39.5) n=90	32.9(23.2-44.4) n=87	38.6(25.3-53.9) n=57
<b>Treatment of STIs</b>				
Choice of STI treatment	n=158	n=84	n=47	n=62
Hospital	2.5(0.9-6.8)	10.7(4.9-21.7)	12.2(5.1-26.4)	0
Drug seller	34.1(26.5-42.6)	51.2(37.5-64.7)	56.3(45.3-66.7)	6.7(2.3-17.6)
Private doctor	6.6(3.5-12.4)	7.1(3.2-15.0)	2.4(0.4-14.4)	2.1(0.3-15.0)
Private clinic	0	1.2(0.2-8.1)	2.7(0.3-19.2)	2.1(0.3-15.1)
NGO clinic**	46.4(38.4-54.5)	1.2(0.2-8.4)	6.2(1.6-21.3)	75.3(61.0-81.2)
Traditional healer	1.9(0.6-6.3)	8.3(4.0-16.4)	6.1(1.8-18.8)	0
Didn't seek any treatment	8.4(4.0-16.8)	20.2(12.4-31.2)	14.1(6.3-28.5)	14.8(7.8-26.2)
(Denominator is who had sexual experience and reported STI in last year)				
Mean waiting days before seeking treatment for last STI in last one year	5.9(5.3-6.7) M=4 n=149	8.1(5.2-11.0) M=6 n=68	8.6(7.6-9.6) M=8 n=41	11.3(6.1-16.4) M=3 n=54
Mean expenditure for seeking treatment for last STI in last one year	146.9(127.2-166.7) M=96 n=149	318.0(259.3-376.7) M=285 n=68	235.2(106.2-364.2) M=170 n=41	105.3(92.7-117.8) M=96 n=54
Percent of IDUs reported to have visited STI clinics organized by NGO in last month	11.7(8.5-15.9)	1.5(0.7-3.2)	0.4(0.1-3.7)	4.1(1.8-9.1)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** boils, AIDS, itching

\*\* **Others stated:** CARE, ICDDR,B (JAGORI)

### HIV and AIDS

Nearly 100 percent of IDUs in all geographical locations reported having heard about HIV and AIDS. The vast majority of IDUs in Chandpur (97 percent), Dhaka (71 percent), Rajshahi (83 percent) and Chapainawabganj (55 percent) were aware that HIV could be prevented by using condoms during sex with different partners. Although an overwhelming majority (91 percent to 98 percent) of the IDUs in all locations reported that HIV could be transmitted by sharing needles/syringes, various misconception regarding the transmission of HIV prevailed. Although only 22 percent to 29 percent of IDUs in Central and Northern parts believed that HIV could be transmitted by mosquito bites, a much larger proportion of IDUs in Chandpur had the same misconception. The other misconception that HIV could be transmitted by sharing food with HIV-infected individuals was also high (37.2 percent) among the IDUs of Chandpur compared with their peers in other locations (12 percent to 26 percent) (**Table 3.10**).

**Table 3.10: Knowledge about Mode of HIV/AIDS Transmission**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj N=209	Chandpur n=159
Percent of IDU reported to have heard about HIV/AIDS	99.7(98.7-99.9)	100	100	100
Percent of IDU who knew condom as a mode of prevention	70.7(64.9-75.8)	82.6(78.2-86.3)	54.5(44.6-64.0)	97.1(92.0-98.9)
Percent of IDU who knew that avoiding anal sex is a mode of prevention	40.5 (34.7-46.6) n=420	37.2(31.3-43.6)	28.2(23.6-33.3)	54.8(45.7-63.6)
Percent of IDU reported that HIV can be transmitted by mosquito bite	21.7 (16.6-27.8) n=424	28.6(24.9-32.7) n=402	27.5(21.8-33.9) n=207	55.1(44.9-64.9)
Percent of IDU reported that HIV can be transmitted by sharing food with HIV infected people	19.5(15.7-24.1)	11.7(8.8-15.2)	26.1(20.3-33.0)	37.2(26.5-49.3)

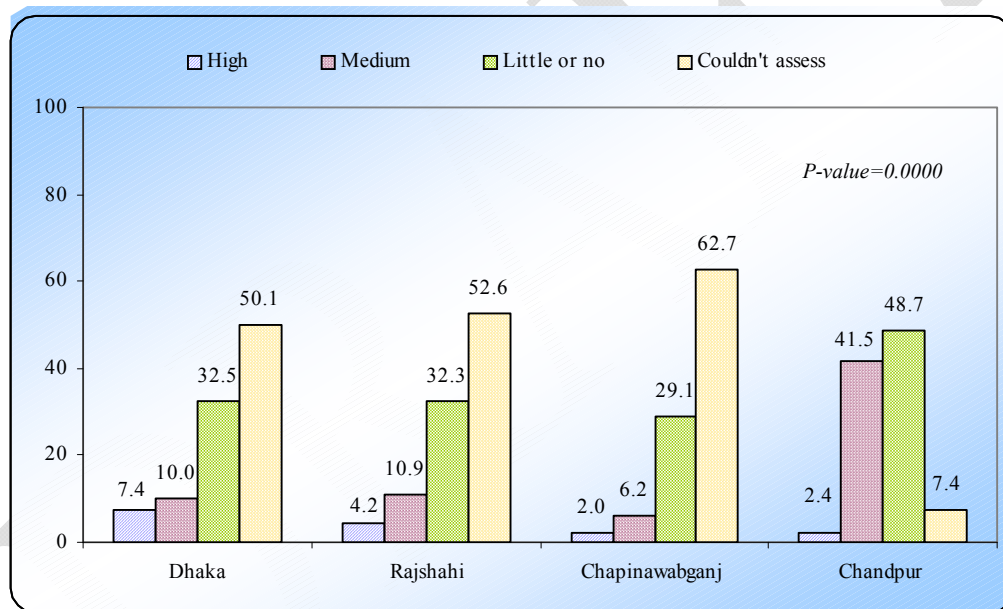
Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj N=209	Chandpur n=159
Percent of IDU reported that HIV can be transmitted by sharing needle/syringe	90.8(87.1-93.6) n=423	96.3(43.6-97.8) n=402	94.6(90.6-96.9)	98.0(93.9-99.4)
Percent of IDU who knew that avoiding multiple sex is a mode of prevention	58.1(50.8-65.1)	68.4(61.9-74.2) n=402	53.9(45.8-61.9)	86.6(79.6-91.4)
Percent of IDU believe that one can tell by looking at someone whether s/he is HIV infected	23.5(18.5-29.5)	13.9(10.9-17.6)	30.8(24.6-37.8)	0.8(0.2-3.3)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

### Self-perception of risk

It is alarming that only 2 percent to 7 percent of the IDUs in all the locations perceived that they were at high risk of HIV transmission (**Figure 3.7**). In all the locations except Chandpur 50 percent to 63 percent failed to assess any risk at all. Approximately, one-third of the IDUs in Dhaka, Rajshahi and Chapainawabganj and one-half in Chandpur thought they had very little or no risk of HIV transmission.

**Figure 3.7: Percentage Considering Themselves At Risk of HIV/AIDS**



The vast majority of IDUs in all the locations who perceived themselves at high or medium risk said that “occasional or frequent sharing of injections” was the principal reason for such perceptions. The other major reasons included “sex with multiple partners” followed by “do not always use condoms” during sex with different partners for such perceptions of risk for HIV (**Table 3.11**).

**Table 3.11: Self-perception of Risk**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
<i>Self-perception</i>				
Risk of HIV/AIDS	n=410	n=401	n=200	
High risk	7.4(4.8-11.1)	4.2(2.7-6.7)	2.0(0.8-5.3)	2.4(0.9-6.4)
Medium risk	10.0(6.9-14.2)	10.9(8.1-14.8)	6.2(3.9-9.8)	41.5(31.5-52.2)
Little or no risk	32.5(27.2-38.1)	32.2(27.2-37.6)	29.1(24.5-34.1)	48.7(38.7-58.8)
Could not assess	50.1(45.1-55.2)	52.6(46.3-58.9)	62.7(56.7-68.3)	7.4(3.9-13.4)

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
(Denominator who perceived themselves to be at little or no risk)				
<b>Rational of such perception</b>				
Reasons for assessing themselves at high/medium risk	n=75	n=61	n=16	n=66
Frequently share injections	39.4(26.1-54.5)	19.7(11.7-31.2)	20.4(5.1-54.9)	8.2(3.4-18.5)
Occasionally share injections	74.6(59.2-85.6)	75.4(63.7-84.3)	69.1(36.9-89.5)	84.1(71.9-91.6)
Sex with multiple partners	63.8(47.8-77.2)	39.3(26.9-53.3)	66.2(39.5-85.5)	41.1(27.8-55.8)
Do not always use condoms	59.2(43.3-73.4)	40.9(28.8-54.4)	20.4(6.1-50.1)	17.1(9.6-28.8)
Other*	2.9(0.4-18.5)	3.3(0.8-12.7)	4.1(0.4-31.5)	1.5(0.2-10.7)
Reasons for assessing themselves at low/no risk	n=123	n=129	n=58	n=80
Never share injections	86.6(77.9-92.2)	83.7(76.1-89.3)	60.4(47.3-72.1)	61.4(47.0-74.1)
Occasionally share injections	8.6(4.9-14.9)	8.5(4.9-14.3)	24.1(12.1-43.1)	32.9(21.4-46.9)
Always use condoms	42.7(32.9-53.1)	38.8(29.7-48.7)	23.0(14.5-34.5)	11.4(5.7-21.5)
Sometimes use condom	22.0(14.6-31.8)	16.3(10.7-23.9)	34.3(21.7-49.7)	11.4(4.9-24.2)
Partners are clean	14.8(7.5-27.2)	8.5(4.9-14.3)	7.4(3.3-15.9)	16.3(10.2-24.9)
Partners are healthy	6.7(3.1-13.9)	0.8(0.1-5.3)	4.1(1.1-13.8)	0
Other**	24.9(17.7-33.9)	26.4(18.9-35.5)	24.2(13.2-40.1)	13.6(5.5-29.9)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** never used condoms.

\*\* **Others stated:** sexual intercourse only with wife, no sexual intercourse with sex worker, frequently get bath, exchange injection with the same person, did not do sex work, wash with urine and did not use others' injection equipment.

### Measures taken to avoid STI and HIV/AIDS

It is disturbing that nearly half the IDUs in all four locations did not take any measures to avoid STIs. Similarly, about two-fifths of the IDUs in all four locations did not take any measures to prevent HIV.

A common step taken by the IDUs to avoid STIs was "sometimes use condom," followed by "washing genital area after sex with Dettol or urine." The most frequently cited measure taken (not more than 41 percent in any location) to avoid HIV was "never share needle/syringe" followed by "sometimes use condom" (Table 3.12).

**Table 3.12: Measures Taken to Avoid STIs and HIV/AIDS**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Steps taken to avoid STIs				
Do nothing	44.5(38.5-50.7)	48.1(42.7-53.7)	46.4(40.6-52.3)	44.1(36.7-51.8)
Wash genital area with Dettol or urine after sex	23.1(18.2-28.9)	14.8(11.4-19.2)	10.9(7.2-16.3)	24.9(17.5-34.3)
Always use condoms	17.2(12.9-22.5)	7.4(5.1-10.8)	13.4(7.9-21.9)	3.4(1.5-7.3)
Sometimes use condoms	23.7(19.0-28.9)	30.8(26.2-35.8)	28.5(22.5-35.5)	13.9(8.6-21.7)
Take medicine	0.8(0.3-2.3)	0	0	0
Other*	17.8(12.7-24.4)	18.4(14.7-22.7)	10.4(6.8-15.6)	18.9(11.9-28.7)
Steps taken to avoid HIV/AIDS				
Nothing	42.3(35.9-49.0)	41.9(36.3-47.8)	41.9(37.0-47.0)	31.9(23.7-41.6)
Never share needle/syringe	38.6(31.7-46.0)	40.9(35.3-46.8)	23.1(19.7-27.0)	32.6(23.1-43.8)
Wash genital area with Dettol or urine after sex	15.1(11.1-20.4)	6.2(4.2-9.1)	10.9(6.9-16.6)	11.6(7.6-17.4)
Always use condoms	16.9(12.8-22.2)	7.9(5.6-11.1)	12.1(7.1-19.9)	4.7(2.2-9.8)
Sometime use condoms	23.6(19.3-28.6)	27.1(22.6-32.0)	28.7(22.1-36.4)	20.9(14.6-29.0)
Take medicine	0.4(0.1-1.9)	0	0	0
Other**	11.6(6.8-18.9)	11.7(9.0-14.9)	10.9(7.5-15.7)	22.2(15.1-31.3)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** soap, did not mix with sex worker, go to DIC, wash genitals with water, try to live neat and clean, no sex work, sexual intercourse only with wife, and have healthy partner.

\*\* **Others stated:** try to live neat and clean, sexual intercourse only with wife, after using the injection give that to others, go to DIC, sex work with healthy partner, wash genitals with water, no sex work, wash injection with water, exchange syringe with one person.

**Confidential HIV testing**

In Chandpur nearly one-half (48.7 percent) of the IDUs knew the places where HIV could be tested confidentially, while 12.4 percent in Rajshahi and 9.4 percent in Dhaka. In Chapainawabganj, this knowledge was almost non-existent (1.1 percent); the situation in Chapainawabganj calls for widespread knowledge dissemination about HIV testing places. Among the IDUs who knew the places for HIV testing, roughly one-half of them in Dhaka and Rajshahi and another one-third in Chandpur ever tested for HIV.

Ten out of 12 IDUs in Dhaka and 26 out of 27 IDUs in Chandpur who had ever tested for HIV reported that they tested at JAGORI of ICDDR,B. In Rajshahi, 11 out of 24 IDUs named Marie Stopes, 7 named ICDDR,B and another 5 named CARE as places where testing was available. Of those who ever tested, about 50 percent in Dhaka reported to have received the test results compared to 100 percent in Chandpur (**Table 3.13**).

**Table 3.13: Confidential HIV Testing**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Percent of IDU who knew where HIV can be tested confidentially	9.4(5.6-15.4)	12.4(9.1-16.8)	1.1(0.3-4.1)	48.7(39.0-58.5)
Percent of IDU who ever tested for HIV	4.5(2.2-9.0)	6.2(4.0-9.5)	0	17.1(10.5-26.5)
Place of testing HIV:	n=12	n=24	0	n=27
ICDDR,B(JAGORI)	83.9(52.2-96.2)	29.2(12.7-53.9)		97.2(78.6-99.7)
CARE(DIC)	9.8(1.4-45.9)	20.8(7.1-47.4)		2.9(0.3-21.5)
Modhumita	6.2(0.5-44.8)	0		0
Govt. Hospital	0	4.2(0.5-28.5)		0
Marie Stopes	0	45.8(23.8-69.6)		0
(Denominator is who ever tested for HIV)				
Motivation for HIV testing	n=12	n=25	0	n=28
Self	0	4.0(0.5-27.3)		88.5(52.6-98.2)
By some one else*	100	92.0(69.8-98.3)		11.5(1.8-47.4)
Situation demanded	0	4.0(0.5-27.3)		0
Percent of IDU reported to have the test result	48.5(16.5-81.8) n=12	16.0(4.8-41.7) n=25	0	100 n=28
Time when last HIV test was done	n=12	n=24	0	n=28
Within one year	94.6(49.6-99.7)	54.2(29.2-77.2)		93.9(62.3-99.3)
Before one year	5.4(0.3-50.4)	45.8(22.8-70.8)		6.1(0.7-37.7)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

\* **Others stated:** friend, NGO worker, Care, Marie Stopes.

**Quitting injecting drug use**

In all four locations, 61 percent to 77 percent of the IDUs had tried to quit injecting drugs, the highest, 76.7 percent in Chandpur and the lowest, 60.9 percent in Dhaka. On average, in Dhaka and Northern locations it took an IDU 2 to 3 attempts to quit injecting drugs. In Chandpur, it took 5 attempts, a significantly higher mean number. To quit injecting drugs, the IDUs usually visited NGO clinics (34 percent to 62 percent) or drug clinics (5 percent to 47 percent). A significant proportion (46 percent to 71 percent) of IDUs also reported that they kept themselves isolated at home to avoid injecting drugs (**Table 3.14**).

**Table 3.14: Efforts to Quit Injecting Drugs**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur N=159
Percent of IDU attempting to quit injecting	60.9(54.4-67.1)	75.7(71.2-79.7)	62.9(57.1-68.3)	76.7(69.2-82.7)
Mean number of attempts made for quit drug	2.3(2.2-2.5) M=2 n=233	3.1(2.8-3.5) M=2 n=303	2.2(2.0-2.4) M=2 n=127	5.0(3.9-6.1) M=3 n=122
Quitting method tried	n=243	n=305	n=127	n=122
Drug clinic	35.8(30.1-41.9)	46.6(40.8-52.4)	45.1(34.5-56.1)	4.9(2.2-10.3)
Hospital	6.1(3.5-10.6)	7.2(4.7-10.9)	22.2(15.6-30.7)	0
NGO	62.4(53.4-70.6)	48.9(43.2-54.5)	33.6(25.6-42.5)	43.9(33.2-55.2)
Went to village	9.1(5.7-14.1)	13.1(6.2-18.4)	3.9(1.5-10.4)	1.5(0.3-5.9)
Went for Tabligue jaamat	7.9(5.3-11.9)	3.3(1.7-6.2)	16.8(11.9-23.2)	1.8(0.4-7.2)
Self-custody at home	45.7(37.8-53.7)	56.7(50.4-62.8)	56.9(46.6-66.8)	71.3(60.3-80.3)
Others*	12.0(7.6-18.5)	18.0(12.9-24.7)	3.6(1.5-8.5)	7.1(3.2-15.1)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** took heroin to avoid injecting drugs, Care Bangladesh, sleeping pills, Modhumita, went to relatives' house, jail, Notun Jibon, taking baths, Majar and by own effort.

### 3.1.5 Incidences of Harassment

The IDUs reported being physically abused during the last one year by various people. More than two-fifths of the IDUs in Dhaka and Chandpur reported being physically abused in the past year. In addition, 28.8 percent IDUs in Rajshahi and another 19.3 percent in Chapainawabganj reported violence during the same period. Most of the IDUs in Dhaka and Northwest cities reported harassment by members of law enforcement agencies and by local people. In Chandpur, in addition to members of law enforcement agencies and local people, other people, particularly family members and friends (58.8 percent), also harassed them to stop injecting drugs.

IDUs in different locations had been sent to jail in the past one year mainly for stealing, drug addiction, carrying drugs and for suspicious movements. A small proportion (6.1 percent) of IDUs in Rajshahi also reported being sent to jail for political reasons (**Table 3.15**).

**Table 3.15: Violence against IDUs**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Percent of IDU reporting being physically abused last year	42.2(37-47.5)	28.8(23.8-34.4)	19.3(13.7-26.5)	42.0(34.2-50.2)
Mean number of times IDU were physically abused last year	5.8(4.6-7.1) M=2 n=172	4.1(3.3-4.9) M=3 n=114	2.6(1.7-3.4) M=2 n=36	5.4(4.2-6.7) M=4.5 n=65
Violence perpetrated by	n=176	n=116	n=36	n=69
Law enforcement agency	75.8(66-83.5)	61.2(50.3-71.1)	79.2(67.5-87.5)	28.7(18.3-42.0)
Mastan (extortionist)	22.6(15.9-30.9)	12.9(6.7-23.5)	3.9(0.7-20.5)	10.3(4.6-21.6)
Local people	75.8(68.7-81.8)	62.1(52.2-71.0)	64.5(44.2-80.7)	39.3(26.3-53.9)
Narcotics officer	4.5(2.3-8.7)	1.7(0.4-6.9)	0	0
Detective branch officer	3.5(1.2-10.3)	0.9(0.1-6.3)	0	0
Drug peddlers	27.2(20.4-35.3)	18.9(12.3-28.1)	1.5(0.2-13.6)	6.4(2.5-15.3)
Other*	17.3(10.6-26.9)	26.7(19.3-35.8)	8.8(3.4-20.8)	58.8(44.9-71.4)
(Denominator is those who reported violence in the last year)				
Percent of IDU sent to jail in last year	10.7(7.8-14.5)	8.2(5.6-11.7)	2.2(0.9-5.1)	14.2(9.2-21.2)
Reasons for go to jail in last year	n=51	n=33	n=4	n=23
Illegal arms	2.6(0.3-17.9)	0	0	0
For carrying drug	11.7(5.4-23.8)	6.1(1.3-23.6)	26.6(0.5-96.2)	16.3(3.8-49.0)
Because of drug	8.1(2.6-22.9)	30.3(15.3-51.1)	0	7.7(1.5-30.4)
Selling ampoule	7.5(2.9-17.6)	6.1(1.4-22.7)	0	11.4(3.5-30.9)
Doubtful movement	20.7(11.4-34.5)	6.1(1.4-22.7)	24.9(0.5-95.9)	12.5(2.5-44.9)

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Snatching	44.4(30.5-59.2)	30.3(14.4-53.5)	28.4(0.6-96.5)	52.2(26.6-76.6)
Mastan (extorshonist)	3.6(0.8-14.5)	6.1(1.3-23.6)	19.9(0.4-94.6)	0
Accident	1.3(0.2-9.8)	9.1(2.9-25.4)	0	0
Political reason	0	6.1(1.3-23.6)	0	0

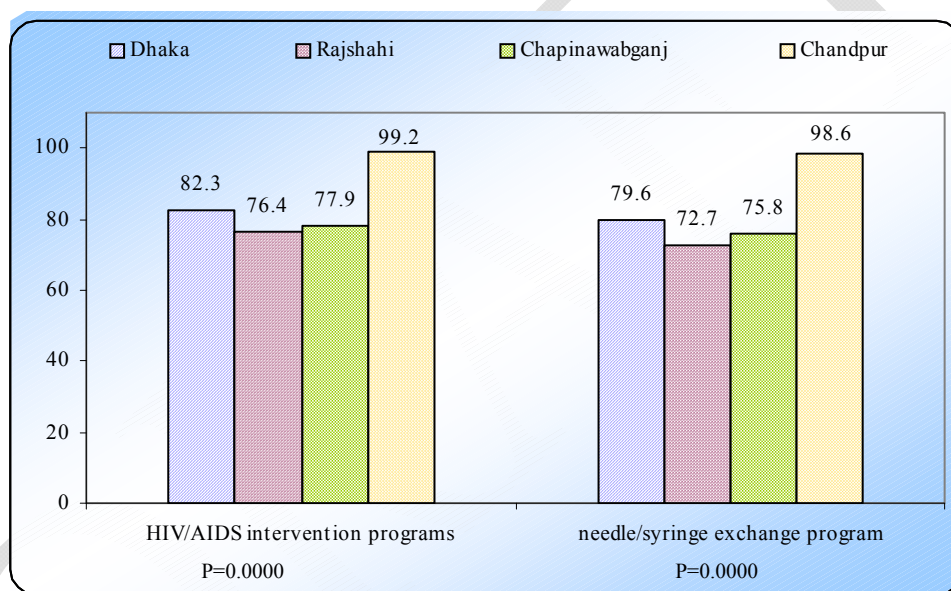
**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** wife/father/mother/friend, relatives, shopkeeper, commissioner, guard, rail staff and passengers.

### 3.1.6 Involvement in Intervention Programs

Almost all (99.2 percent) the IDUs in Chandpur and the majority of them in Dhaka (82.3 percent), Rajshahi (76.4 percent) and Chapainawabganj (77.9 percent) reported being involved in HIV/AIDS intervention programs during the past one year. The vast majority (79.6 percent to 98.6 percent) of the IDUs in all four locations reported that they were primarily exposed to needle exchange programs (**Figure 3.8**).

**Figure 3.8: Percentage Exposed to Intervention Programs in Last Year**



About two-thirds of the IDUs in Dhaka and Rajshahi and half in Chandpur attended drop-in-centers (DIC). In Chapainawabganj, not more than one-quarter reported attending a DIC. About 19 to 27 percent reported receiving condoms in all locations except Chandpur, where it was only 3.5 percent. A considerable proportion of IDUs participated in different education programs. In Dhaka, about one-sixth (16 percent) of the IDUs received STI treatment, as well (**Table 3.16**).

About one-quarter IDUs in both Dhaka (25.9 percent) and Rajshahi (25 percent), and in Chandpur more than one-half (54 percent) of IDUs reported that the intervention programs helped them change their behavior. About one-tenth in Chapainawabganj (11.2 percent) reported the same. Regarding the benefits from the intervention programs, 65 percent to 70 percent in both the Northern locations and more than one-half of IDUs in Dhaka (45.7 percent) reported that although they received useful information, it did not affect their behavior at all. In Chandpur, however, an overwhelming majority (93.7 percent) of the IDUs reported learning about HIV/AIDS, STDs, safe sex and correct use of condoms from

intervention programs. The same response was given by about one-half of the IDUs in Dhaka (45.7 percent) and Rajshahi (52.6 percent) and another 32.9 percent in Chapainawabganj (Table 3.16).

**Table 3.16: Exposure to Interventions**

Indicators % (95% CI)	Dhaka n=425	Rajshahi n=403	Chapainawabganj n=209	Chandpur n=159
Percent of IDU exposed to HIV/AIDS interventions in last year	82.3(75.7-87.3)	76.4(71.8-80.5)	77.9(69.1-84.8)	99.2(94.2-99.9)
Type of interventions in last year (Denominator is who participated in an HIV interventions last year)	n=344	n=308	n=162	n=157
Needle exchange program	96.8(93.2-98.5)	95.1(92.3-96.9)	97.3(91.6-99.1)	99.3(95.2-99.9)
Education program	28.5(23.3-34.4)	15.6(10.8-21.9)	28.9(23.3-35.2)	9.5(5.5-15.3)
Received condoms	27.1(22.6-32.2)	21.8(17.7-26.5)	19.1(13.6-26.1)	3.5(1.4-8.4)
Received STI treatment	16(11.1-22.4)	0.6(0.2-2.6)	0.4(0.04-3.1)	1.2(0.3-5.2)
Attended IHC	0.4(0.1-1.8)	0.3(0.04-2.3)	0	0
Attended DIC	62(54.9-68.6)	66.2(59.7-72.2)	24.8(14.1-39.9)	50.0(40.1-59.9)
Attended VCT	0.2(0.03-1.7)	3.2(1.6-6.5)	0	0
Aids rally	6.9(4.0-11.6)	1.3(0.5-3.4)	0.8(0.1-5.8)	0.7(0.1-4.8)
Mean number of years involved with interventions (Denominator is who participated in an HIV interventions last year)	3.3(3.0-3.5) M=3 n=344	4.3(4.04-4.5) M=4 n=308	3.9(3.6-4.2) M=3.5 n=162	1.6(1.5-1.7) M=1.7 n=157
Mean number of times involved with interventions in last month (Denominator is who participated in an HIV interventions last year)	10.9(9.1-12.5) M=5 n=344	2.6(2.003-3.1) M=0 n=308	2.6(0.8-4.5) M=0 n=162	14.7(13.2-16.1) M=15 n=157
Percent of IDU participated in needle/syringe exchange program in city in the last year	79.6(73.6-84.6)	72.7(67.9-77.0)	75.8(66.8-82.9)	98.6(94.1-99.7)
Percent of IDU participated in needle/syringe exchange program in city in last month (Denominator is who participated in an HIV interventions last year)	69.4(63.0-75.2) n=343	43.2(36.3-50.3) n=308	11.8(5.7-23.1) n=162	99.3(95.2-99.9) n=156
Benefits from the interventions (Denominator is who participated in an HIV interventions last year)	n=344	n=308	n=162	n=157
Helped to change behavior	25.9(19.3-33.9)	25(19.5-31.5)	11.2(7.0-17.4)	54.1(43.0-64.9)
Gave useful information but did not affect behavior	52.2(43.5-60.8)	64.6(58.1-70.6)	70.3(62.6-76.9)	10.3(5.6-18.1)
Learnt about HIV/AIDS/STD/safe sex and correct use of condom	45.7(39.9-51.5)	52.6(45.3-59.8)	32.9(24.8-42.1)	93.7(88.6-96.6)
Information was not easily understandable	8.9(5.1-14.9)	1.3(0.5-3.4)	3.4(1.2-8.8)	0
Others*	3.5(0.9-11.8)	0.3(0.04-2.3)	2.5(0.8-7.6)	0.5(0.1-3.6)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** get injection, learn how to live neat and clean.

### 3.1.7 Factors Influencing Sharing Behavior of IDUs

The factors affecting the needle/syringe sharing behavior of IDUs were also examined through multivariate logistic regression analysis. When performing the analysis, we combined the information for all the locations to see whether needle/syringe sharing varies across different locations. The results of the analysis are also controlled for the study locations. Analysis of the findings reveals that the IDUs with secondary and higher education are less likely to share needles/syringes, compared with the IDUs who have no education. Although the age of the IDUs has no significant impact on sharing behavior, the IDUs who inject more than 7 times a week are significantly more likely to share needles/syringes with others (Table 3.17).



**Table 3.17: Odds Ratio of Factors Affecting Sharing of Needles/Syringes**

Factors	Odds Ratio	P-value	95% CI	
<b>Age</b>				
<=25	1	-	-	-
26-35	1.07	0.811	0.63	1.82
35+	1.39	0.316	0.73	2.63
<b>Education</b>				
No education	1	-	-	-
Primary	0.60	0.012	0.40	0.89
Secondary+	0.42	0.003	0.24	0.74
<b>Duration of injecting drug (in years)</b>				
1-5	1	-	-	-
6-10	0.71	0.068	0.50	1.03
11+	0.25	0.002	0.11	0.60
<b>Frequency of injecting last week</b>				
1-7	1	-	-	-
8-20	2.63	0.000	1.70	4.07
21+	2.70	0.001	1.48	4.94
<b>Living status</b>				
With relative	1	-	-	-
Alone	1.20	0.538	0.67	2.13
With friends	1.31	0.532	0.56	3.09
Homeless/on the street	4.93	0.001	2.00	12.14
<b>Exposed to intervention</b>				
Yes	1	-	-	-
No	2.49	0.000	1.62	3.83
<b>Area</b>				
Dhaka	1	-	-	-
Rajshahi	0.88	0.622	0.53	1.45
Chapinawabganj	1.19	0.585	0.64	2.19
Chandpur	3.27	0.001	1.59	6.71
<b>Interaction term</b>				
Living status× Participated in needle /syringe exchange program	0.80	0.000	0.72	0.89

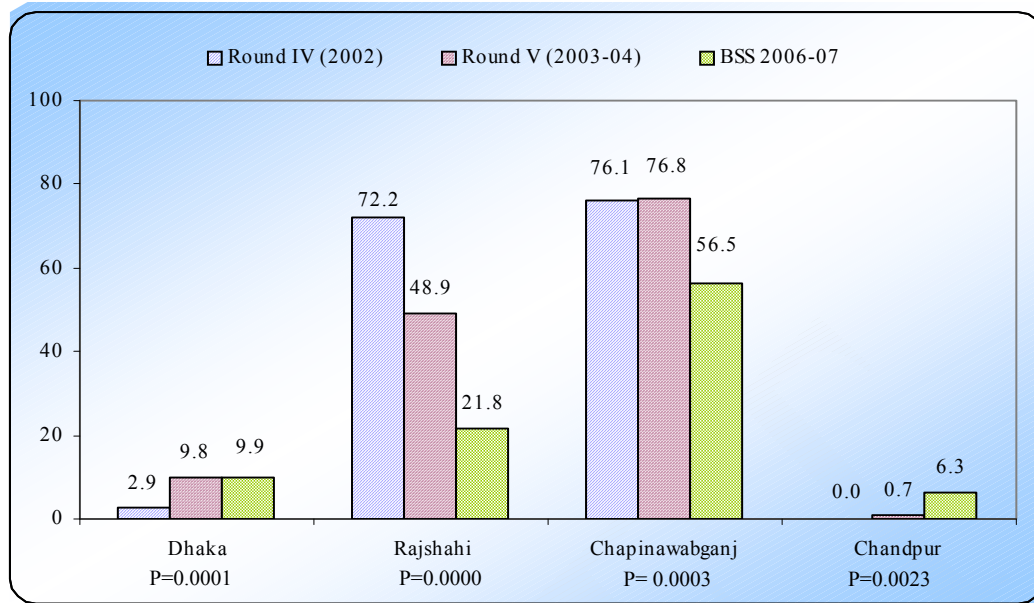
The IDUs living on the street/homeless are 4.9 times more likely to share compared with those living with their friends and families. Intervention programs also significantly affect the sharing behavior of the IDUs. An IDU with no exposure to an intervention program is 2.5 times more likely to share. In addition, the IDUs in Chandpur are 3.3 times more likely to share needles/syringes compared with IDUs in other locations and consequently are more vulnerable to HIV/AIDS.

### 3.1.8 Change in Risk Behavior Over the Rounds

#### *Injected by professional injectors*

Although the percentage of IDUs injected by professional injectors over the rounds has increased in Dhaka and Chandpur, the practice is still very low. In Rajshahi, this practice has decreased significantly from 72.2 percent in Round IV (2002-03) to 21.8 percent in BSS 2006-07 (**Figure 3.9**).

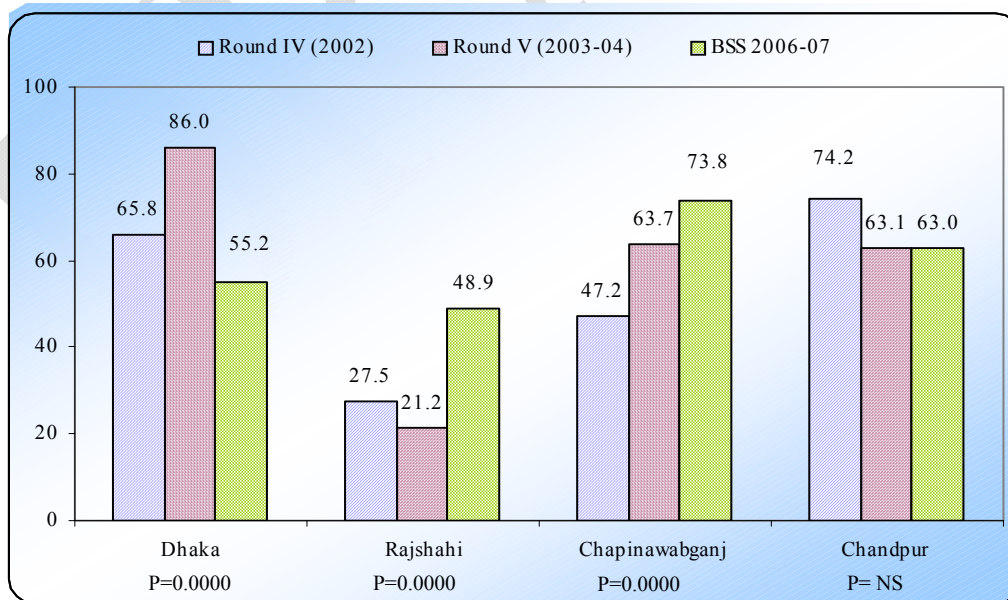
**Figure 3.9: Percentage Injected by Professional Injectors in Last Two Months**



**Sharing used needles/syringes**

Percentage of IDUs who borrowed used needle/syringes is highest in Chapainawabganj (74 percent) followed by Chandpur (63 percent), Dhaka (55 percent) and Rajshahi (50 percent). Compare to previous round, situation has improved only in Dhaka from 86 percent to 55 percent. In other areas borrowing needle/syringe increased significantly, specially in Rajshahi the figure increased sharply from 21 percent to 50 percent (Figure 3.10).

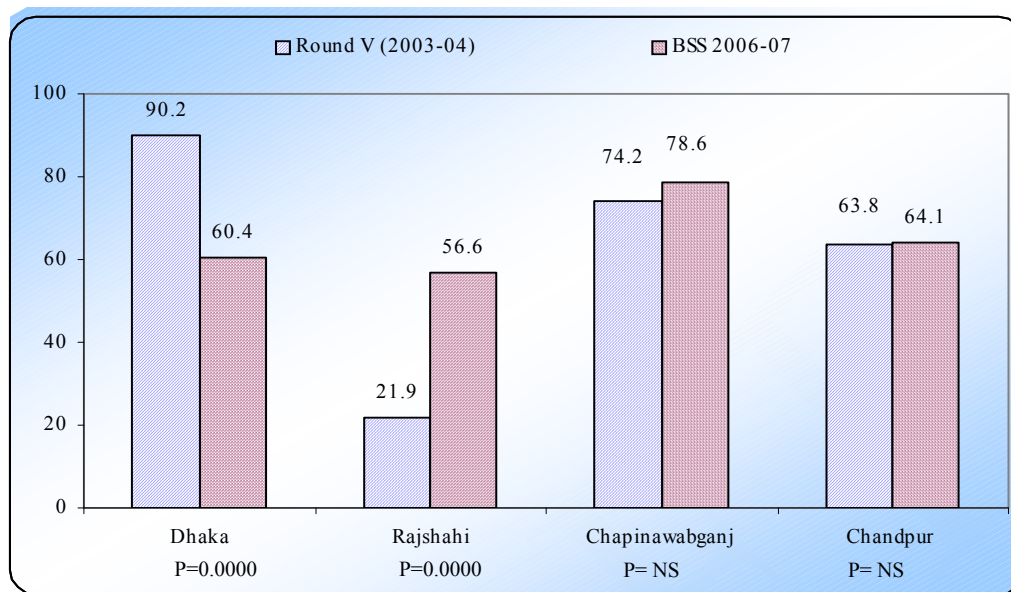
**Figure 3.10: Percentage Borrowing Used Needles/Syringes in Last Week**



The proportion of IDUs who lent used needles/syringes in the last week also decreased in Dhaka from 90.2 percent in Round V to 60.4 percent in BSS VI. Meanwhile, lending used needles/syringes in Rajshahi increased more than double from 21.9 percent in Round V to

56.6 percent in round VI and remained unchanged in Chapainawabganj and Chandpur during the same period (**Figure 3.11**).

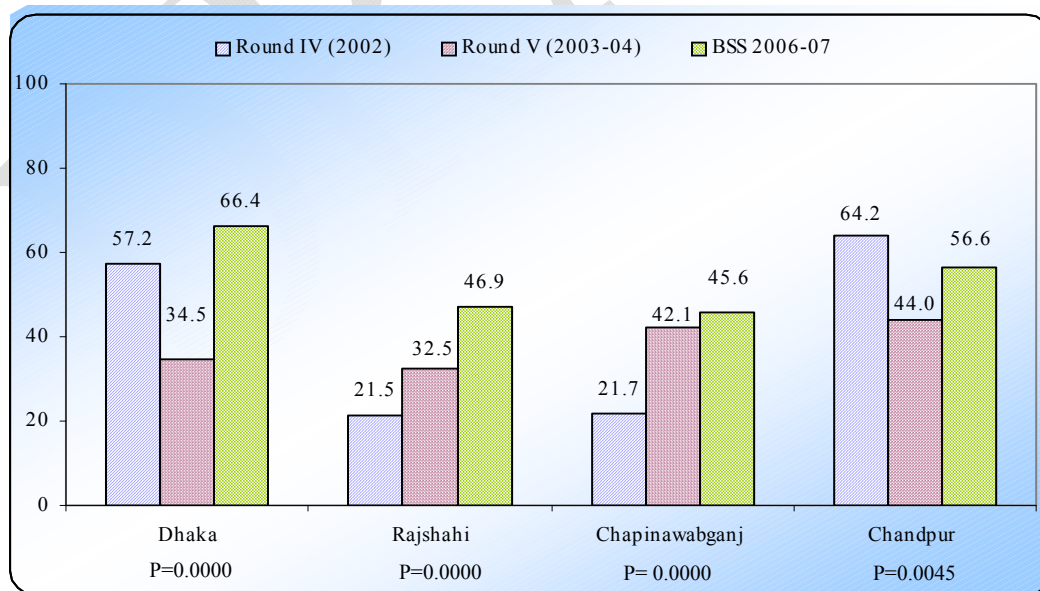
**Figure 3.11: Percentage Lending Used Needle/Syringes in Last Week**



#### ***Buying sex from commercial female sex workers***

The occurrence of buying sex from commercial female sex workers among IDUs in Rajshahi and Chapainawabganj increased steadily over BSS rounds. Moreover, in Dhaka and Chandpur, sex with commercial sex workers decreased in Round V compared with Round IV but again increased in BSS Round VI (**Figure 3.12**).

**Figure 3.12: Percentage Buying Sex from Female Sex Workers in Last Year**

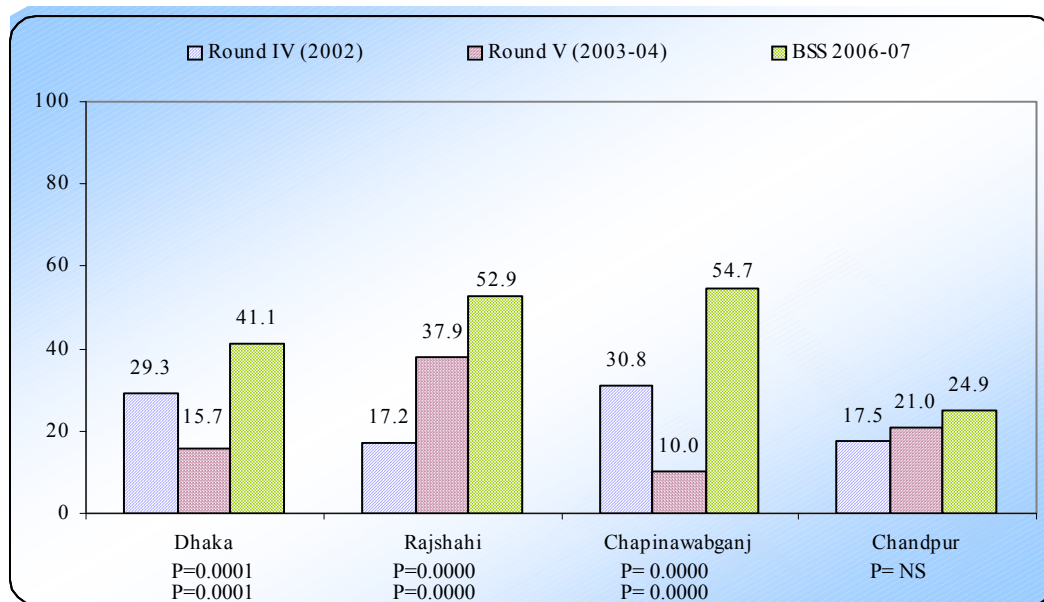


#### ***Use of condoms with female sex workers***

The use of condoms during last sex act with female sex workers increased significantly in Rajshahi from 17.2 percent in Round IV to 52.9 percent in Round VI. Although condom use increased in Chandpur, it remained low. However, in Dhaka and in Chapainawabganj the use

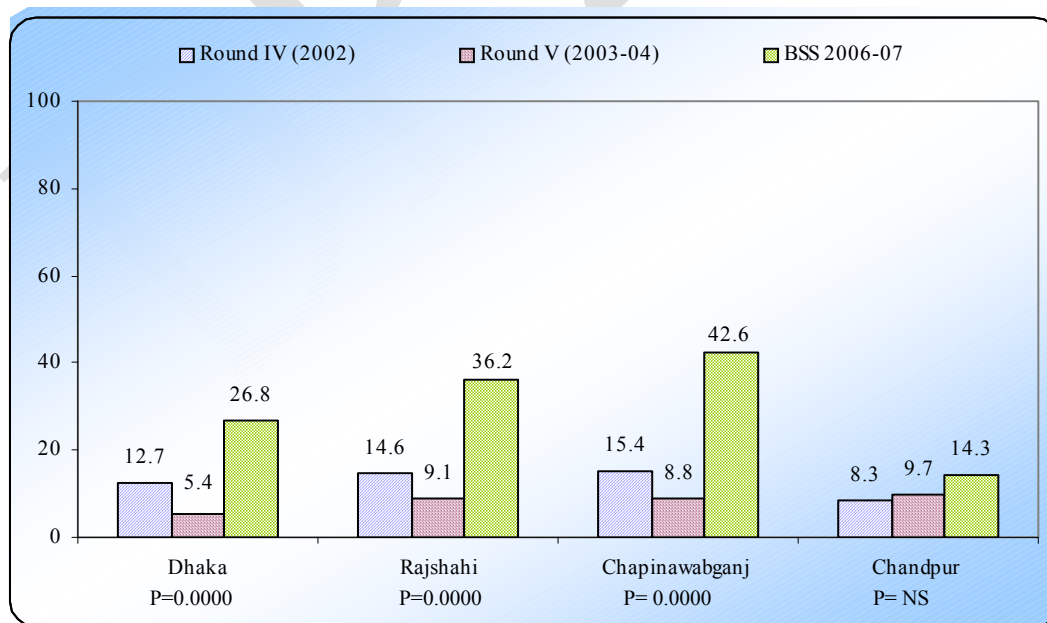
of condoms during last sex act with female sex workers increased in BSS Round VI (2006-07) compared with Round V, most noticeably in Chapainawabganj (**Figure 3.13**).

**Figure 3.13: Percentage Using Condoms during Last Sex Act with Female Sex Worker**



The consistent use of condoms with female sex workers in the last year also increased in BSS 2006-07 compared with the previous rounds (**Figure 3.14**). In Chandpur, 14.3 percent of the IDUs reported using condoms consistently in BSS 2006-07, which was 9.7 percent in Round V. The consistent use of condoms among the IDUs is, however, remarkable among the IDUs in Dhaka, Rajshahi and Chapainawabganj during BSS 2006-07 compared with Round V.

**Figure 3.14: Percentage Consistently Using Condoms with Female Sex Worker in Last Year**

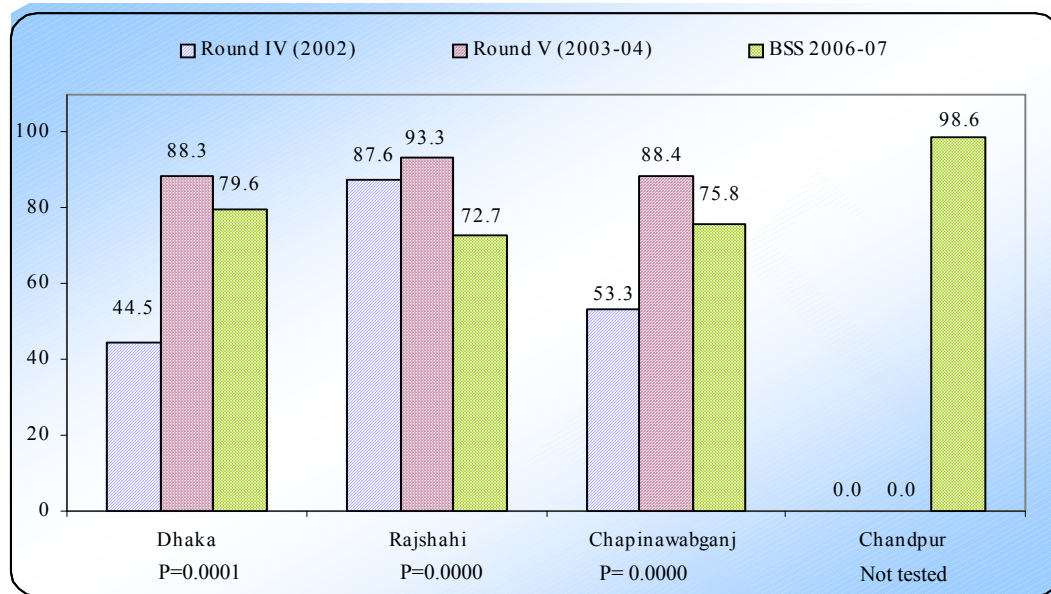


**Participation in needle/syringe exchange program**

In the previous two rounds, IV and V, none of the IDUs in Chandpur participated in a needle/syringe exchange program during the last year, while in BSS round VI (2006-07)

nearly all IDUs (98.6 percent) were covered by the needle/syringe exchange programs in the preceding year. In contrast, the percentage of IDUs covered by the needle/syringe exchange program in the last year in Dhaka, Rajshahi and Chapainawabganj decreased during BSS Round VI compared with Round V (Figure 3.15).

**Figure 3.15: Percentage Covered by Needle/Syringe Exchange Program in Last Year**



### 3.1.9 Summary of Findings

A considerable number of IDUs from Dhaka belonged to the lower socio-economic strata of society, and they sold blood to increase their income and to buy drugs. The average duration of injecting drugs among the IDUs was long and irrespective of location; more than one-half of them acknowledged sharing used needles/syringes during last injection within two months preceding the survey. The data on needle/syringe sharing indicate a significant decrease in Dhaka, while there appears to be no change in Chandpur when compared with the previous round. The situation had reversed in two other locations --Rajshahi and Chapainawabganj-- showing an increasing trend. Temporary cessation of needle/syringe exchange programs during the period of data collection might have influenced sharing behavior in Rajshahi. About one-half of the IDUs had a history of buying commercial sex. Some of them had sex with male sex workers. They also performed group sex. However, consistent condom use in the last year in all locations significantly increased, probably because of strong program support during the last few years. This suggests that condom distribution, if continued, is likely to contribute further to consistent condom use.

Although HIV/AIDS awareness among the IDUs was almost universal, a good proportion of them held erroneous beliefs about the various modes of HIV transmission. Although nearly all IDUs knew that HIV could be transmitted by sharing needles/syringes, this knowledge had little impact on their sharing behavior. Curiously, the IDUs did not consider themselves susceptible to HIV infection and thus were unlikely to take any measures to protect themselves either from STIs or HIV.

The coverage of needle/syringe exchange programs in three locations, except in Chandpur, declined over the BSS rounds. A considerable proportion of IDUs from all locations also stated that they were harassed by law enforcement agencies and local people.

## 3.2 Heroin Smokers (HS)

In BSS 2006-07, only in Dhaka were the behavioral changes of heroin smokers (HS) monitored over time. The findings on HS are presented in the following sections.

### 3.2.1 Socio-demographic Characteristics of HS

The heroin smokers were young, with a mean age of 29 years. Approximately one-third (31.7 percent) of them reported having no schooling. Although, two-fifths of them were currently living with their relatives, a significant portion (30.3 percent) lived on the street. Less than one-third (29.6 percent) reported being currently married and about one-third (33.2 percent) currently living with their wives or regular sex partners. The average age of first sex for an HS was 18 years.

Of the HS, 27.3 percent reported their major source of income as rag picking (*tokai*). About one-fifth (20.5 percent) reported stealing/robbery for income and another one-fifth reported being either businessmen (12.5 percent) or rickshaw pullers (8.8 percent). On average, in the last month, an HS earned Taka 7,732. In addition, about one-tenth (9.2 percent) of the HS sold blood in the last 12 months to earn money (**Table 3.18**).

**Table 3.18: Socio-demographic Characteristics**

Indicators % (95% CI)	Dhaka n=339
Mean age (in years)	29.9(29.1-30.7) M=29
Percent who had no schooling	31.7(26.2-37.8) n=330
Duration of stay in this city	
Whole life	57.3 (51.3-63.1)
≤10 years	21.7 (17.1-27.1)
>10 years	20.3 (15.8-25.5)
Could not remember	0.8 (0.3-2.5)
Current living status	
Alone	19.8 (14.5-26.3)
With relatives	39.6 (33.3-46.3)
Friends	10.1 (7.1-14.2)
On the street	30.3 (25.1-36.1)
Others	0.2 (0.02-1.1)
Average income (in Taka) last month	7731.7 (6791.1-8672.4) M=6000 n=338
Source of income in last 6 months	
Rickshaw puller	8.8 (5.5-13.7)
Hawker	3.6 (2.1-6.0)
Service	7.8 (5.2-11.7)
Tokai (rag picker)	27.3 (22.1-33.2)
Stealing/robbery	20.5 (14.5-28.2)
Business	12.5 (9.0-17.1)
Household work	6.3 (3.9-10.1)
Others	13.3 (8.2-20.7)
Percent sold blood for money in last 12 month	9.2 (6.1-13.6)
Currently married	29.6 (24.8-34.9)
Percent currently living with wife or other regular sex partners	33.2 (28.4-41.0)
Age at first sex (in years)	18.3 (17.9-18.7) M=18 n=322

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### 3.2.2 History of Drug Use and Injection Practices

#### History of heroin and other drug use

On average, a heroin smoker started smoking heroin at the age of 24, while the average age of initiating any kind of drug was 18 years. The overwhelming majority (93.3 percent) of the HS reported taking cannabis before starting heroin. Use of other drugs before taking heroin such as phensedyl (44.9 percent) tablets (38.0 percent) and alcohol (37.7 percent) was quite common. Three-fourths (75.2 percent) of the HS smoked heroin 2-3 times a day. They usually smoked at *addas* (97.5 percent), although 15.9 percent reported smoking at home (Table 3.19).

**Table 3.19: History of Drug Use**

Indicators % (95% CI)	Dhaka n=339
Mean duration of taking any kind of drugs (in years)	11.5(10.9-12.1) M=10
Mean age of starting any drugs (in years)	18.4(17.9-18.9) M=18
Mean duration of heroin use (in years)	6.1(5.6-6.7) M=5
Mean age of starting heroin (in years)	23.7(23.1-24.4) M=18
Types of drug taken before starting heroin	
Cannabis	93.3(89.3-95.9)
Phensedyl	44.9(39.6-50.3)
Injections	2.9(1.6-5.7)
Tablets	38.0(31.5-45.0)
Alcohol	37.7(31.7-44.2)
Others*	4.9(2.8-8.6)
Mean frequency of heroin use yesterday	2.2(2.0-2.3) M=2
Frequency of heroin use last week	
Once a day	19.5(15.4-24.3)
2-3 times in a day	75.2(69.7-80.0)
4 times in a day	5.4(2.7-10.3)
Frequency of heroin use last one month	
Once a day	19.0(14.8-24.1)
2-3 times in a day	75.6(70.0-80.5)
4 times in a day	5.4(2.7-10.3)
Place of taking heroin	
At home	15.9(11.7-21.5)
At <i>adda</i>	97.5(94.6-98.8)
Others**	0.4(0.1-1.8)

**Note:** M refers to median . Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** *chorosh, afim, shidhi, tari.*

\*\***Others stated:** inside a dustbin.

#### Injection practices

More than one-fifth (22.1 percent) of the HS reported ever injecting drugs and 5.6 percent reported injecting in the past six months preceding the survey. On average, an HS had 4 injections in the past six months. Nearly one-half (47.3 percent) of the HS reported injecting drugs in an attempt to quit heroin. Other common reasons for injecting drugs instead of smoking heroin were unavailability of heroin, bored with previous drugs and the high cost of heroin. Most of the HS (72.6 percent) who injected drugs in the last six months reported sharing (borrowed or lent) used needles/syringes. On average, 2 heroin smokers shared needles/syringes when they injected drugs. Although one-half of the HS reported cleaning

needles/syringes during their last injecting episode, the majority of them did it incorrectly with clothes (Table 3.20).

**Table 3.20: Injection Behavior of Heroin Smokers**

Indicators % (95 CI)	Dhaka n=339
Percent ever injected drugs	22.1(17.4-27.6)
Percent injected in past six month	5.6(3.4-9.3)
Percent injected in past six month (Denominator is who injected ever in lifetime)	25.5(14.8-40.3) n=74
Types of drugs ever taken by injection (Denominator is who injected ever in lifetime)	n=74
Buprenorphine	42.7(29.4-57.2)
Pethidine	28.1(19.5-38.6)
Cocktail	37.5(26.5-49.9)
Others*	34.9(22.8-49.3)
Mean number of injections taken in the last 6 months (Denominator is who injected in the last six months)	3.4(2.5-4.4) M=4 n=20
Reasons for injecting instead of taking heroin (Denominator is who injected ever in lifetime)	n=74
To quit heroin	47.3(34.5-60.3)
Smoking heroin takes more time	7.3(3.0-16.4)
Heroin is more expensive	9.4(3.6-22.5)
Heroin is not easily available	28.3(18.9-40.0)
Bored with previous drugs	22.8(12.4-38.2)
Others**	11.6(5.6-22.3)
Injection taken in the last six months (Denominator is who injected in the last six months)	n=20
Buprenorphine	57.3(29.4-81.2)
Pethidine	25.8(9.8-52.9)
Cocktail	33.7(12.9-63.4)
Frequency of sharing injections in last six months (Denominator is who injected in the last six months)	n=20
Always	41.8(21.9-64.8)
Never	25.0(8.5-54.7)
Sometimes	33.2(14.8-58.6)
Percent of heroin smokers who borrowed used needle/syringe last time (Denominator is who injected in the last six months and shared)	72.6(43.5-90.1) n=15
Percent of heroin smokers who borrowed used needle/syringe last time	3.1(1.6-5.8)
Percent of heroin smokers who lent used needle/syringe last time (Denominator is who injected in the last six month and shared)	44.9(21.5-70.8) n=15
Percent of heroin smokers who lent used needle/syringe last time	1.9(0.8-4.4)
Percent of heroin smokers who shared (borrowed or lent) used needle/syringe last time (Denominator is who injected in the last six months and shared)	72.6(43.5-90.1) n=15
Percent of heroin smokers who shared (borrowed or lent) used needle/syringe last time	3.1(1.6-5.8)
Mean number of sharing network when heroin smokers shared with different persons last time in last six months (Denominator is who shared last time in last six months)	1.7(1.0-2.3) M=2 n=11



Indicators % (95 CI)	Dhaka n=339
Percent cleaned needle/syringe when shared last time in last six month heroin smokers (Denominator is who shared last time in last six months)	53.3(19.2-84.6) n=11
Method of cleaning (Denominator is who cleaned injections during last injections in last six months)	M=6
Water	21.7(2.3-76.8)
Clothes	89.1(26.6-99.5)
Blow/suck	19.0(1.0-84.3)
With few drops of drug	28.5(1.8-89.1)
Others	10.9(0.5-73.4)
Percent know where new needles/syringes are available (Denominator is who injected ever in lifetime)	98.8(91.3-99.9) n=74
Sources of new needle/syringe (Denominator is who know where new needles/syringes are available)	n=73
Pharmacy	85.9(71.8-93.5)
Health care center	9.4(4.1-19.9)
Friends	0.8(0.1-6.0)
Drug partners	19.1(9.4-34.8)
NGO workers	78.8(68.2-86.6)
Drug sellers	9.5(4.7-18.4)
Percent reported having abscesses last year	1.4(0.5-3.6)
Percent reported having abscesses last year (Denominator is who injected in last six months)	24.8(9.8-49.8) n=20

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

\***Others stated:** *bonojestic, Y.T. jestic.*

\*\* **Others stated:** Heroin is not good, ineffective product, peer pressure, not available and more intoxication.

### 3.2.3 Sexual Behavior and Practices

#### Sex act

About one-third (34.9 percent) of the HS reported having sex with their regular sex partners during the last year. A significant proportion (45.8 percent) of the HS also performed sex with commercial female sex workers in the past year (**Table 3.21**).

**Table 3.21: Sexual Behavior of Heroin Smokers**

Indicators % (95% CI)	Dhaka n=339
Percent of heroin smokers who had sex with non-commercial regular female partners in last year	34.9(29.2-41.1)
Percent of heroin smokers who had sex with non-commercial regular female partners in last month	28.9(23.8-34.7)
Percent of heroin smokers who had sex with commercial female partners in last year	45.8(40.4-51.4)
Percent of heroin smokers who had sex with commercial female partners in last month	30.2(25.2-35.8)
Percent of heroin smokers who had sex with commercial male/ <i>Hijras</i> in last year	1.8(0.8-4.2)
Percent of heroin smokers who had sex with commercial male/ <i>Hijras</i> in last month	1.2(0.4-3.4)
Percent of heroin smokers who sold sex in exchange of money of drugs in last year	1.4(0.5-3.8)
Percent of heroin smokers who had group sex in last year	8.5(5.6-12.7)
Percent of heroin smokers who had group sex in last month	2.4(1.3-4.5)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Number of sex partners**

The average number of regular, non-commercial sex partners of an HS who reported having sex with non-commercial sex partners in the last year was 1.3. Moreover, an HS who reported having sex with female sex workers, on average, bought sex from 5.5 female sex workers in the last year (Table 3.22).

**Table 3.22: Sex Partners and Sex Acts of Heroin Smokers**

Indicators % (95% CI)	Dhaka n=339
<b>Regular non-commercial sex partners</b>	
Mean number of regular sex partners in last one year	0.5 (0.3-0.6) M=1
Mean number of regular sex partners in last one year (Denominator is who had sex with non-commercial regular female partners in last year)	1.3 (1.1-1.5) M=1 n=133
Mean number of sex acts with regular sex partners in last one month	2.3 (1.7-2.9) M=0
Mean number of sex acts with regular sex partners in last one month (Denominator is who had sex with non-commercial regular female partners in last month)	8.0 (6.5-9.5) M=5 n=116
<b>Commercial female sex partners</b>	
Mean number of commercial female sex partners in last one year	2.5 (1.7-3.3) M=0
Mean number of commercial female sex partners in last one year (Denominator is who had sex with commercial regular female partners in last year)	5.5 (3.8-7.3) M=4 n=148
Mean number of commercial female sex partners in last month	0.6 (0.5-0.7) M=0
Mean number of commercial female sex partners in last month (Denominator is who had sex with commercial regular female partners in last month)	1.9 (1.6-2.2) M=2 n=99
Mean number of sex acts with commercial female sex partners in last month (Denominator is who had sex with commercial regular female partners in last month)	3.9 (2.9-5.0) M=2 n=99
<b>Commercial male sex partners/Hijras</b>	
Mean number of commercial male sex partners/Hijras in last one year	0.1(-0.2-0.1) M=0
Mean number of commercial male sex partners/Hijras in last one year (Denominator is who had sex with commercial male sex partners/Hijras in last year)	3.1(-1.6-7.8) M=1 n=6
Mean number of commercial male sex partners/Hijras in last month (Denominator is who had sex with commercial male sex partners/Hijras in last month)	2.3(-0.6-5.2) M=2 n=4
Mean number of sex acts with commercial male sex partners/Hijras in last month (Denominator is who had sex with commercial male sex partners/Hijras in last month)	2.7(-0.5-5.9) M=3 n=4
<b>Group sex</b>	
Mean number of sex partners during group sex in last one year (Denominator is who had group sex)	4.0(3.7-4.3) M=4 n=32
<b>Sex in exchange for money or drugs</b>	
Mean number of sex partners to whom you paid money or drugs (Denominator is who paid money or drug for sex)	1.9(0.3-3.5) M=1.5 n=4

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Use of condoms**

Consistent use of condoms by HS is notably low; only 7.9 percent consistently used condoms during sex with regular partners in the last month. Furthermore, only 23.3 percent of HS consistently used condoms during sex with commercial female sex partners during the same period. The use of condoms is even lower during sex with commercial male/*Hijra*; 85.1 percent of HS never used condoms during sex with them (**Table 3.23**).

**Table 3.23: Use of Condoms with Different Sex Partners**

Indicators % (95% CI)	Dhaka n=339
<b>Regular non-commercial sex partners</b>	
Percent of heroin smokers who used condom during last sex with non-commercial regular partner in last year (Denominator is who had sex with non-commercial regular partner in last year)	24.1(16.4-33.9) n=134
Condom use during sex with non-commercial regular partner in last year (Denominator is who had sex with non-commercial regular partner in last year)	n=134
Always	7.8(3.4-16.9)
Sometimes	49.8(40.0-59.7)
Never	42.4(32.7-52.7)
Condom use during sex with non-commercial regular partner in last month (Denominator is who had sex with non-commercial regular partner in last month)	n=116
Always	
Sometimes	7.9(3.1-18.8)
Never	44.4(35.3-54.0) 47.7(37.9-57.7)
<b>Commercial female sex partners</b>	
Percent of heroin smokers who used condoms during last sex with commercial female partner in last year	37.6(27.1-49.5) n=150
Condom use during sex with commercial female partner in last year	n=150
Always	22.4(13.4-35.1)
Sometimes	31.8(22.4-42.9)
Never	45.8(35.2-56.8)
Condom use during sex with commercial female partner in last month	n=99
Always	23.3(12.8-38.7)
Sometimes	28.1(18.2-40.8)
Never	48.6(35.4-62.0)
<b>Commercial male sex partners/<i>Hijras</i></b>	
Percent of heroin smokers who used condoms during last sex with commercial male/ <i>Hijra</i> in last year (Denominator is who had sex with male/ <i>Hijra</i> in last year)	25.4(2.6-81.0) n=6
Condom use during sex with commercial male/ <i>Hijra</i> in last year (Denominator is who had sex with male/ <i>Hijra</i> in last year)	n=6
Always	15.7(0.8-81.0)
Sometimes	9.7(0.5-70.6)
Never	74.6(19.0-97.4)
Condom use during sex with commercial male/ <i>Hijra</i> in last month (Denominator is who had sex with male/ <i>Hijra</i> in last month)	n=4
Always	0
Sometimes	14.9(0.2-93.0)
Never	85.1(7.0-99.8)
<b>Group sex</b>	
Percent of heroin smokers who used condoms during last group sex in last year (Denominator is who had group sex in last year)	16.1(6.0-36.3) n=32
Percent of group sex partners used condom during last sex in last year (Denominator is who had group sex in last year)	60.4(40.6-77.3) n=32

Indicators % (95% CI)	Dhaka n=339
<b>Sex in exchange for money or drugs</b>	
Percent of heroin smokers who used condoms during last sex in exchange of money or drugs in last year (Denominator is who sold sex with money or drugs in last year)	61.3(2.6-98.9) n=4
Condom use during sex in exchange of money or drug in last year (Denominator is who sold sex with money or drugs in last year)	n=4
Always	32.3(0.6-97.4)
Sometimes	29.0(0.5-97.0)
Never	38.7(1.1-97.4)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### Access to condoms

An overwhelming majority (96.6 percent) of the HS knew where condoms were available, but only 23.1 percent stated that access to condoms was easy. Among the multiple sources from which the HS collected condoms during the previous month, pharmacies (62.7 percent) were the primary source followed by NGO workers (48.9 percent) and then shops (36.9 percent). Among the HS who used condoms during sex in the past month, 4.6 percent experienced condom breakage (Table 3.24).

**Table 3.24: Knowledge about Condom Access and Experience of Condom Breakage**

Indicators % (95% CI)	Dhaka n=339
Percent of heroin smokers recognized male condom	98.7 (96.3-99.5)
Percent of heroin smokers who had sexual experience recognized male condom	99.4 (97.1-99.9) n=325
Percent of heroin smokers who knew the place where condoms are available	96.6 (93.0-98.4) n=338
Percent of heroin smokers who had sexual experience knew the place where condoms are available	97.2 (93.4-98.9) n=324
Percent of heroin smokers who had sexual experience but never used condoms	36.7 (31.5-42.2) n=324
Sources of condoms during sex in last month (Denominator is who used condoms in last month)	n=101
Shop	36.9 (24.9-50.9)
Pharmacy	62.7 (48.9-74.7)
Health care center	6.0 (2.8-12.3)
Bar/guest house/hotel	0.3 (0.04-2.2)
Friends	2.5 (0.8-8.1)
NGO workers	48.9 (36.9-61.2)
Didn't buy last month	9.3 (4.5-18.1)
Percent of heroin smokers reported easy access to condoms	23.1 (18.4-28.6)
Percent of heroin smokers reported easy access to condoms (Denominator is who used condom in last month)	77.9 (66.9-86.0) n=101
Reasons for not having easy access (Denominator is who reported not having easy access to condoms)	n=27
High cost	76.2 (53.6-89.9)
Shop/pharmacy is far away	64.0 (40.7-82.1)
Shop/pharmacy is closed	46.5 (27.8-66.2)
Feel ashamed to buy	15.1 (5.1-37.2)
Others	3.4 (0.4-24.0)
Percent of heroin smokers who used condoms experienced condom breaking during sex in last month	1.4(0.5-3.5)
Percent of heroin smokers who used condoms experienced condom breaking during sex in last month (Denominator is who used condom in last month)	4.6(1.8-11.3) n=101

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### 3.2.4 STIs and HIV/AIDS Issues

#### STIs

Among the HS in Dhaka, 29.0 percent reported at least one symptom of STIs in the last one year. However, STIs among the HS who never used condoms during sex in the last one year was significantly higher at 37.9 percent. Approximately 14 percent of the HS who reported STIs opted for services from pharmacies followed by 13.1 percent from NGOs, 9.9 percent from private doctors and 4.7 percent from hospitals. Another 12.1 percent of the HS also sought treatment from traditional healers. In contrast, a significant proportion of the HS (37.7 percent) did not seek any treatment. Only 7.5 percent HS reported visiting NGO- organized STI clinics in the last month. On average, an HS spent Taka 447 for treatment of last symptom of STI during the one year preceding the survey (**Table 3.25**).

**Table 3.25: Knowledge of STIs and Treatment-seeking Behavior**

Indicators % (95% CI)	Dhaka n=339
<b>Knowledge about STIs</b>	
Knowledge about STIs	
Discharge from penis	48.7(40.7-56.7)
Burning pain on urination	37.9(31.5-44.7)
Genital ulcers/sores	76.3(70.2-81.4)
Swellings in groin area	13.0(9.1-18.3)
Anal discharge	0.5(0.1-2.2)
Anal ulcers/sores	1.0(0.3-3.3)
Others*	4.0(2.2-7.2)
<b>Experience of STIs</b>	
Percent of heroin smokers reported STIs in last one year:	
Urethral discharge	13.6(9.5-19.1)
Anal discharge	1.1(0.4-2.9)
Genital ulcers/sores	21.0(16.0-27.0)
Percent of heroin smokers reported at least one STI symptom in last one year	29.0(23.7-34.9)
Percent of heroin smokers who had sexual experience and never used condoms reported at least one STI symptom in last one year	37.9(28.8-48.0) n=125
<b>Treatment of STIs</b>	
Choice of STI treatment (Denominator is who had sexual experience and reported STI in last year)	n=100
Hospital	4.7(1.9-11.3)
Drug seller	14.0(8.3-22.7)
Private doctor	9.9(4.6-19.9)
Private clinic	3.4(0.5-19.9)
NGO clinic**	13.1(7.4-22.2)
Traditional healer	12.1(5.6-24.2)
Friend	4.2(1.3-12.6)
Self	0.8(0.1-6.0)
Didn't seek any treatment	37.7(25.5-51.7)
Mean waiting days before seeking treatment for last STI in last one year	13.1(10.5-15.6) M=10 n=59
Mean expenditure for seeking treatment for last STI in last one year	447.0(189.6-704.4) M=100 n=58
Percent of heroin smokers reported to have visited STI clinics organized by NGO in last month	7.5(4.4-12.6)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** eclampsia, scoral swelling, AIDS, boils, non-erectile penis, ulcer, itching.

\*\*NGO Clinic: Modhumitha, Care Bangladesh, Notun Jibon.

**HIV/AIDS**

Although almost all HS (99.3 percent) had heard about the HIV/AIDS, some held incorrect ideas regarding the transmission of HIV. Nearly one-third (29 percent) of the HS reported that HIV could be transmitted by mosquito bites and more than one-third (34.1 percent) believed that HIV could be transmitted by sharing food with HIV-infected people. However, a majority (82.7 percent) of HS rightly knew condoms were a mode to prevent HIV infection. Another 87.1 percent reported that HIV could be transmitted by sharing needles/syringes (Table 3.26).

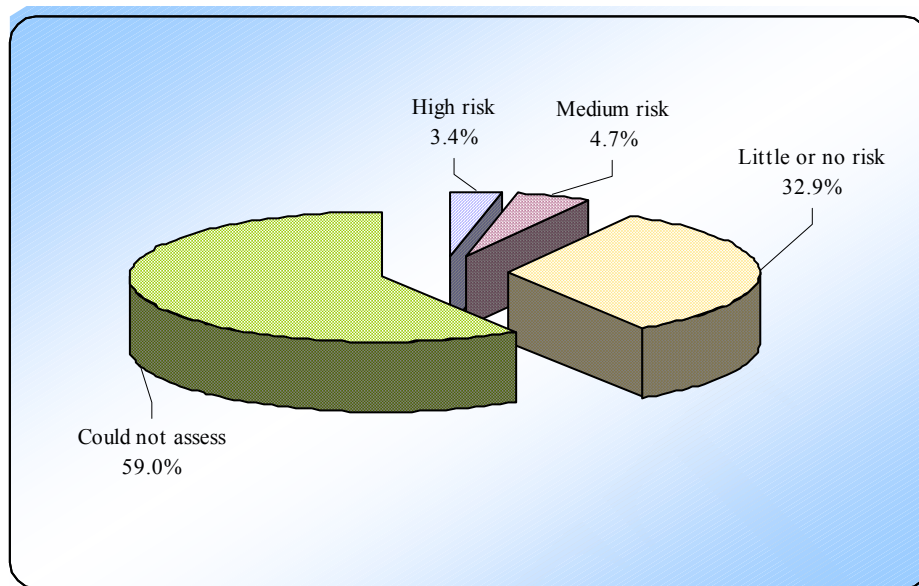
**Table 3.26: Knowledge about HIV/AIDS Transmission Modes**

Indicators % (95% CI)	Dhaka n=339
Percent of heroin smokers reported to have heard about HIV/AIDS	99.3(97.8-99.8)
Percent of heroin smokers who knew condom as a mode of prevention	82.7(77.3-87.0)
Percent mentioned can reduce the risk of HIV/AIDS by using a condom properly every time	80.9(75.3-85.5) n=338
Percent mentioned can reduce the risk of HIV/AIDS by using a condom during anal sex	50.8(44.4-57.2) n=338
Percent of heroin smokers who knew that avoiding anal sex is a mode of prevention	40.9(32.8-49.4) n=338
Percent of heroin smokers reported that HIV can be transmitted by mosquito bite	29.2(23.8-35.2)
Percent of heroin smokers reported that HIV can be transmitted by sharing food with HIV infected people	34.1(27.2-41.7)
Percent of heroin smokers reported that HIV can be transmitted by sharing needle/syringe	87.1(81.5-91.2)
Percent of heroin smokers who knew that avoiding multiple sex is a mode of prevention	71.8(65.7-77.2)
Percent of heroin smokers believe that one can tell by looking at someone whether s/he is HIV infected	11.2(7.3-16.9)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Self-perception of risk**

In Dhaka, only 3.4 percent of the HS thought that they were at high risk of contracting HIV/AIDS; another 4.7 percent perceived medium risk, and approximately one-third (32.9 percent) of HS thought that they were at little or no risk of contracting HIV/AIDS. About three-fifths (59.0 percent) of the HS could not assess their risk of HIV infection (Figure 3.16).

**Figure 3.16: Self-perception of Risk of Contracting HIV/AIDS**

Those HS who considered themselves to be at high or medium risk mentioned sex with multiple partners and inconsistent use of condoms during sex with different partners as the main reasons for such perceptions (**Table 3.27**).

**Table 3.27: Self-perception of Risk**

Indicators % (95% CI)	Dhaka (n=339)
<b>Self-perception</b>	
Risk of HIV/AIDS	n=328
High risk	3.4(1.7-6.8)
Medium risk	4.7(2.8-7.9)
Little or no risk	32.9(27.8-38.5)
Could not assess	59.0(53.1-64.7)
(Denominator who perceived themselves to be at little or no risk)	
<b>Rationale of such perception</b>	
Reasons for assessing themselves at high/medium risk	n=31
Frequently share needle/syringe	1.9(0.2-14.1)
Occasionally share injections	7.9(2.1-25.5)
Sex with multiple partners	63.9(45.4-79.0)
Do not always use condoms	65.9(42.6-83.4)
Other*	12.9(4.1-34.1)
Reasons for assessing themselves at low/no risk	n=112
Always use condoms	14.8(7.6-27.0)
Partners are clean	19.3(12.9-27.9)
Partners are healthy	2.4(0.8-6.5)
Don't have sex with foreigner	11.2(6.2-19.5)
Occasionally share injections	2.1(0.6-7.2)
Never share injections	22.0(13.7-33.5)
Other**	56.3(44.1-67.7)

\*Others stated: unhygienic environment, take drugs.

\*\*Others stated: no sexual intercourse with sex worker, use condom with sex worker, wife/spouse, sometimes use condom, did not use others' needles.

### Measures taken to avoid STI and HIV/AIDS

To avoid STIs, a small number of (7.2 percent) of HS reported consistently using condoms; however, almost one-half (45.9 percent) took no measures to avoid STIs and 40.3 percent took no measures to avoid HIV/AIDS. The remaining HS, however, mentioned that they

never shared needles/syringes, consistently used condoms, washed their genital area with antiseptic/urine after sex and took other methods to avoid HIV/AIDS (Table 3.28).

**Table 3.28: Measures Taken to Avoid STIs and HIV/AIDS**

Indicators % (95% CI)	Dhaka n=339
Steps taken to avoid STIs	
Do nothing	46.0(39.2-52.9)
Wash genital area with antiseptic or urine after sex	6.7(4.3-10.3)
Always use condoms	7.2(3.6-13.8)
Sometimes use condoms	26.0(20.6-32.3)
Take medicine	1.3(0.4-4.5)
Other*	20.9(15.4-27.7)
Steps taken to avoid HIV/AIDS	n=336
Nothing	40.6(33.2-48.5)
Never share needle/syringe	21.1(16.0-27.3)
Wash genital area with Dettol or urine after sex	8.6(5.7-12.8)
Always use condoms	7.9(4.2-14.4)
Other**	28.1(22.3-34.9)

\* **Others stated:** have sex with neat and clean/reliable partner, no sex without wife, never share needle/syringe.

\*\* **Others stated:** sometimes use condoms, never inject drugs, stay neat and clean.

### **Confidential HIV testing**

Only 14.6 percent of HS were aware of places for HIV testing. However, only 8 HS surveyed had tested for HIV. Nearly one-half of them (4 out of 8 HS) did not collect test results. Nevertheless, about one-half HS (4 out of 8) had tested more than one year before the date of interview (Table 3.29).

**Table 3.29: Confidential HIV Testing**

Indicators % (95% CI)	Dhaka n=339
Percent of heroin smokers who knew where HIV can be tested confidentially	14.6(10.2-20.4)
Percent of heroin smokers who ever tested for HIV	3.0(1.3-6.6)
Motivation for HIV testing : (Denominator is who ever tested for HIV)	n=8
Self	17.9(1.2-80.1)
By some one else*	18.4(3.1-61.5)
Situation demanded	63.8(22.4-91.4)
Percent of heroin smokers reported to have test results (Denominator is who ever tested for HIV)	56.1(11.5-92.6) n=8
Time when last HIV test was done :	n=8
Within last one year	44.7(7.4-89.1)
More than one year ago	55.3(10.9-92.6)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** doctors, friends.

### **Efforts to quit smoking heroin**

More than one-half (68.4 percent) of the HS tried to quit smoking heroin. On average, an HS attempted 3 times to quit heroin. The most frequently cited method, which almost one-half (46.3 percent) of the HS followed, was to stay at home (self-custody) to stop smoking heroin. To quit heroin, one-third of the HS reported visiting drug clinics and 30.3 percent, reported visiting NGO clinics (Table 3.30).



**Table 3.30: Efforts to Quit Smoking Heroin**

Indicators % (95% CI)	Dhaka n=339
Percent of heroin smokers who tried to quit smoking heroin	68.4(62.3-73.9)
Mean number of attempts made to quit	3.1(2.7-3.6) M=2 n=214
Quitting methods tried	n=217
Drug clinic	34.4(27.3-42.3)
Hospital	11.4(7.5-17.0)
NGO	30.3(23.1-38.7)
Went to village	4.3(2.0-8.9)
Went for <i>Tabligue jaamat</i> (Islamic pilgrim)	6.9(3.6-12.8)
Self-custody at home	46.3(38.0-54.8)
Others*	18.1(12.6-25.2)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** relatives, drink alcohol, take cannabis, jail, take injection.

### 3.2.5 Incidences of Harassment

Almost half (51.1 percent) of the HS reported being physically abused during the past year. Approximately 62 percent of the HS reported that local people harassed them and 56.5 percent were abused by members of law enforcement agencies. Drug peddlers, local mastans (extortionist) as well as other perpetrators also harassed the HS. Nearly 16 percent of the HS had been to jail in the last year. The had been to jail mainly for picking pockets (43.1 percent), taking drugs (37.0 percent), suspicious movements (5 percent) and other reasons including “didn't agree to pay” (Table 3.31).

**Table 3.31: Violence against Heroin Smokers**

Indicators % (95% CI)	Dhaka (n=339)
Percent of heroin smokers physically abused last year	51.1(46.2-56.0)
Mean number of times heroin smokers were physically abused last year	3.9(3.3-4.6) M=2 n=161
Violence perpetrated by (Denominator is those who reported violence in the last year)	n=161
Law enforcement agency	56.5(47.9-64.8)
Mastan (extorshonist)	15.9(10.2-23.9)
Local people	61.8(52.9-69.9)
Narcotics officer	13.2(8.2-20.7)
Detective branch officer	0.8(0.1-5.4)
Drug peddlers	24.0(17.4-32.1)
Other*	20.0(13.9-27.9)
Percent of heroin smokers who had been to jail in last year	15.8(11.9-20.6)
Reasons for go to jail in last year :	n=50
Picking pocket	43.1(28.9-58.5)
Taking drugs	37.0(22.6-54.2)
Doubtful movement	5.0(1.4-16.7)
Picketing	2.4(0.3-16.9)
Fighting	4.3(1.0-17.0)
Political reason	1.0(0.1-7.3)
Gambling	1.5(0.2-11.3)
Didn't agree to pay	2.9(0.4-19.8)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** father, mother/members of family, relatives/uncle, master contractor and friend.

### 3.2.6 Involvement in Intervention Programs

Less than one-half (44.5 percent) of the HS participated in HIV/AIDS intervention programs during the past year. Most of the HS (83.9 percent) attended DIC, while 45.7 percent received condoms and about one-quarter (23.4 percent) participated in needle/syringe exchange programs. While talking about the benefits of such intervention programs, most (73.6 percent) of the HS mentioned that they had learnt about HIV/AIDS and the correct use of condoms. Although 27.2 percent of the HS reported that these programs helped them to change their behavior, 5.7 percent also reported that the contents of these intervention programs were not relevant to their needs (**Table 3.32**).

**Table 3.32: Exposure to Interventions**

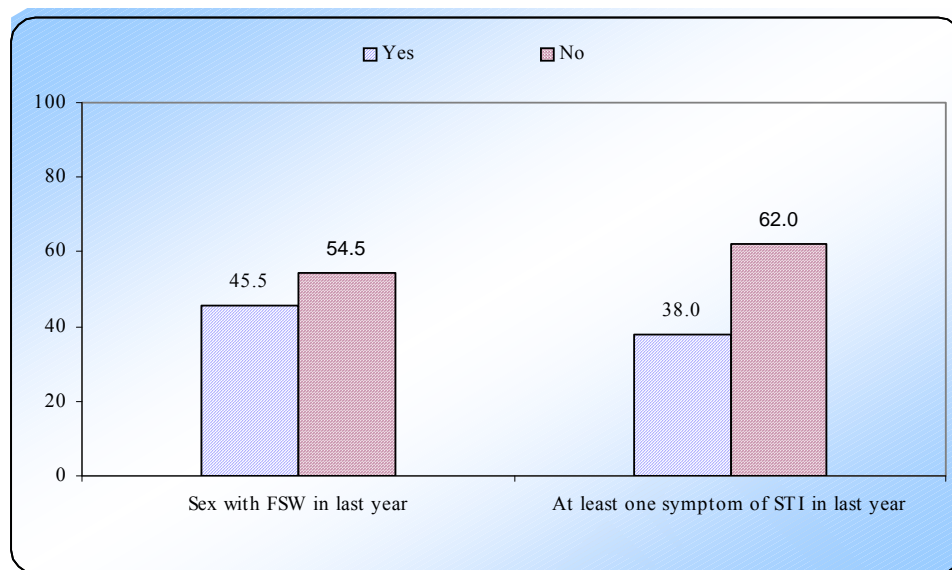
Indicators % (95% CI)	Dhaka n=339
Percent of heroin smokers exposed to HIV/AIDS interventions in last year	44.5(37.2-52.1)
Type of interventions in last year	n=136
Needle exchange program	23.4(16.8-31.7)
Education program	21.1(13.4-31.6)
Received condoms	45.7(35.1-56.6)
Received STI treatment	8.6(4.7-15.2)
Attending IHC	1.7(0.4-6.8)
Attending DIC	83.9(74.3-90.3)
Attending VCT	1.2(0.3-5.2)
Mean number of years involved with interventions	1.6(1.4-1.9) M=1 n=136
Mean number of times involved with interventions in last month	3.2(1.2-5.3) M=1 n=136
Percent of heroin smokers participated in needle/syringe exchange program in this city in last month	10.4(7.1-15.1)
Benefits from the interventions	n=136
Helped you change your behavior	27.2(19.5-36.6)
Gave useful information but did not affect behavior	21.6(15.1-30.0)
Learnt about HIV/AIDS/STD/safe sex and correct use of condoms	73.6(61.4-83.0)
Information was not easily understandable	1.9(0.6-5.7)
Was not relevant to our needs	5.7(2.9-10.9)
Others*	1.8(0.4-7.1)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** free condom, treatment for STIs.

#### *Characteristics of HS who participated intervention programs*

The bivariate analysis of the selected characteristics of HS who participated in the intervention program in the last year reveals that the intervention program has significant impact on their risk behavior. More than one-half (54.5 percent) of the HS who participated in the intervention program did not report sex with female sex workers. Furthermore, a smaller proportion (38 percent) of HS who participated in the intervention program reported symptoms of STIs in the last year, compared with those who did not participate in the intervention program (**Figure 3.17**).

**Figure 3.17: Characteristics of HS Participating in Intervention Programs**

### 3.2.7 Change in Risk Behavior Over the Rounds

#### *Practice of injections*

In Round V, roughly one-third of the HS in Dhaka injected during the six months preceding the interview, which decreased significantly to 5.6 percent in BSS Round VI (2006-07).

#### *Sex with female sex workers*

Sexual practices also changed over the last two rounds of BSS. In Round V, 73.6 percent of the HS reported that having sex with female sex workers, which decreased significantly to 45.8 percent in BSS Round VI.

#### *Use of condoms*

The use of condoms during last sex act with female sex workers in the last year has significantly increased in BSS 2006-07 compared with the previous round. In Round V, only 3.8 percent HS reported using condoms during last sex act with commercial female sex partners, increasing to 37.6 percent in BSS Round VI (2006-07).

#### *Exposure to intervention programs*

Exposure to HIV/AIDS also increased over the last two rounds of BSS. In BSS Round VI (2006-07), as many as 44.5 percent HS reported participating in HIV/AIDS interventions in the last year, while the same was 7.0 percent in Round V.

**Table 3.33: Change of Risk Behavior of HS Over Time**

Indicators	Round V (2003-04)	BSS VI (2006-07)	P- values
Percent injected in last six months	34.4	5.6	0.000
Percent had sex with commercial female sex partners in last year	73.6	45.8	0.000
Percent used condom during last sex with commercial female partners in last year	3.8	37.6	0.000
Percent of HS reported at least one STI symptoms in last one year	43.0	29.0	0.000
Percent exposed to HIV/AIDS interventions in last year	7.0	44.5	0.000

### 3.2.8 Summary of Findings

The HS were young, and nearly one-third of them were currently married at the time of survey. The sexual debut was average 18 years. Most of them came from the lower socio-economic strata of society had a long history of taking drugs. The majority of HS smoked heroin 2-3 times a day. Almost all of them smoked in a group, called *adda*. More than one-fifth of HS had ever injected drugs.

The study probed into the HS practice of risky sexual behaviors. About one-half of them acknowledged having sex with female sex workers, including male sex workers/*Hijra*, in the last year. The consistent use of condoms by HS was remarkably lower and about one-half of them had never used condoms. Despite their knowledge about HIV/AIDS, still one-quarter of them held erroneous beliefs about the transmission of HIV. Nevertheless, the majority of HS knew that the proper use of condoms prevents HIV transmission. One of the most important findings of the survey is that the majority of the HS did not feel themselves susceptible to contracting HIV.

The risk behavior related to the transmission of HIV, such as injecting drugs and sex with commercial sex partners, declined significantly compared with the previous round. Even so, the most positive behavior of consistent condom use and exposure to various intervention programs increased significantly.

Almost one-half (51 percent) of HS were physically abused during the last year by members of law enforcement agencies, drug peddlers, local mastans and others.

## Section 4: Risk Behavior of Female Sex Workers

The brothel-based sex workers interviewed were from all 14 brothels throughout the country. The street-based sex workers interviewed were from Dhaka, Chittagong and Khulna and the hotel-based sex workers were from in Dhaka, Chittagong and Sylhet. The findings on female sex workers are presented in the following sections.

### 4.1 Background Characteristics

On average, a brothel-based female sex worker (BBFSW) was 22-years old and had no education (59.7 percent). Although a small proportion (1.9 percent) of them were currently married, nearly two-fifths (36.9 percent) were currently living with regular sex partners. The overwhelming majority (99.7 percent) of the BBFSWs sold sex for a living and earned, on average, Taka 9,051 in the last month.

The street-based female sex workers (SBFSWs) in Khulna were younger (median age 22 years) than the street-based sex workers in Dhaka (median age 25 years) and Chittagong (median age 24 years). Of the SBFSWs, nearly two-fifths (38.2 percent) of those in Khulna, 17.9 percent in Dhaka and 10.8 percent in Chittagong had no education. One out-of-ten SBFSWs in Dhaka, more than one-quarter (26.1 percent) in Chittagong and around one-fifth (20.7 percent) in Khulna were currently married. Between 18 percent to 30 percent of the SBFSW in all the three locations were also living with their regular sex partners. Almost all the SBFSWs in the three selected locations sold sex for their livelihood. The average income in the last month was highest at Taka 6,658 in Chittagong followed by Taka 5,350 in Dhaka and Taka 3,311 in Khulna, significantly lower compared with that in Chittagong.

The hotel-based female sex workers (HBFSWs) in all locations were young, with an average age of 19-21 years. Of the HBFSWs, approximately one-third in Chittagong had no schooling, one-fifth in Dhaka (22.1 percent) and nearly one-fifth (19.2 percent) in Sylhet. More than one-third (36.1 percent) in Dhaka followed by 26.5 percent in Sylhet and 18.5 percent in Chittagong were currently living with their regular sex partners. Selling sex was the main source of their earnings. On average, a hotel-based sex worker earned Taka 14,879 in Dhaka and Taka 15,774 in Chittagong in the last month. Earning were strikingly lower in Sylhet, an estimated Taka 7,353.

All the female sex workers in all locations performed first sex during their early teenage years (Table 4.1).

**Table 4.1: Socio-demographic Characteristics**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Mean age (in years)	23.5 (23.1-24.0) M=22	25.2 (24.5-25.8) M=25	24.0 (23.4-24.6) M=24	23.0 (22.2-23.7) M=22	20.9 (20.4-21.5) M=20	19.6 (18.9-20.3) M=19	20.3 (19.5-21.1) M=19
Percentage who had no schooling	59.7 (55.9-63.3) n=677	17.9 (13.3-23.7) n=437	10.8 (6.4-17.7)	38.2 (32.0-44.8)	22.1 (17.5-27.4)	33.6 (26.8-41.2) n=107	19.2 (13.7-26.3)
Mean income last month	9051.2 (8698.8- 9403.5) M=8000	5349.5 (4849.2- 5849.8) M=5000	6658.4 (6024.9- 7292.0) M=7000	3310.7 (3017.7- 3603.6) M=3000	14879.4 (13330.2- 16428.6) M=14000	15774.1 (14106.1- 17442.1) M=15000	7352.9 (6600.5- 8105.5) M=7000

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
	n=681	n=437					
Source of income in last 1 month							
Selling sex	99.7 (98.8-99.9)	99.8 (98.4-100.0)	100	99.7 (97.7-100.0)	100	99.1 (89.9-99.9)	100
Family source	0	2.1 (0.9-4.7)	0	0	0	0.9 (0.1-10.1)	0
Others*	7.8 (6.0-10.0)	9.4 (5.9-14.6)	0.3 (0.04-2.3)	25.8 (20.7-31.7)	2.6 (1.2-5.6)	1.9 (0.5-6.8)	21.9 (14.9-30.9)
Selling blood last year	0.1 (0.02-1.0)	0.4 (0.1-1.8)	1.9 (0.9-4.2)	2.5 (1.3-5.0)	0.3 (0.03-1.9) n=335	0	0
Percentage currently married	1.9 (1.1-3.3)	11.2 (7.9-15.7)	26.1 (21.8-30.9)	20.7 (17.0-25.0)	30.3 (25.2-35.9)	18.5 (10.3-30.9)	26.5 (20.3-33.7)
Percentage currently living with regular sex partner	36.9 (33.4-40.6)	17.6 (13.8-22.2)	27.4 (23.3-32.0)	30.3 (25.7-35.3)	36.1 (29.6-43.1)	25.0 (16.6-35.8)	23.2 (16.1-32.1)
Mean number of living children (Denominator is women who have children)	1.3 (1.3-1.4) M=1 n=253	1.5 (1.4-1.7) M=1 n=168	1.6 (1.4-1.7) M=1 n=130	1.8 (1.7-1.9) M=2 n=174	1.4 (1.3-1.6) M=1 n=115	1.4 (1.0-1.7) M=1 n=17	1.6 (1.4-1.8) M=1.5 n=50
Mean age (in years) of the youngest child (Denominator is women who have children)	5.0 (4.5-5.4) M=4 n=253	6.4 (5.7-7.1) M=6 n=168	4.3 (3.9-4.8) M=4 n=130	4.7 (4.3-5.1) M=4 n=174	3.8 (3.3-4.4) M=3 n=116	4.8 (3.3-6.3) M=5 n=17	4.4 (3.4-5.5) M=3 n=50
Duration of stay in this city							
Whole life	5.3 (3.8-7.2)	53.5 (47.7-59.2)	62.9 (56.2-69.2)	41.9 (35.6-48.4)	24.4 (20.4-28.8)	21.3 (13.5-32.0)	13.3 (8.1-20.9)
<=10 years	82.0 (78.9-84.7)	30.6 (24.7-37.2)	24.0 (20.3-28.1)	44.1 (36.7-51.8)	68.1 (63.2-72.7)	76.9 (65.4-85.4)	83.4 (75.6-89.1)
>10 years	12.7 (10.4-15.5)	15.9 (12.3-20.4)	13.1 (9.1-18.4)	14.1 (10.7-18.2) n=313	7.4 (5.0-10.8)	1.9 (0.4-8.5)	3.3 (1.2-9.1)
Mean age at first sex in years (Denominator is who could recall)	15.0 (14.8-15.2) M=15 n=681	14.6 (14.3-15.0) M=15 n=432	14.5 (14.3-14.8) M=15 n=313	13.8 (13.5-14.1) M=14 n=308	15.0 (14.7-15.2) M=15 n=334	14.3 (13.9-14.7) M=14 n=107	15.1 (14.9-13.3) M=15 n=150

Note: M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\*Others stated: sold sex, money from family, service, friends, business, *tokai*, tailoring, selling heroin, money from interest, pimp, day labor, *aya*, fishing, thief, house rent, working on garments, working in beauty parlor, working in hotel, cleaner, service in NGO.

## 4.2 Sexual Behavior and Practices

### *Dynamics of sex work*

A brothel based female sex worker, on an average, was engaged in this profession for more than six years and had been staying in the brothel for more than five years. The street based sex workers in Dhaka, Chittagong and Khulna were involved in this activity respectively for 5.7, 4.9 and 4.5 years. The mean duration of selling sex on the street was more than 4.5 years in Dhaka and Chittagong and 3.4 years in Khulna. However, the hotel based female sex workers in all locations seemed to be quite new in this profession. The mean duration in this profession was only 2.0 years in Dhaka and Chittagong, and 3 years in Sylhet (**Table 4.2**).

**Table 4.2: Dynamics of Sex Work**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent less than 1 year in profession	9.1 (7.1-11.5)	2.9 (1.6-5.3)	1.0 (0.3-2.9)	4.5 (2.6-7.5)	33.1 (27.5-39.1)	28.7 (19.4-40.2)	13.9 (8.6-21.7)
Mean years in profession in years	6.7 (6.3-7.2) M=5	5.7 (5.2-6.3) M=5	4.9 (4.5-5.2) M=4	4.5 (4.0-4.9) M=3	2.0 (1.7-2.2) M=1	1.9 (1.3-2.6) M=1	2.9 (2.4-3.4) M=2 n=150
Percent stayed less than 1 year in the same site (brothel/street/hotel)	12.7 (10.4-15.5)	3.3 (1.9-5.7)	1.0 (0.3-2.9)	5.4 (3.2-8.9)	33.6 (27.9-39.8)	32.4 (23.9-42.3)	39.1 (29.6-49.5)
Mean duration of stay in this brothel/street/hotel in years	5.6 (5.3-6.0) M=4	4.7 (4.3-5.2) M=4	4.6 (4.4-4.9) M=4	3.4 (3.1-3.7) M=3	1.8 (1.6-2.1) M=1 n=334	1.8 (1.3-2.3) M=1	1.6 (1.2-2.0) M=1

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### **Mobility of sex workers**

Among the brothel based sex workers, 3.8 percent had clients from outside the local city during the year preceding the survey. Less than one percent sex workers had visited other countries during the last year as well. In the last year, approximately 11.4 percent of street based sex workers in Dhaka 6.4 percent in Chittagong and 22.0 percent in Khulna had clients from places outside the respective city. Street based sex workers who had visited other countries during the last year ranged from 0 to 2.5 percent in all the locations. Roughly, one-tenth of hotel based sex workers in Dhaka had clients outside the city from which they were interviewed. The corresponding figure in Chittagong was 16.7 percent and 45.0 percent in Sylhet (**Table 4.3**).

**Table 4.3: Mobility of Sex Workers**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent who had clients outside the current spot in the same city last year	1.0 (0.5-2.1)	27.8 (21.4-35.3)	7.6 (4.9-11.8)	52.9 (47.3-58.4)	34.4 (30.0-39.1)	23.2 (13.9-35.9)	53.6 (44.7-62.4)
Percent who had clients outside the current city last year	3.8 (2.6-5.5)	11.4 (8.0-16.0)	6.4 (4.1-9.8)	22.0 (17.5-27.2)	10.4 (7.6-14.1)	16.7 (9.9-26.5)	45.0 (46.7-53.7)
Percent who had visited another country in last year	0.7 (0.3-1.8)	0.7 (0.2-2.6)	0	2.5 (1.3-5.0)	1.7 (0.5-5.7) n=336	0.9 (0.1-8.6)	1.3 (0.2-8.9)
Percent had clients outside the country last year (Denominator is who visited other country last year)	60.0 (8.1-96.2) n=5	100 n=4	0	62.5 (20.8-91.4) n=8	100 n=5	100 n=1	100 n=2
Name of countries	India	India	-	India	India, Singapore, Pakistan	India	Singapore
Percent who used condoms during sex act in other countries last year (Denominator is who visited another country last year)	0	0	0	75.0 (4.1-99.5) n=4	27.8 (0.04-99.7) n=4	100 n=1	100 n=2

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Clients/partners of female sex workers**

The brothel-based sex workers, on average, sold sex 6 days in the last week and 98.2 percent of them reported either new or regular clients during the week prior to the survey. On average, a brothel-based sex worker reported approximately 9 new clients and 11 regular clients in the last week. During the same period, nearly two-fifths (36.8 percent) of them reported having more than 20 clients. Almost one-third (32.7 percent) also reported having sex with non-commercial partners.

An overwhelming majority of the street-based sex workers in Dhaka (91.2 percent) and Chittagong (92 percent) reported having sex with new clients, while the corresponding figure was 84.7 percent in Khulna. The number of regular sex partners for the street-based sex workers in all three locations was also high, ranging between 76 percent to 87 percent. The mean number of new clients of street-based sex workers in the last week was 7.4 in Dhaka, 8.8 in Chittagong and much lower at 4.2 in Khulna. The corresponding mean during the same period for regular clients was 6.4, 5.8 and 3.5 respectively. One-quarter (25.1 percent) of the sex workers in Dhaka and 28.0 percent in Chittagong reported more than 20 clients in the last week, and in Khulna only 2.9 percent reported the same. Around one-half (51.3 percent) of the street-based sex workers in Chittagong and less than one-third in Dhaka and Khulna reported having sex with non-commercial sex partners during the last month.

The hotel-based sex workers in all three locations usually had new clients in the last week as well as regular clients. The mean number of new clients in the last week was 49 in Chittagong, 32 in Dhaka and 16 in Sylhet, alarmingly high figures when compared with brothel and street-based sex workers. Moreover, the average number of regular clients for those hotel-based sex workers who had sex in the past week was also higher in Chittagong (21 clients) and Dhaka (14 clients) than with their counterparts in other groups. About four-fifths of the hotel-based respondents in Dhaka and Chittagong and more than one-third in Sylhet reported more than 20 clients in the last week. More than one-third (39.4 percent) in Dhaka, almost one-half (49.1 percent) in Chittagong and 61.6 percent in Sylhet reported having non-commercial sex partners during the last month (**Table 4.4**).

**Table 4.4: Clients and Non-commercial Partners**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Mean number of days of taking clients (any type) in last one week	6.0 (5.9-6.1) M=7 n=682	5.3 (5.1-5.5) M=6 n=429	5.2 (4.9-5.4) M=5 n=305	4.5 (4.2-4.7) M=4 n=306	4.3 (4.1-4.4) M=4 n=335	5.2 (1.0-9.4) M=3 n=107	5.0 (4.7-5.4) M=50
Percent of sex workers reported new clients last week	93.3 (91.1-94.9)	91.2 (87.2-94.0)	92.0 (87.3-95.1)	84.7 (79.9-88.6)	97.6 (94.9-98.9)	94.4 (87.1-97.7)	96.0 (91.5-98.2)
Percent of sex workers reported regular clients last week	98.0 (96.6-98.8)	85.8 (80.9-89.6)	76.1 (69.9-81.4)	87.3 (83.2-90.4)	78.9 (73.5-83.4)	66.7 (54.4-77.0)	80.1 (71.1-86.9)
Percent reported new/regular clients last week	98.2 (96.9-99.0)	97.4 (94.1-98.9)	97.1 (94.0-98.7)	97.8 (95.5-98.9)	99.5 (97.8-99.9)	96.3 (87.9-98.9)	100
Mean number of new clients last week	7.9 (7.5-8.4) M=7 n=679	7.4 (6.4-8.4) M=6	8.8 (6.6-11.1) M=5	4.2 (3.2-5.1) M=3 n=313	31.2 M=29 (28.4-33.9)	46.2 (40.7-51.6) M=45 n=106	15.1 (12.5-17.7) M=12.5 N=150

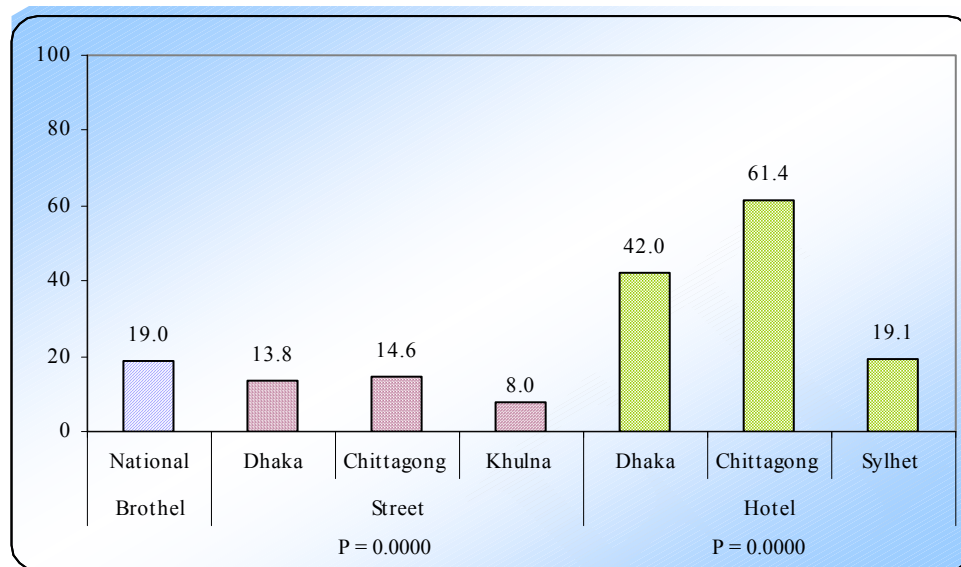


Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Mean number of new clients last week (Denominator is who had new clients last week)	8.5 (8.0-8.9) M=7 n=633	8.1 (7.1-9.1) M=6 n=399	9.6 (7.3-11.9) M=6 N=289	4.9 (3.9-6.0) M=4 n=265	31.9 (29.2-34.6) M=29	48.9 (44.3-53.6) M=45 n=100	15.8 (13.2-18.3) M=13.5 N=144
Mean number of regular clients last week	10.3 (9.9-10.7) M=10 n=681	6.4 (5.2-7.5) M=5	5.8 (4.4-7.2) M=3	3.5 (3.0-3.9) M=3	10.8 (9.1-12.5) M=8	14.3 (12.4-16.1) M=10	3.4 (2.5-4.3) M=3
Mean number of regular clients last week (Denominator is who had regular clients last week)	10.6 (10.2-11.0) M=10 n=667	7.4 (6.3-8.5) M=5 n=384	7.6 (6.1-9.1) M=5 n=239	4.0 (3.6-4.4) M=4 n=274	13.7 (12.1-15.3) M=12 n=271	21.4 (18.9-23.9) M=16.5 n=72	4.3 (3.4-5.2) M=3 N=121
Mean number of clients (new or regular)	19.0 (18.0-20.0) M=17	13.8 (12.3-15.2) M=12	14.6 (12.3-16.9) M=12	8.0 (6.5-9.4) M=7	42.0 (38.0-45.9) M=40	61.4(55.4-67.4) M=57.5	19.1 (15.8-22.4) M=16
Mean number of clients (new or regular) (Denominator is who had new or regular clients last week)	19.4 (18.4-20.4) M=18 n=671	14.1 (12.7-15.6) M=12 n=428	15.0 (12.8-17.3) M=12 n=305	8.1 (6.7-9.6) M=7 n=307	42.2 (38.2-46.2) M=40 n=335	63.8 (58.1-69.4) M=16 n=104	19.1 (15.8-22.4) M=16
Percent of sex workers reported >20 clients last week (new or regular)	36.2 (32.6-39.9)	24.5 (18.7-31.3)	28.0 (20.3-37.4)	2.9 (1.0-8.3)	80.0 (73.2-85.4)	83.3 (72.8-90.3)	34.4 (55.4-74.5)
Percent of sex workers reported >20 clients last week (new or regular) (Denominator is who had new or regular clients last week)	36.8 (33.2-40.5) n=671	25.1 (19.3-32.0) n=428	28.9 (21.0-38.2) n=305	2.9 (1.0-8.5) n=307	80.4 (73.6-85.8) n=335	86.5 (77.6-92.3) n=104	34.4 (55.4-74.5)
Percent of sex workers reported having non-commercial partners last month	32.7 (29.2-36.3)	29.8 (25.0-35.0)	51.3 (45.7-56.8)	31.2 (25.8-37.1)	39.4 (34.1-45.0)	49.1 (38.8-59.4)	61.6 (51.2-71.0)
Percent reported anal/vaginal sex with non-commercial partner last month	32.7 (29.2-36.3)	29.4 (24.6-34.7)	51.3 (45.7-56.8)	31.2 (25.8-37.1)	39.4 (34.1-45.0)	49.1 (38.8-59.4)	61.6 (51.2-71.0)
Mean number of non-commercial partners in last month	0.3 (0.3-0.4) M=0	0.5 (0.4-0.7) M=0	0.6 (0.5-0.7) M=1	0.4 (0.3-0.5) M=0	0.7 (0.5-0.9) M=0	0.8 (0.5-1.1) M=0	1.2 (0.9-1.5) M=1
Mean number of non-commercial partners in last month (Denominator is who reported non-commercial sex last month)	1.0 (1.0-1.0) M=1 n=223	1.8 (1.4-2.2) M=1 n=137	1.2 (1.1-1.3) M=1 n=161	1.2 (1.1-1.4) M=1 n=98	1.7 (1.3-2.1) M=1 n=132	1.6 (1.1-2.2) M=1 n=53	1.9 (1.6-2.2) M=1 n=93

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

The average number of clients (both new and regular) in the last week was very high among the hotel based sex workers particularly in Chittagong. The overall number of clients both new and regular per week is presented in **Figure 4.1**.

**Figure 4.1: Mean Number of New or Regular Clients in Last Week**



### *Sexual practices*

A vast majority of the female sex workers in all the locations reported having vaginal sex with new and regular clients in the last week. The female sex workers also reported having anal and oral sex with their new clients. Roughly one-third of the brothel-based sex workers and 27.8 percent of the hotel-based sex workers in Sylhet reported having anal sex with new and regular clients in the last week. For other groups and locations, anal sex did not exceed 12.4 percent. Again, less than one-third (30.6 percent) of the street-based sex workers in Khulna and more than one-fifth (20.5 percent) of the brothel-based sex workers reported having oral sex with new and regular clients (**Table 4.5**).

**Table 4.5: Nature of Sex**

Indicators % (95 % CI)	Brothel	Street				Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)	
Percent reported vaginal sex with new clients last week	93.0 (90.8-94.7)	90.2 (86.2-93.2)	91.4 (86.4-94.7)	84.4 (79.5-88.3)	97.1 (94.1-98.6)	94.4 (87.1-97.7)	96.0 (91.5-98.2)	
Percent reported anal sex with new clients last week	11.0 (8.8-13.6)	7.2 (4.8-10.7)	0.6 (0.2-2.6)	8.0 (5.3-11.8)	10.2 (7.3-14.1)	4.6 (1.4-14.6)	14.6 (9.7-21.3)	
Percent reported oral sex with new clients last week	8.2 (6.4-10.5)	7.7 (4.4-13.3)	0.3 (0.04-2.3)	18.2 (13.0-24.8)	12.4 (9.4-16.0)	9.3 (5.2-16.0)	9.3 (5.8-14.4)	
Percent reported vaginal sex with regular clients last week	97.5 (96.0-98.5)	85.0 (79.7-89.1)	76.1 (69.9-81.4)	86.0 (81.3-89.6)	72.2 (71.4-82.2)	65.7 (52.6-76.9)	80.1 (71.1-86.9)	
Percent reported anal sex with regular clients last week	27.2 (24.0-30.7)	6.5 (3.9-10.5)	0.6 (0.2-2.6)	6.4 (3.8-10.5)	11.1 (8.2-14.8)	5.6 (1.9-14.5)	17.2 (11.9-24.2)	
Percent reported oral sex with regular clients last week	14.1 (11.6-16.9)	3.9 (2.2-6.6)	1.0 (0.3-2.9)	15.6 (11.1-21.5)	13.3 (10.0-17.4)	9.3 (4.8-17.3)	3.3 (1.4-7.6)	

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent reported anal sex with new or regular clients last week	32.7 (29.2-36.3)	11.4 (8.0-16.1)	1.3 (0.5-3.4)	12.4 (8.9-17.0)	11.8 (8.9-15.4)	5.6 (1.9-14.5)	27.8 (21.2-35.6)
Percent reported oral sex with new or regular clients last week	20.5 (17.6-23.7)	9.2 (5.6-14.7)	1.0 (0.3-2.9)	30.6 (23.9-38.2)	15.5 (12.4-19.3)	10.2 (5.6-17.4)	10.6 (6.1-16.3)
Percent reported non-penetrative sex in the last week	28.1 (24.9-31.6)	26.8 (21.1-33.4)	13.4 (8.9-19.7)	11.8 (6.9-19.4)	28.5 (21.8-36.3)	40.7 (25.8-57.7)	25.8 (17.5-36.4)

**Note:** Where responses from the total number of respondents were not available, ‘n’ is inserted in the appropriate cell.

The female sex workers also reported group sex in the last month. More than two-fifths of hotel-based sex workers in Dhaka (44.9 percent) and Sylhet (44.1 percent) and street-based sex workers in Khulna (43.3 percent) reported having group sex. About 30 percent of the street-based sex workers in Dhaka and Chittagong reported the same. The average number of group sex partners varied from 2 to 3 (Table 4.6).

**Table 4.6: Group Sex**

Indicators % (95 % CI)	Brothel	Street	Street	Street	Hotel	Hotel	Hotel
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent reported group sex last month	18.5 (15.7-21.5)	30.8 (25.4-36.7)	29.9 (24.8-35.6)	43.3 (38.3-48.5)	44.9 (38.7-51.2)	19.4 (13.1-27.8)	46.1 (32.5-50.2)
Mean number of clients in group sex in last month (Denominator is who reported group sex last month)	2.8 (2.7-3.0) M=3 n=126	3.4 (3.1-3.7) M=3 n=141	3.5 (3.3-3.7) M=3 n=94	2.6 (2.5-2.7) M=2 n=136	3.2 (3.0-3.4) M=3 n=151	2.9 (2.5-3.2) M=3 n=21	2.9 (2.7-3.2) M=3 n=62

**Note:** M refers to median. Where responses from the total number of respondents were not available, ‘n’ is inserted in the appropriate cell.

### ***Knowledge of and access to condoms***

Almost all the female sex workers in the selected locations recognized male condoms, although approximately 11.5 percent of the street-based sex workers in Khulna and less than one percent of the street-based sex workers in Dhaka had never used condoms.

An overwhelming majority of the brothel- and hotel-based sex workers thought that condoms were easily available. Access to condoms seemed to be somewhat difficult among the street-based sex workers, particularly in Khulna where about two-fifths of the respondents reported difficulty accessing condoms. Among the multiple responses given by sex workers in Khulna who reported access to condoms as difficult, three quarters (75.4 percent) of them “felt ashamed to buy condoms” while about two-thirds (64.9 percent) said the “cost was high” and more than two-fifths (42.1 percent) were “not willing to carry” condoms.

As to the various sources from which sex workers received condoms during the past month, three-quarters (76.5 percent) of the brothel-based sex workers cited “shop” while about one-half (48.1 percent) of them cited “NGO worker” and more than one-quarter (28.6 percent) mentioned “clients.”

The hotel-based sex workers (87 percent to 100 percent) primarily obtained condoms on the hotel premises, although more than one-third in Dhaka cited “clients and “NGO workers” as the second and third most important sources. NGOs appeared as a prominent source (60.9 percent) for delivering condoms to Sylhet hotels; in Chittagong, however, not even one-fifth (17.6 percent) reported receiving supplies from NGOs.

The street-based sex workers in Dhaka mostly collected condoms from shops (60.7 percent) and pharmacies (49.5 percent) although about two-fifths (42.2 percent) reported NGO and clients (36.9 percent) as their source of condoms during the last month. NGOs were the single largest provider to the street-based sex workers in Chittagong (86.0 percent) and in Khulna (59.2 percent). About two-fifths (38.4 percent) in Khulna also collected condoms from their pimps (Table 4.7).

**Table 4.7: Knowledge of, Ever Use of and Access to Condoms**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent recognized male condom	100	100	100	99.7 (97.7-100.0)	100	100	100
Percent of sex workers who have ever used a male condom	100	99.2 (97.6-99.8)	100	88.5 (84.4-91.7)	100	100	100
Percent of sex workers who have used a male condom during last sex act (Denominator is who ever used condoms)	68.0 (64.4-71.4)	76.5 (71.7-80.8) n=435	84.4 (78.8-88.7)	37.6 (32.0-43.5) n=277	39.5 (33.2-46.2)	28.7 (20.5-38.7)	71.5 (64.4-77.8)
Percent of sex workers showed a male condom to interviewers	60.9 (57.2-64.5)	73.2 (67.5-78.2)	87.9 (83.6-91.2)	35.1 (29.1-41.7) n=313	31.5 (24.3-39.9) n=336	35.2 (28.7-42.3)	57.6 (46.6-67.9)
Sources of condom in last month (Denominator is who used condoms in last month)	n=682	n=431		n=255			
Shop	76.5 (73.2-79.6)	60.7 (53.4-67.5)	16.9 (11.2-24.7)	26.7 (20.2-34.3)	0.7 (0.2-2.9)	0	1.3 (0.2-9.3)
Pharmacy	2.3 (1.4-3.8)	49.5 (42.4-56.6)	15.9 (10.8-22.8)	18.8 (14.2-24.6)	1.2 (0.5-3.2)	0.9 (0.1-8.8)	0
Health center	0.6 (0.2-1.6)	3.8 (2.0-6.9)	0	17.3 (11.5-25.2)	1.3 (0.5-3.4)	0	1.9 (0.6-6.0)
Bar/guest house/hotel	0	1.3 (0.4-4.6)	0	14.9 (10.2-21.2)	97.6 (95.3-98.8)	100	87.4 (80.3-92.2)
Friends	0.4 (0.1-1.4)	24.5 (18.5-31.7)	6.7 (3.9-11.2)	4.3 (2.5-7.4)	1.2 (0.4-3.3)	0	1.9 (0.5-8.2)
Clients	28.6 (25.3-32.1)	36.9 (30.3-44.1)	14.3 (9.4-21.3)	43.9 (36.3-51.9)	35.2 (29.7-41.1)	22.2 (16.1-29.9)	12.6 (7.7-19.8)
Pimps	0.1 (0.02-1.0)	16.2 (11.9-21.8)	1.6 (0.6-4.4)	38.4 (30.5-47.1)	1.0 (0.3-3.1)	1.9 (0.4-8.1)	27.2 (18.6-37.8)
NGO workers	48.1 (44.4-51.9)	42.2 (35.7-48.8)	86.0 (80.2-90.3)	59.2 (51.8-66.3)	34.3 (27.2-42.1)	17.6 (6.8-38.3)	60.9 (52.9-68.5)

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
No condom bought last month	0	0.7 (0.2-2.1)	0	2.7 (1.3-5.7)	0	0	0
Others*	5.7 (4.2-7.7)	0	0	0.8 (0.2-3.0)	0	0	0
Percent of sex workers with easy access to condoms	98.8 (97.7-99.4)	86.6 (81.7-90.4)	96.8 (93.6-98.5)	62.1 (55.8-68.0)	94.5 (90.2-97.0)	97.2 (90.5-99.2)	100
Percent of sex workers with easy access to condoms (Denominator is who used condoms in last month)	n=682	n=431		n=255			
Yes	99.0 (97.9-99.5)	88.0 (83.2-91.5)	96.8 (93.6-98.5)	76.5 (69.2-82.5)	94.5 (90.2-97.0)	97.2 (90.5-99.2)	100
No	1.0 (0.5-2.1)	11.0 (7.6-15.6)	3.2 (1.5-6.5)	22.4 (16.5-29.6)	4.8 (2.5-8.9)	2.8 (0.8-9.4)	
Reasons for not having easy access to condoms (Denominator is who reported not having easy access to condoms)	N=7	n=46	n=10	n=57	n=19	n=3	
Cost high	57.1 (15.1-90.9)	63.8 (43.2-80.3)	70.0 (26.1-93.9)	64.9 (48.8-78.2)	10.4 (2.3-36.3)	0	0
Shop/pharmacy is far away	0	64.1 (45.5-79.2)	60.0 (23.7-87.9)	8.8 (3.1-22.4)	0	0	0
Shop/pharmacy is closed	28.6 (4.2-78.5)	40.2 (24.6-58.1)	50.0 (16.8-83.2)	8.8 (3.6-19.7)	0	0	0
Feel ashamed to buy	0	27.6 (15.5-44.2)	0	75.4 (61.4-85.6)	47.7 (15.8-81.5)	100	0
Do not know where to buy	14.3 (1.0-74.3)	0	0	0	0	0	0
Not willing to carry	0	11.2 (3.3-32.0)	10.0 (0.7-62.9)	42.1 (26.7-59.2)	53.0 (27.5-77.0)	66.7 (0.3-99.9)	0
Others**	42.9 (9.1-85.0)	5.0 (1.1-20.0)	20.0 (3.0-67.0)	15.8 (8.6-27.3)	58.6 (30.7-81.8)	66.7 (0.3-99.9)	0

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** aunt, mistress, elder sister, landlady, mother, *babu*, guard.

\*\***Others stated:** NGO worker did not give condoms; *sardarni* did not provide condoms, not available from the NGO.

### Use of condoms

In general, the female sex workers in the brothels and hotels in all locations requested their clients, both new and regular, to use condom in last week. The street based respondents in Khulna seemed rather reluctant to request their clients to use condoms, where about one-fifth (17.7 percent) and one-third (32.5 percent) did neither approach their new nor their regular clients, respectively, to use condoms. However, the use of condoms during last vaginal sex with new clients is notably high among the street-based sex workers in Chittagong, while nearly one-half of the street based sex workers in Khulna as well as two-thirds of the hotel based sex workers in Dhaka and Chittagong did not use condom during their last sex with new clients. The use of condoms during last vaginal sex is comparatively lower among all groups of female sex workers (**Table 4.8**).

**Table 4.8: Condom Use in Last Vaginal and Anal Sex with Clients and Non-commercial Partners**

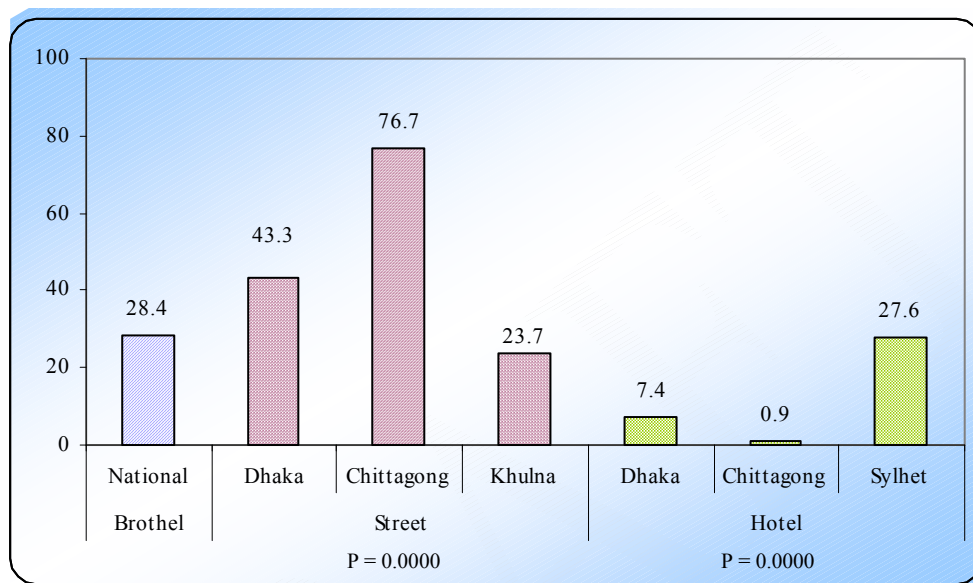
Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent requested new clients to use condoms last week (Denominator is who had new clients last week)	n=637	n=399	n=289	n=266	n=330	n=102	n=145
Approached all	99.4 (98.3-99.8)	88.6 (84.2-91.9)	95.5 (91.8-97.6)	63.5 (56.1-70.3)	79.6 (73.9-84.4)	77.5 (54.8-90.7)	98.6 (94.4-99.7)
Approached some	0.5 (0.2-1.5)	8.4 (6.0-11.6)	3.1 (1.5-6.4)	18.8 (13.6-25.4)	18.0 (13.8-23.0)	21.6 (8.8-43.9)	1.4 (0.3-5.6)
Approached none	0.2 (0.02-1.1)	3.0 (1.6-5.7)	1.4 (0.5-3.7)	17.7 (13.3-23.1)	2.4 (1.0-5.5)	0.9 (0.1-9.2)	0
Condom use in last vaginal sex with new clients (Denominator is sex workers who reported new clients last week and had vaginal sex)	70.2 (66.5-73.6) n=634	81.2 (76.1-85.5) n=395	91.3 (86.0-94.7) n=287	50.9 (44.7-57.1) n=265	39.9 (33.5-46.7) n=326	36.3 (24.5-50) n=102	71.3 (65.7-79.4) n=145
Condom use in last anal sex with new clients (Denominator is sex workers who reported new clients and had anal sex last week)	48.0 (36.7-59.5) M=75	55.5 (35.2-74.1) n=36	100 n=2	41.7 (19.6-67.7) n=24	15.7 (5.0-39.5) n=32	20 (0.2-97.2) n=5	77.3 (53.1-91.1) n=22
Percent requested regular clients to use condom last week (Denominator is who had regular clients last week)	n=669	n=384	n=239	n=274	n=271	N=72	n=121
Approached all	99.3 (98.2-99.7)	82.3 (76.2-87.1)	93.3 (88.1-96.3)	39.1 (32.4-46.2)	67.3 (60.5-73.5)	59.7 (37.7-78.4)	74.4 (62.5-83.5)
Approached some	0.7 (0.3-1.8)	12.0 (8.5-16.6)	6.3 (3.4-11.2)	28.5 (23.4-34.2)	18.8 (14.2-24.5)	33.3 (17.6-53.9)	19.0 (11.8-29.3)
Approached none	0	5.7 (3.2-9.9)	0.4 (0.1-3.1)	32.5 (26.3-39.3)	13.9 (9.4-20.0)	6.9 (2.3-18.9)	6.6 (3.5-12.1)
Condom use in last vaginal sex with regular clients (Denominator is sex workers who reported regular clients last week and had vaginal sex)	45.6 (41.8-49.4) n=656	74.0 (67.8-79.4) n=381	82.0 (76.0-86.8) n=239	24.9 (19.9-30.7) n=269	32.8 (26.3-39.9) n=267	25.7 (16.6-37.5) n=70	54.2 (44.8-63.2) n=120
Condom use in last anal sex with regular clients (Denominator is sex workers who reported regular clients and had anal sex last week)	60.5 (53.3-67.4) n=185	87.3 (59.0-97.1) n=30	100 n=2	50.0 (27.0-73.0) n=20	0 n=34	16.7 (0.3-93.6) n=6	73.1 (49.8-88.1) n=26
Condom use in last vaginal or anal sex with non-commercial partner (Denominator is sex workers who reported non-commercial partners last month)	16.6 (12.2-22.1) n=223	55.9 (45.6-65.8) n=137	62.7 (54.7-70.1) n=161	1.0 (0.1-7.1) n=98	14.8 (9.6-22.1) n=132	20.8 (11.5-34.6) n=53	20.7 (13.3-30.7) n=92
At least one client used condoms in group sex last month (Denominator is sex workers who reported group sex last month)	73.0 (64.5-80.1) n=126	97.3 (92.7-99.0) n=141	97.9 (92.2-99.5) n=94	66.9 (57.7-75.0) n=136	86.2 (79.7-90.8) n=151	90.5 (64.5-98.0) n=21	89.8 (80.0-95.1) n=59

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Consistent use of condoms**

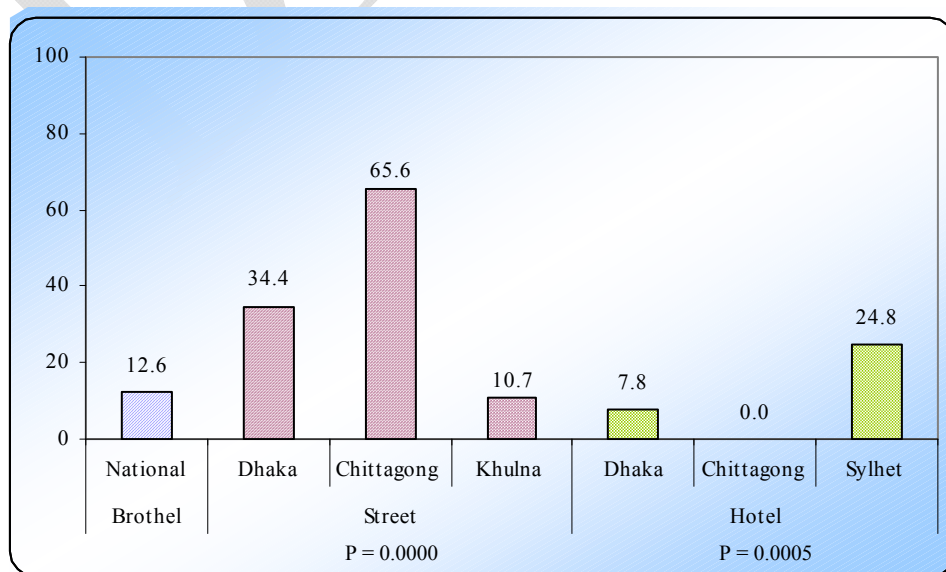
Consistent use of condoms during vaginal/anal sex with new clients during the past week was low among hotel-based sex workers in Dhaka (7.4 percent) and Chittagong (1.0 percent). However, reported consistent condom use by street-based sex workers was high in Chittagong as 76.7 percent reported always using condoms during the week preceding the survey. More than two-fifths (43.3 percent) of the same group in Dhaka and about one-quarter (23.7 percent) in Khulna reported consistent condom use during the same period (**Figure 4.2**).

**Figure 4.2: Consistent Use of Condoms in Vaginal or Anal Sex with New Clients in Last Week**



Consistent condom use during sex with regular clients in the past week was also reported to be high by the street based respondents in Chittagong (65.6 percent) followed by those in Dhaka (34.4 percent). A quarter (24.8 percent) of the hotel based respondents in Sylhet also reported similar condom use during the same period (**Figure 4.3**).

**Figure 4.3: Consistent Use of Condoms in Vaginal or Anal Sex with Regular Clients in Last Week**



Nearly one-fourth (26.3 percent) of the street-based sex workers in Khulna did not use condom at all with their new clients in the past week. It is also important to note that almost all hotel based sex workers in Chittagong (99 percent), Dhaka (91.2 percent) and Sylhet 72.4 percent), as well as 70.2 percent brothel-based sex workers occasionally used condom during last vaginal sex act with their new clients. Nevertheless, a significantly large proportion in brothel (56.8), street in Khulna (88.8 percent); and hotels in Dhaka (71.8 percent), Chittagong (56.6 percent) and Sylhet (39.1 percent) reported not to have used condoms with their non-commercial sex partners during the same period. (Table 4.9).

**Table 4.9: Condom Use in Vaginal or Anal Sex with Clients and Non-commercial Partners**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Frequency of condom use in vaginal or anal sex with new clients last week (Denominator is sex workers who reported new clients last week)	n=635	n=397	n=287	n=266	n=330	n=102	n=145
Always	28.4 (25.0-32.0)	43.3 (36.4-50.5)	76.7 (70.9-81.6)	23.7 (18.0-30.5)	7.4 (4.6-11.7)	0.9 (0.1-9.0)	27.6 (18.8-38.6)
Sometimes	70.2 (66.6-73.7)	53.2 (46.3-59.9)	22.3 (17.5-27.9)	50.0 (42.8-57.2)	91.2 (86.5-94.4)	99.0 (90.9-99.9)	72.4 (61.4-81.2)
Never	1.4 (0.7-2.7)	3.6 (1.9-6.7)	1.0 (0.3-3.3)	26.3 (21.2-32.2)	1.4 (0.4-4.3)	0	0
Frequency of condom use in vaginal or anal sex with regular clients last week (Denominator is sex workers who reported regular clients last week)	n=669	n=384	n=238	n=271	n=266	n=69	n=121
Always	12.6 (10.3-15.3)	34.4 (28.4-37.0)	65.6 (58.8-71.8)	10.7 (7.3-15.4)	7.8 (4.8-12.6)	0	24.8 (17.2-34.4)
Sometimes	86.0 (83.1-88.4)	58.4 (51.2-65.2)	33.6 (27.4-40.4)	50.9 (43.5-58.3)	84.3 (78.2-88.9)	97.1 (88.7-99.3)	65.3 (56.9-72.9)
Never	1.5 (0.8-2.8)	7.3 (4.3-12.0)	0.8 (0.2-3.5)	38.4 (31.4-45.9)	7.9 (5.0-12.2)	2.9 (0.7-11.3)	9.9 (5.7-16.8)
Frequency of condom use in oral sex with new clients last week (Denominator is sex workers who reported new clients last week)	n=53	n=33	0	n=55	n=38	n=10	n=14
Always	17.0 (8.9-30.0)	5.6 (1.1-23.4)	0	7.3 (2.6-18.9)	14.9 (5.7-33.9)	10.0 (0.7-62.9)	21.4 (5.9-54.0)
Sometimes	5.7 (1.8-16.7)	4.7 (1.0-20.4)	0	0	16.9 (6.5-37.4)	0	28.6 (9.6-60.1)
Never	77.4 (63.7-86.9)	89.6 (71.8-96.7)	0	92.7 (81.1-97.4)	68.2 (48.2-83.2)	90.0 (37.2-99.3)	50.0 (23.2-76.8)
Frequency of condom use in oral sex with regular clients last week (Denominator is sex workers who reported new clients last week)	n=96	n=19	n=3	n=49	n=45	n=10	n=5
Always	19.8 (12.9-29.2)	19.1 (5.9-47.3)	66.7 (0.3-99.9)	6.1 (1.8-18.9)	16.4 (6.6-35.0)	10.0 (0.9-58.9)	0



Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Sometimes	7.3 (3.5-14.7)	18.6 (4.6-52.1)	33.3 (0.1-99.7)	0	5.5 (1.7-16.3)	10.0 (0.6-66.4)	20.0 (0.8-88.9)
Never	72.9 (63.0-81.0)	62.3 (33.3-84.6)	0	93.9 (81.1-98.2)	78.2 (60.6-89.3)	80.0 (35.5-96.7)	80.0 (11.1-99.2)
Frequency of condom use in vaginal or anal sex with non-commercial partner last month (Denominator is sex workers who reported non-commercial partner last month)	n=222	n=137	n=161	n=98	n=132	n=53	n=92
Always	5.9 (3.4-9.9)	45.2 (35.0-55.8)	55.9 (47.3-64.1)	0	6.9 (3.8-12.5)	0	11.9 (6.1-21.9)
Sometimes	37.4 (31.2-44.0)	23.1 (15.6-32.7)	18.0 (11.4-27.3)	11.2 (5.7-20.8)	21.2 (13.9-30.9)	43.4 (29.8-58.0)	48.9 (34.4-63.7)
Never	56.8 (50.1-63.2)	31.7 (22.0-43.3)	26.1 (18.8-35.0)	88.8 (79.2-94.3)	71.8 (62.2-79.8)	56.6 (42.0-70.2)	39.1 (27.1-52.6)

Note: Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### Condom breakage

Condom breakage during the last month was largely reported by hotel-based sex workers in Dhaka (59.5 percent), Chittagong (58.3 percent) and Sylhet (37.1 percent); and by street-based respondents in Dhaka (39.5). One-quarter (24.9 percent) of the brothel-based respondents and one-fifth (21.0 percent) of the street-based respondents in Chittagong reported condom breakage during sex in last month (Table 4.10).

**Table 4.10: Condom Breakage**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent of sex workers who had a condom break last month	24.9 (21.8-28.3)	39.5 (33.6-45.7)	21.0 (17.0-25.7)	13.1 (9.4-17.8)	59.5 (51.5-67.0)	58.3 (38.7-75.7)	37.1 (27.9-47.3)
Percent of sex workers who had a condom break last month (Denominator is who have used condom last month)	24.9 (21.9-28.3) n=682	40.1 (34.2-46.4) n=431	21.0 (17.0-25.7)	16.1 (11.7-21.7) n=255	59.5 (51.5-67.0)	58.3 (38.7-75.7)	37.1 (27.9-47.3)

Note: Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### Female condoms

Among the female sex workers in all geographical locations and among all groups, 60 percent to 73 percent could recognize a female condom. In Khulna, almost 80 percent of them failed to recognize such condoms. However, a vast majority of the female sex workers had not used female condoms, although one-quarter (24.7 percent) of the hotel-based sex workers in Sylhet used them. Nevertheless, almost one-half of the sex workers who had ever used female condoms did not like them (Table 4.11).

**Table 4.11: Female Condoms**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent recognized female condom	50.4 (46.6-54.1)	62.9 (55.9-69.4)	72.6 (64.5-79.5)	19.8 (15.1-25.4)	50.3 (44.0-56.6)	60.2 (46.4-72.5)	69.5 (60.3-77.4)
Percent of sex workers who have ever used a female condom	16.1 (13.5-19.1)	17.3 (13.4-22.1)	18.5 (14.0-23.9)	3.8 (2.1-6.8)	13.9 (10.3-18.7)	14.8 (9.0-23.4)	24.7 (18.1-32.6) n=150
Percent of sex workers who have ever used a female condom (Denominator is who recognized female condom)	32.0 (27.2-37.1) n=344	27.5 (21.7-34.3) n=279	25.4 (19.0-33.1) n=228	19.4 (11.3-31.1) n=62	27.7 (20.4-36.4) n=169	24.6 (14.6-38.4) n=65	35.6 (26.7-45.6) n=104
Percent liked female condom (Denominator is who has ever used female condom)	56.4 (46.8-65.5) n=110	23.8 (13.8-38.1) n=79	55.2 (43.8-66.0) n=58	25.0 (4.7-69.2) n=12	51.7 (37.0-66.1) n=44	56.3 (39.3-71.9) n=16	40.5 (25.1-58.1) n=37

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

### *Occupational profile of clients*

In general, businessmen (88.1 percent) are the main clients of brothel-based sex workers. Among their other clients, rickshaw pullers/van drivers, day laborers, students and the unemployed are prominent.

Businessmen, rickshaw pullers/van drivers and day laborers are the major clients of street-based sex workers. In Khulna, a majority (83.9 percent) of the street-based sex workers reported businessmen as their major clients, followed by day laborers (56.6 percent), rickshaw pullers/van drivers (56.6 percent) and students (22.2 percent).

Businessmen (90 percent to 98 percent) in the last week ranked highest as clients among hotel-based groups in all locations followed by service holders in Dhaka (72.2 percent), Chittagong (70.4 percent) and Sylhet (47.0 percent). Members of law enforcement agencies ranked third in Dhaka (51.6 percent) and Chittagong (56.5 percent) hotels. In Sylhet hotels, students and service holders ranked second and third. Students appear to rank as an important group visiting different types of sex workers and future program interventions should consider addressing them (**Table 4.12**).

**Table 4.12: Occupational Profile of Clients**

Indicators % (95% CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Don't know clients' profile	6.6 (5.0-8.7)	1.7 (0.6-4.4)	0	1.0 (0.3-2.9)	3.2 (1.5-6.7)	0	0
Categories of clients (Denominator is who knew clients' profile)	n=638	n=430	n=314	n=311	n=326	n=108	n=151
Student	30.4 (27.0-34.1)	29.6 (23.5-36.5)	20.1 (15.5-25.6)	22.2 (17.3-28.0)	45.3 (39.7-50.9)	18.5 (10.9-29.8)	47.0 (38.9-55.2)
Rickshaw pullers/ van drivers	41.1 (37.3-44.9)	61.8 (53.5-69.5)	61.5 (53.8-68.6)	56.6 (49.7-63.3)	11.7 (7.5-17.7)	9.3 (3.6-21.8)	23.2 (16.5-31.5)
Law enforcement agencies	17.6 (14.8-20.7)	17.7 (13.3-23.1)	21.3 (15.6-28.4)	6.8 (4.1-11.0)	51.6 (46.9-56.3)	56.5 (44.8-67.5)	33.8 (23.6-45.7)

Indicators % (95% CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Service	16.0 (13.3-19.1)	34.5 (27.7-41.9)	30.6 (23.1-29.2)	33.4 (26.1-41.7)	72.2 (63.9-79.3)	70.4 (58.5-80.0)	47.0 (37.6-56.6)
Businessmen	88.1 (85.3-90.4)	58.9 (51.5-66.0)	64.7 (55.8-72.6)	83.9 (78.1-88.4)	97.2 (94.4-98.6)	98.2 (92.5-99.6)	90.1 (84.4-93.8)
Daily laborer	37.2 (33.5-41.0)	43.0 (36.0-50.3)	53.2 (45.6-60.7)	57.6 (50.9-63.9)	7.2 (4.5-11.1)	6.5 (2.6-15.3)	10.6 (6.6-16.5)
Unemployed	22.3 (19.2-25.7)	41.5 (35.6-47.7)	43.0 (34.5-51.9)	13.8 (9.8-19.1)	3.9 (2.3-6.6)	6.5 (3.1-13.0)	17.2 (11.5-25.1)
Driver	35.0 (31.3-38.8)	6.4 (3.7-10.8)	4.5 (2.1-9.3)	15.8 (11.2-21.7)	8.2 (5.1-13.0)	33.3 (21.5-47.7)	2.0 (0.4-8.5)
Others*	3.0 (1.9-4.6)	6.1 (3.3-10.8)	0.6 (0.2-3.0)	5.5 (3.1-9.6)	2.4 (1.2-4.8)	0.9 (0.1-8.0)	24.5 (17.6-33.0)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** foreigner, shopkeeper, guard, hooker, laborer, drug peddler, land owner, overseas migrant, Hotel staff.

### Reported injecting drugs by clients

Approximately, one-tenth of the street-based and hotel-based sex workers in Dhaka reported that their clients (new or regular) injected drugs. Moreover, 11.3 percent of the hotel-based sex workers in Chittagong reported that their non-commercial partners injected drugs (Table 4.13).

**Table 4.13: Reported Injection of Drugs by Clients and Non-commercial Partners**

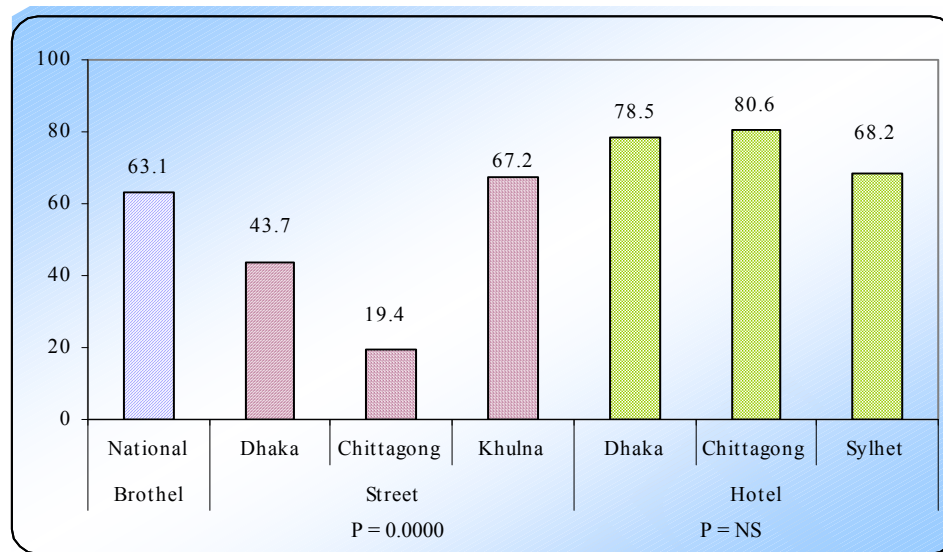
Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent of SW that knew their clients (new or regular) inject drugs	2.9 (1.9-4.5) n=681	10.7 (7.5-15.1) n=437	5.7 (3.0-10.7)	1.0 (0.1-6.7)	9.3 (5.9-14.3) n=335	5.7 (1.2-22.7) n=106	2.6 (0.6-11.7)
Percent of SW that knew their non-commercial clients inject drugs (Denominator is who had non-commercial partners last month)	0	6.3 (3.0-13.0) n=136	3.1 (1.3-7.2) n=161	5.1 (2.2-11.6) n=98	4.1 (1.7-9.3) n=132	11.3 (5.6-21.6) n=53	3.2 (1.0-9.5) n=93

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

## 4.3 STDs and HIV/AIDS Issues

### Self-reported STIs and care-seeking behavior

Except the street-based sex workers in Dhaka and Chittagong, in all other locations and groups 63 percent to 81 percent reported experiencing at least one symptom of STIs during the last year. Street-based sex workers in Dhaka (about two-fifths) and Chittagong (one-fifth) reported the same. Prevalence of STIs seemed to be higher among the hotel-based sex workers in all locations (Figure 4.4).

**Figure 4.4: Percentage Reporting At Least One STI Symptom in Last Year**

Almost all hotel-based sex workers in Sylhet (97.1 percent) and Dhaka (83.5 percent) opted for formal medical treatment. A larger proportion (73.8 percent) of brothel-based sex workers and street-based sex workers in Chittagong (83.6 percent) opted for formal medical treatment as their first choice during their last occurrence of an STI symptom. About one-half of the street-based sex workers in Dhaka and Khulna did not seek any formal treatment. Female sex workers usually visited NGO clinics, pharamasists and private doctors for treatment.

On average, a female sex worker of all groups waited for 5 to 10 days before seeking treatment for their last STI. The average cost of STI treatment as reported by brothel-based sex workers was Taka 239, whereas a street-based sex worker in Dhaka spent an average of Taka 249 followed by Taka 195 in Chittagong and Taka 104 in Khulna. Hotel-based sex workers spent quite a lot for STI treatment, the highest being Taka 1,037 in Chittagong. This was followed by Taka 508 in Dhaka and Taka 239 in Sylhet (Table 4.14).

**Table 4.14: Self-reported STIs and Health Care-seeking Behavior**

Indicators % (95 % CI)	Brothel		Street		Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent of sex workers who knew symptoms of STIs							
Vaginal discharge	31.3 (28.0-34.9)	59.0 (51.6-66.1)	52.2 (44.5-59.8)	27.1 (21.2-33.9)	57.7 (51.3-63.9)	78.7 (70.5-85.1)	74.8 (66.7-81.5)
Smelly discharge	54.9 (51.1-58.6)	42.8 (36.5-49.2)	49.4 (42.8-55.9)	22.9 (18.6-27.9)	47.4 (39.0-55.9)	65.7 (54.7-75.3)	52.3 (44.5-60.1)
Genital ulcers/sores	72.9 (69.5-76.1)	76.7 (71.1-81.4)	80.3 (73.1-85.9)	50.6 (43.6-57.7)	73.2 (67.3-78.3)	74.1 (61.9-83.4)	68.2 (59.5-75.8)
Lower abdominal pain	24.5 (21.4-27.8)	43.8 (37.1-50.6)	38.5 (31.6-46.0)	62.1 (55.6-68.2)	49.7 (42.6-56.8)	76.9 (69.5-82.9)	40.4 (31.2-50.3)
Did not know	0	7.2 (4.8-10.8)	1.9 (0.8-4.7)	16.9 (12.4-22.6)	7.7 (4.9-11.9)	0.9 (0.1-9.6)	5.3 (2.7-10.1)
Others*	14.2 (11.8-17.0)	6.5 (4.1-10.3)	0	19.1 (14.4-24.9)	9.7 (6.0-15.3)	19.4 (11.0-32.0)	15.2 (9.2-24.2)
Percent of sex workers who reported painful/ smelly discharge from vagina in last year	35.7 (32.2-39.4)	16.7 (12.7-21.6)	4.2 (2.3-7.3) n=313	24.2 (18.9-30.4)	61.2 (53.4-68.5) n=336	55.6 (39.7-70.4)	56.9 (44.6-68.5)

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent of sex workers reported pain in lower stomach area that was not associated with period or a stomach upset	25.8 (22.6-29.2)	22.1 (17.3-27.8)	8.6 (6.2-11.8)	51.6 (46.0-57.2)	58.4 (51.0-65.4)	60.2 (46.8-72.2)	55.6 (44.0-66.7)
Percent of sex workers reported genital warts/ulcer/sore in last one year	17.4 (14.8-20.5)	16.1 (11.8-21.6)	7.0 (4.8-10.1)	30.3 (24.4-36.8)	38.9 (31.9-46.3)	39.8 (32.7-47.4)	27.2 (19.9-35.9)
Percent of sex workers reported at least one STI symptom last year	63.1 (59.4-66.7)	43.7 (37.4-50.3)	19.4 (16.2-23.2)	67.2 (61.3-72.6)	78.5 (72.9-83.3)	80.6 (64.2-90.6)	68.2 (57.2-77.5)
Percent of sex workers who sought formal medical treatment as their first choice in last STI symptom in last year (Denominator is sex workers who had symptoms in the last year)	73.8 (69.4-77.7) n=431	51.5 (43.5-59.5) n=191	83.6 (72.4-90.9) n=61	47.4 (39.2-55.7) n=211	83.5 (77.5-88.1) n=268	63.2 (53.7-71.7) n=87	97.1 (91.2-99.1) n=103
First choice of last STI treatment (Denominator is who reported STI in last year)	n=431	n=191	n=61	n=211	n=268	n=87	n=103
Hospital	0.7 (0.2-2.1)	2.4 (0.8-6.6)	1.6 (0.2-11.6)	9.5 (5.5-15.9)	0.9 (0.3-3.2)	0	2.9 (0.6-12.2)
Pharmacy	17.2 (13.9-21.0)	35.8 (28.2-44.2)	9.8 (4.4-20.6)	37.0 (29.4-45.3)	1.0 (0.4-2.9)	12.6 (5.6-25.9)	0
Private doctor	18.6 (15.2-22.5)	24.2 (18.5-31.1)	14.8 (7.4-27.3)	3.3 (1.6-6.7)	10.1 (6.8-14.6)	32.2 (23.9-41.8)	9.7 (5.1-17.6)
Private clinic	4.9 (3.2-7.4)	0	0	0	7.5 (4.5-12.2)	11.5 (6.6-19.2)	4.9 (2.1-10.8)
NGO clinic	49.7 (44.9-54.4)	25.0 (18.1-33.3)	67.2 (55.1-77.4)	34.6 (26.8-43.3)	64.9 (58.3-71.1)	19.5 (12.6-29.1)	79.6 (69.9-86.8)
Traditional healer	0.9 (0.3-2.5)	0	3.3 (0.8-12.6)	7.6 (4.7-12.1)	1.3 (0.4-4.2)	2.3 (0.5-10.1)	0
Advice/treatment from friends	0	0.5 (0.1-3.6)	0	0	0	0	0
Self-medication	1.4 (0.6-3.1)	5.3 (2.8-9.8)	0	5.2 (2.8-9.6)	0	1.1 (0.1-10.7)	0
Did not seek treatment	6.7 (4.7-9.5)	6.8 (3.3-13.8)	3.3 (0.8-12.3)	2.8 (1.1-7.0)	14.2 (10.0-19.6)	20.7 (13.2-30.9)	2.9 (0.9-8.8)
Percent of sex workers who sought formal medical treatment as their first choice during last STI symptom in last year (Denominator is sex workers who had symptoms and sought treatment in the last year)	79.1 (74.8-82.8) n=402	55.3 (47.1-63.3) n=178	86.4 (75.0-93.1) n=59	48.8 (40.6-57.1) n=205	97.2 (94.0-98.8) n=227	79.7 (67.9-87.9) n=69	100
Mean waiting days for last STI treatment (Denominator is sex workers who sought treatment in the last year)	5.2 (4.2-6.2) M=3 n=402	8.6 (6.6-10.5) M=4 n=178	6.0 (2.9-9.1) M=4 n=59	5.6 (4.3-6.8) M=4 n=203	7.7 (6.4-8.9) M=7 n=226	6.8 (4.8-8.8) M=5.5 n=68	9.7 (8.1-11.3) M=7.5 n=98
Mean expenditure (in Taka) in last STI treatment last year (Denominator who sought treatment last year)	239.1 (173.5-304.7) M=96 n=377	248.7 (198.7-298.6) M=215 n=178	195.0 (130.3-259.7) M=96 n=59	104.3 (91.7-116.8) M=96 n=200	508.2 (312.1-704.2) M=96 n=225	1036.9 (605.4-1468.4) M=650 n=67	239.1 (168.1-310.1) M=96 n=96
Percent of SW reported to visit NGO, STI clinic last	8.8	9.6	13.4	21.3	35.6	9.3	36.4

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
month	(6.9-11.2)	(6.1-14.8)	(9.2-19.0)	(15.9-28.0)	(30.6-40.9)	(5.5-15.2)	(27.3-46.6)
Name of clinics visited (Denominator is who visited STI clinics last month)	n=60	n=41	n=42	n=67	n=117	n=10	n=82
BWHC	3.3 (0.8-12.8)	0	0	0	33.9 (22.9-46.8)	10.0 (0.6-67.0)	1.8 (0.2-12.5)
Modhumita (BAP)	0	10.6 (3.9-25.9)	78.6 (59.7-90.1)	0	97.4 (92.8-99.1)	0	61.8(47.8- 74.1)
Marie Stopes	0	18.5 (7.6-38.4)	0	35.8 (21.7-53.0)	1.3 (0.2-9.4)	0	0
HELP	0	0	0	0	0	90.0 (32.9-99.4)	0
SAARD	0	0	0	7.5 (3.1-16.7)	0	0	21.8 (12.9-34.6)
Sylhet Jubo Academy	0	0	0	0	0	0	9.1 (3.6-20.9)
Family Health Care	0	0	0	0	0	0	3.6 (0.9-13.8)
Hetoishi Bangladesh	0	0	0	0	0	0	1.8 (0.2-12.9)
Smiling Sun	0	5.5 (1.5-18.3)	2.4 (0.3-17.5)	1.5 (0.2-10.3)	0	0	0
YPSA	0	0	19.1 (8.5-37.4)	0	0	0	0
PIACT Bangladesh	1.7 (0.2-11.5)	42.7 (22.4-65.7)	0	50.8 (36.2-65.2)	0	0	0
Durjoy Nari Shongho	0	15.6 (5.7-36.3)	0	1.5 (0.2-10.0)	0	0	0
Ashor	0	0	0	1.5 (0.2-10.6)	0	0	0
World Vision	0	0	0	1.5 (0.2-10.9)	0	0	0
Care	5.0 (1.6-14.8)	7.2 (2.2-20.9)	0	0	0	0	0
PSTC	55.0 (42.0-67.4)	0	0	0	0	0	0

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**\*Other stated:** itching, burning pain in vaginal area, irregular period, AIDS, weakness, dark circles.

### ***Knowledge about modes of HIV transmission***

Knowledge about HIV/AIDS was universal among all groups of female sex workers in all locations. More than 95 percent in most locations also knew that condom use was a mode of prevention. Only about one-fourth of the street-based sex workers in Khulna and 16.5 percent of the hotel-based sex workers in Dhaka did not have this knowledge. The knowledge that avoidance of sharing needles/syringes was a mode of prevention was also high among all the groups and locations except the street-based respondents in Khulna, where it was lower (57.7 percent). Although the overall knowledge of modes of transmission, in general, was good among female sex workers, misconceptions regarding the same prevailed among a smaller proportion of women. These misconceptions were noticeably high among the street-based respondents of Khulna, where 47.6 percent believed that HIV could be transmitted by mosquito bites and another 36.7 percent by sharing food with an infected person. About one-third (31.5 percent) of the hotel-based sex workers in Chittagong believed that HIV can be

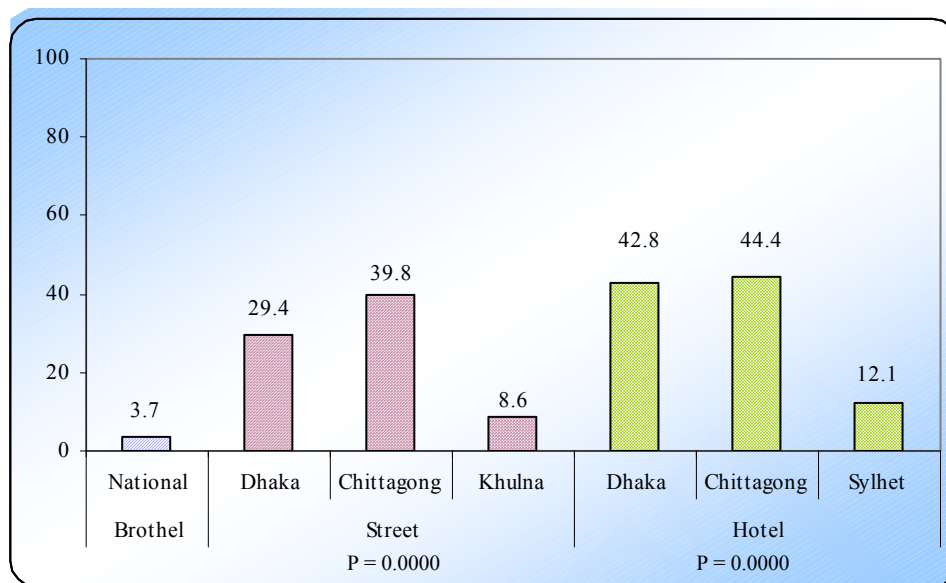
transmitted by mosquito bites and one-third (34.7 percent) in Sylhet believed that HIV could be transmitted by sharing food with an HIV-infected person (**Table 4.15**).

**Table 4.15: Knowledge about Modes of HIV Transmission**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent reported to have heard about HIV/AIDS	99.9 (99.0-100.0)	98.8 (97.0-99.5)	100	98.7 (95.8-99.6)	100	100	100
Percent knew that condom use is a mode of prevention	99.4 (98.5-99.8)	96.2 (93.6-97.7)	98.7 (96.6-99.5)	76.8 (70.4-82.1)	83.5 (76.9-88.4)	95.4 (90.2-7.9)	95.4 (90.6-97.8)
Percent mentioned can reduce the risk of HIV/AIDS by using a condom properly every time	99.4 (98.4-99.8) n=682	96.0 (93.4-97.6)	98.7 (96.6-99.5)	77.0 (70.6-82.3) n=313	80.1 (72.9-85.9)	91.7 (87.3-94.6)	95.4 (90.6-97.8)
Percent knew that avoidance of sharing needle/syringe is a mode of prevention	97.4 (95.9-98.3)	86.3 (80.9-90.4)	87.6 (81.5-91.9)	57.7 (48.7-66.2) n=312	96.5 (94.1-97.9)	96.3 (88.3-99.9)	75.5 (65.5-83.3)
Percent mentioned can reduce the risk of HIV/AIDS by using a condom during anal sex	59.7 (55.9-63.3) n=682	77.0 (71.6-81.7)	87.3 (81.3-91.5)	34.5 (28.5-41.0) n=313	66.9 (58.6-74.2)	73.8 (61.2-83.4) n=107	73.7 (64.2-81.3) n=148
Percent knew that avoiding anal sex is a mode of prevention	57.7 (53.9-61.4)	71.2 (64.8-76.9) n=437	86.6 (80.7-90.9)	26.2 (20.1-33.4) n=313	68.9 (60.6-76.2)	50.0 (40.0-59.9)	69.3 (58.6-78.3) n=150
Percent believed that HIV can be transmitted by mosquito bites	29.0 (25.7-32.5)	15.2 (11.5-19.9)	9.6 (6.3-14.2)	47.6 (41.3-54.0) n=313	27.9 (22.9-33.4)	31.5 (21.9-42.8)	19.2 (13.4-26.7)
Percent believed that HIV can be transmitted by sharing food	16.4 (13.8-19.4)	29.2 (23.4-35.6)	26.1 (19.6-34.0)	36.7 (30.3-43.7) n=313	15.5 (11.4-20.7) n=334	17.6 (11.5-26.0)	34.7 (25.9-44.5) n=150
Percent knew that avoiding multiple sex is a mode of prevention	46.3 (42.6-50.0)	82.8 (78.0-86.7)	83.8 (78.6-87.9)	48.2 (39.6-57.0) n=313	63.3 (54.7-71.2)	53.7 (45.6-61.5)	78.7 (69.8-85.5) n=150
Percent believed that one can tell by looking at people whether they are infected with HIV	10.3 (8.2-12.8)	20.6 (16.0-26.2)	11.5 (7.4-17.3)	28.2 (21.7-35.7) n=312	6.7 (4.2-10.3) n=336	9.3 (5.4-15.4)	3.9 (1.9-8.2)

### ***Self-perception of risk***

Among the brothel-based sex workers only 3.7 percent perceived themselves to be at high risk of HIV/AIDS. They considered themselves at low or no risk mainly because their partners were clean and because they sometimes used condoms. Another 18.4 percent could not assess their risk at all (**Figure 4.5**).

**Figure 4.5: Percentage Perceiving Themselves To Be at High Risk**

A very small portion of the brothel based sex workers (3.7 percent) perceived themselves to be at high risk. About two-fifths (39.8 percent) of the street based sex workers in Chittagong and 29.4 percent in Dhaka considered themselves at high risk, while only 8.6 percent of the street based sex workers in Khulna did so. A little less than one-third (29.7 percent) of the same group in the same city could not assess their risk. More than two-fifths of the hotel based sex workers in Dhaka (42.8 percent) and Chittagong (44.4 percent) perceived themselves to be at high risk. Of the hotel-based sex workers in Sylhet, 14.8 percent were not sure of their risk of HIV/AIDS (Table 4.16).

**Table 4.16: Self-perception of Risk**

Indicators % (95 % CI)	Brothel	Street				Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)	
Sex workers who perceived themselves to be at high risk	3.7 (2.5-5.4) n=681	29.4 (22.7-37.2)	39.8 (31.3-49.0)	8.6 (5.4-13.4) n=313	42.8 (37.6-48.2)	44.4 (37.2-51.9)	12.1 (7.4-19.1) n=149	
Sex workers who perceived themselves to be at some risk	34.8 (31.3-38.5) n=681	29.0 (24.1-34.6)	26.4 (21.6-31.9)	18.9 (14.5-24.2) n=313	44.2 (39.2-49.3)	50.9 (41.8-60.0)	54.4 (44.5-63.9)	
Sex workers who perceived themselves to be at little or no risk	43.2 (39.5-46.9) n=681	36.0 (29.8-42.8)	32.8 (26.4-39.9)	42.8 (36.9-48.9) n=313	10.2 (6.9-14.7)	3.7 (0.9-12.9)	18.8 (12.4-27.4)	
Sex workers who could not assess their risk	18.4 (15.6-21.5) n=681	5.6 (3.3-9.1)	1.0 (0.3-3.0)	29.7 (25.0-34.9) n=313	2.8 (1.4-5.5)	0.9 (0.1-8.8)	14.8 (9.5-22.2)	

Note: Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

The majority of female sex workers perceived such risk mainly due to the nature of their work and because they did not use condoms regularly when having sex with clients (Table 4.17).



**Table 4.17: Rationale for Self-perception of Extent of Risk**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Reasons for self-perceived risk (Denominator is who considered themselves to be at high or medium risk)	n=262	n=266	n=208	n=86	n=288	N=103	n=99
Risky work	77.5 (72.0-82.2)	72.7 (63.7-80.2)	84.1 (77.7-89.0)	17.4 (10.0-28.6)	38.6 (32.0-45.6)	79.6 (61.4-90.6)	75.8 (63.5-84.9)
Frequent anal sex	0	1.7 (0.6-4.8)	0.5 (0.1-3.5)	0	1.5 (0.4-5.9)	0	7.1 (3.5-13.8)
Not using condoms	1.1 (0.4-3.5)	3.7 (1.7-8.0)	0.5 (0.1-3.4)	3.5 (1.1-10.4)	3.8 (1.9-7.4)	2.9 (0.6-13.4)	1.0 (0.1-7.2)
Irregular use of condoms	93.5 (89.8-95.9)	76.5 (67.1-83.9)	42.8 (34.4-51.6)	95.4 (88.3-98.2)	88.4 (82.3-92.6)	69.9 (58.6-79.2)	91.9 (81.9-96.6)
Share needles/injections	0.8 (0.2-3.0)	0.8 (0.2-3.4)	0	0	0.4 (0.1-1.7)	0	2.0 (0.5-7.9)
Others*	3.8 (2.1-7.0)	4.3 (2.1-8.5)	0.5 (0.1-3.6)	12.8 (7.0-22.2)	0.9 (0.2-3.5)	0.9 (0.1-8.4)	3.0 (0.9-9.5)
Reasons for not assessing themselves at little or no risk (Denominator is who perceived themselves at little or no risk)	n=294	n=151	n=103	n=134	n=38	n=4	n=28
Always use condoms	15.0 (11.3-19.6)	59.4 (49.0-69.0)	73.8 (62.6-82.6)	11.9 (7.3-18.8)	34.2 (19.8-52.4)	0	42.9 (22.8-65.6)
Partners are disease free	2.4 (1.1-4.9)	9.0 (5.2-15.2)	1.9 (0.5-7.8)	11.9 (7.5-18.5)	14.7 (5.9-32.3)	50.0 (2.4-97.7)	3.6 (0.5-22.5)
Partners are clean	28.2 (23.4-33.7)	20.0 (13.1-29.4)	6.8 (3.2-13.7)	46.3 (37.8-55.0)	23.4 (11.6-41.5)	50.0 (0.2-99.8)	17.9 (7.4-37.3)
Do not have sex with foreigners	1.0 (0.3-3.1)	12.5 (6.3-23.2)	1.9 (0.4-8.1)	0.7 (0.1-5.3)	24.6 (9.8-49.5)	25.0 (0.4-96.1)	21.4 (9.5-41.5)
Do not share needles/syringes	3.4 (1.8-6.2)	9.3 (5.2-16.0)	0	2.2 (0.7-6.9)	15.9 (5.8-36.6)	25.0 (0.4-96.1)	7.1 (1.8-24.5)
Irregular use of condoms	63.3 (57.6-68.6)	10.3 (6.3-16.4)	1.0 (0.1-6.9)	65.7 (57.3-73.2)	7.0 (1.5-27.3)	25.0 (0.1-99.6)	3.6 (0.4-25.6)
Others**	14.0 (10.4-18.4)	19.0 (13.3-26.4)	1.9 (0.5-7.7)	77.6 (70.5-83.5)	32.3 (17.7-51.4)	50.0 (2.4-97.7)	32.1 (16.9-52.4)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Other stated:** wash with hot water, sex with many people, inconsistent condom use, weak body, healthy body.

\*\* **Other stated:** stay neat and clean, did not receive blood, select partner carefully, wash with Savlon/water, no physical problem.

### **Measures taken to avoid STIs and HIV/AIDS**

The female sex workers reported that they usually washed genitalia with Dettol/urine and sometimes used condoms to avoid STIs and HIV. All groups in all locations also reported “sometimes use condoms” for the same purpose. However, among the brothel-based sex workers, only 7.0 percent reported that they consistently used condoms for avoiding STIs and HIV/AIDS. Consistent condom use as a mode of prevention of STIs and HIV/AIDS was largely reported by the street-based sex workers in Chittagong (54.0 percent) followed by the same group in Dhaka (28.2 percent) (**Table 4.18**).

**Table 4.18: Measures Taken to Avoid STIs and HIV**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Steps taken to avoid STIs							
Do nothing	0.3 (0.1-1.2)	3.2 (1.8-5.6)	0	13.7 (10.0-18.4)	11.9 (8.8-17.2)	16.7 (8.6-29.9)	5.9 (2.9-11.6)
Wash genitalia with Dettol/urine	70.7 (67.2-74.0)	60.0 (52.4-67.1)	33.4 (27.0-40.6)	39.8 (32.8-47.3)	58.7 (51.3-65.8)	62.0 (48.9-73.6)	47.7 (37.0-58.6)
Always use condoms	6.7 (5.1-8.9)	28.2 (22.4-34.8)	53.5 (47.2-59.7)	5.1 (3.0-8.4)	4.9 (2.9-8.2)	0	10.6 (6.2-17.4)
Sometimes use condoms	89.3 (86.8-91.4)	63.7 (57.2-69.7)	46.2 (40.1-52.4)	67.8 (62.0-73.2)	75.8 (69.5-81.1)	78.7 (63.6-88.7)	80.1 (71.7-86.6)
Take medicine	0	1.6 (0.7-3.5)	0.3 (0.04-2.4)	0.6 (0.2-2.6)	8.9 (6.2-12.6)	9.3 (2.9-25.9)	9.9 (5.3-17.9)
Others*	11.0 (8.8-13.6)	9.5 (6.7-13.2)	2.2 (1.1-4.6)	25.2 (20.3-30.7)	5.1 (2.8-9.2)	0.9 (0.1-7.9)	1.9 (0.6-6.0)
Steps taken to avoid HIV (Denominator who have heard about HIV)	n=682	n=433		n=310			
Do nothing	0	2.8 (1.5-5.5)	0.3 (0.04-2.3)	14.8 (11.0-19.8)	16.3 (11.9-21.9)	23.2 (12.4-39.1)	13.9 (8.7-21.5)
Wash genitalia with Dettol/urine	71.0 (67.4-74.3)	59.0 (51.6-65.9)	25.2 (20.4-30.6)	39.4 (32.3-46.8)	50.4 (43.2-57.5)	62.0 (46.6-75.4)	46.4 (35.2-57.9)
Always use condoms	6.6 (5.0-8.7)	28.6 (22.6-35.5)	54.1 (47.9-60.3)	5.2 (3.1-8.5)	4.6 (2.7-7.9)	0	10.6 (6.1-17.7)
Sometimes use condoms	90.6 (88.2-92.6)	63.7 (57.2-69.7)	45.2 (39.2-51.4)	68.4 (62.8-73.5)	75.6 (69.6-80.9)	75.9 (58.6-87.5)	75.5 (66.5-82.7)
Take medicine	0.1 (0.02-1.0)	2.8 (1.5-5.2)	1.0 (0.3-3.0)	0	6.1 (3.7-9.9)	0.9 (0.1-10.1)	7.9 (4.2-14.5)
Others**	10.1 (8.1-12.6)	10.0 (6.8-14.5)	1.6 (0.7-3.8)	23.9 (18.9-29.7)	5.9 (3.4-10.0)	1.9 (0.4-7.9)	7.3 (4.1-12.7)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** select partner, wash with soap, stay neat and clean, never use others' cloth, use Savlon cream, Masterd oil, reliable partner, work with hands, use condoms most of the time, and drank sufficient water.

\*\***Others stated:** healthy partner, used new syringe, took vitamins, took bath after sex work, and no anal sex.

### **Confidential HIV testing**

Knowledge about confidential HIV testing was not widespread among any of the groups of sex workers in any location: about one-quarter to one-third reported knowing about testing. In Sylhet, more than two-fifths (44.4 percent) of the hotel-based sex workers, which is the highest among all groups, reported knowing about testing. An overwhelming majority of the brothel-based sex workers and all the hotel-based sex workers in Chittagong were not aware of confidential HIV testing. In Sylhet, 13.9 percent of hotel based sex workers and in Chittagong, 10.8 percent of street based sex workers had ever tested for HIV. Of those who ever tested for HIV, the majority of the hotel-based sex workers tested for HIV within the past year and collected the test results (**Table 4.19**).

**Table 4.19: Confidential HIV Testing**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent of sex workers who knew whether HIV can be tested confidentially	9.7 (7.7-12.1)	32.7 (26.2-40.0)	25.8 (20.1-32.5)	25.2 (19.9-31.3)	16.2 (11.6-22.1)	0	44.4 (35.8-53.3)
Percent ever tested for HIV	4.3 (3.0-6.1)	7.6 (5.0-11.6)	10.8 (7.6-15.2)	6.1 (3.9-9.2)	8.0 (5.3-11.7)	0	13.9 (8.7-21.5)
Who asked you to have the test? (Denominator is who ever tested for HIV)	n=29	n=35	n=34	n=19	n=26	0	n=21
Self	24.1 (11.4-44.0)	18.6 (1.7-38.3)	50.0 (32.7-67.3)	15.8 (4.5-42.7)	68.2 (43.1-85.9)	0	57.1 (37.5-74.8)
Some one else*	75.9 (56.0-88.6)	78.3 (58.1-90.4)	50.0 (32.7-67.3)	79.0 (52.1-92.8)	31.8 (14.1-56.9)	0	42.9 (25.2-62.5)
Needed the test	0	3.1 (0.4-22.6)	0	5.3 (0.6-34.2)	0	0	0
Percent reported to have received the results of HIV test (Denominator is who ever tested for HIV)	71.4 (51.1-85.7) n=28	69.5 (44.5-86.6) n=35	55.9 (34.9-74.9) n=34	68.4 (42.0-86.7) n=19	91.4 (74.2-97.6)	0	95.2 (71.5-99.4) n=21
When did you have the most recent HIV test? (Denominator is who ever tested for HIV)	n=29	n=35	n=34	n=19	n=26	0	n=21
Within last one year	44.8 (27.2-63.9)	51.6 (27.8-74.7)	50.0 (31.8-68.2)	47.4 (23.9-72.1)	88.8 (70.0-96.4)	0	81.0 (58.4-92.8)
More than one year ago	55.2 (36.1-72.8)	48.4 (25.3-72.2)	50.0 (31.8-68.2)	52.6 (27.9-76.1)	11.3 (3.6-30.0)	0	19.1 (7.2-41.8)
Do not remember	0	0	0	0	0	0	0

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

\* friend, NGO worker.

#### 4.4 Incidences of Harassment

Almost one-half of the street-based sex workers in all locations reported being beaten in the last year, particularly by members of law enforcement agencies and by local *mastans* (extorshonist). The brothel- and hotel-based sex workers also reported harassment by different people. Roughly one-fifth (18.5 percent) of the brothel-based sex workers reported being harassed by their clients during the last year. Sixty to seventy five percent of street-based sex workers reported that, members of law enforcement agencies were responsible for the violence.

The occurrences of reported rape during the last year were strikingly high (69.5 percent) among hotel-based sex workers in Sylhet. In all other locations, less than one-third of the sex workers reported rape. The street- and hotel-based sex workers were raped mainly by local *mastans* (miscreants) and by men in uniform. Regular clients and local *mastans* were reported as the most common offenders for the brothel-based sex workers (**Table 4.20**).

**Table 4.20: Violence Against Female Sex Workers**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent of sex workers reported being beaten last year	23.0 (20.0-26.3)	50.8 (45.8-55.8)	44.9 (39.3-50.7)	53.2 (46.7-59.6)	22.8 (18.1-28.3)	27.8 (18.6-39.4)	31.8 (23.5-41.5)
Violence perpetrated by (Denominator is who reported being beaten last year)	n=157	n=225	n=141	n=167	n=81	n=30	N=48
Law enforcement agency	1.3 (0.3-5.0)	67.6 (59.1-75.0)	74.5 (65.3-81.9)	61.1 (53.5-68.2)	37.2 (26.9-48.9)	13.3 (5.6-28.6)	16.7 (9.4-27.8)
Mastans (extorshonists)	7.6 (4.4-13.1)	37.9 (30.3-46.2)	41.8 (32.6-51.8)	12.0 (7.1-19.5)	27.4 (16.7-41.5)	33.3 (21.0-48.4)	18.8 (8.4-36.9)
New clients	1.3 (0.3-5.0)	10.1 (6.6-15.3)	3.5 (1.5-8.3)	3.6 (1.5-8.4)	12.7 (6.5-23.2)	20.0 (5.9-49.9)	6.3 (2.2-16.6)
Regular clients	18.5 (13.1-25.4)	3.3 (1.7-6.6)	0	1.2 (0.3-4.7)	2.9 (0.8-9.6)	6.7 (1.7-22.6)	2.1 (0.2-15.3)
Others*	73.9 (66.4-80.2)	14.7 (9.7-21.7)	7.8 (4.0-14.6)	36.5 (30.1-43.5)	34.5 (24.2-46.5)	36.7 (21.9-54.4)	75.0 (61.6-84.9)
Percent of sex workers reported being raped last year	5.0 (3.6-6.9)	32.0 (27.8-36.6)	28.3 (23.8-33.4)	27.4 (22.5-32.9)	31.6 (26.0-37.8)	28.7 (20.5-38.6)	69.5 (60.4-77.3)
Percent of sex workers reported being beaten or raped last year	24.3 (21.2-27.7)	60.3 (55.4-65.0)	55.7 (49.8-61.5)	63.1 (56.5-69.2)	39.8 (33.9-46.0)	37.9 (26.9-50.4)	77.5 (69.3-84.0)
Violence perpetrated by (Denominator is who reported being raped last year)	N=34	n=147	n=89	n=86	n=103	n=31	n=105
Law enforcement agency	0	36.3 (27.9-45.5)	20.2 (13.6-29.1)	40.7 (29.6-52.9)	26.0 (17.9-36.1)	12.9 (2.7-44.4)	24.8 (17.5-33.9)
Mastans (extorshonists)	26.5 (13.9-44.6)	62.3 (52.3-71.4)	77.5 (65.6-86.2)	36.1 (25.6-48.1)	25.4 (16.2-37.4)	41.9 (26.2-59.5)	20.0 (12.7-30.1)
New clients	5.9 (1.4-22.0)	15.2 (10.2-22.1)	7.9 (3.7-15.9)	8.1 (3.6-17.5)	20.8 (12.7-32.2)	6.5 (0.8-38.5)	8.6 (3.6-18.9)
Regular clients	29.4 (16.1-47.6)	10.0 (5.4-17.6)	7.9 (3.3-17.4)	5.8 (2.5-12.9)	1.9 (0.4-7.5)	6.5 (1.3-26.1)	15.2 (8.9-24.9)
Others**	41.2 (25.4-59.0)	5.5 (2.7-10.9)	1.1 (0.2-7.8)	19.8 (12.1-30.7)	32.5 (20.9-46.5)	38.7 (20.4-60.8)	51.4 (41.4-61.4)
Percent of sex workers reported being arrested in the last year	1.3 (0.7-2.5)	10.9 (7.2-16.0)	5.4 (3.3-8.8)	15.9 (11.5-21.6)	36.8 (30.6-43.5)	26.9 (13.2-46.9)	9.9 (6.4-15.1)
Percent of sex workers reported being sent to a vagrant center in the last year	0	2.3 (1.0-5.5)	0.3 (0.04-2.3)	2.9 (1.4-5.7)	4.6 (2.6-8.1)	0	0

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** friend, mistress, mother, local girl, husband, pimp, guard, driver, heroin seller, sex worker, local people.

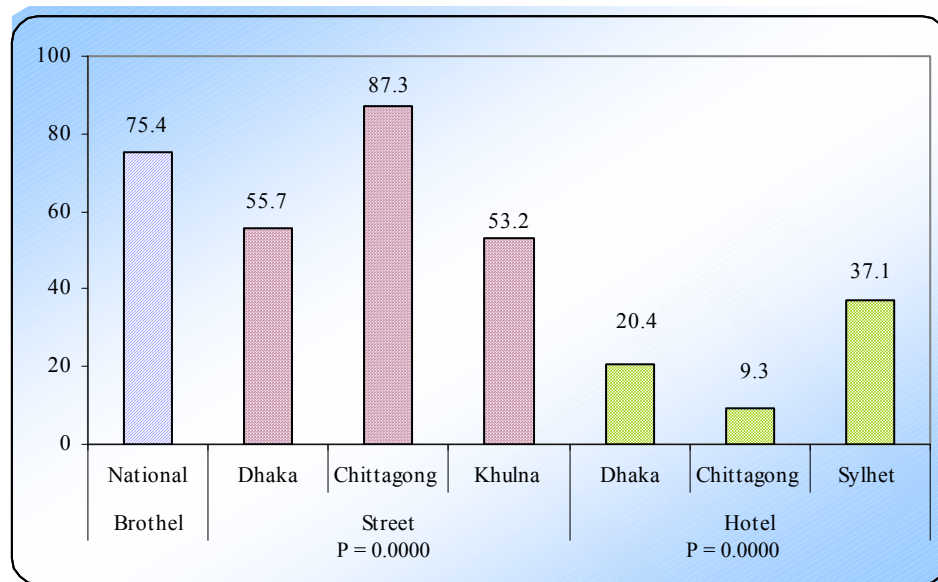
\*\* **Others stated:** *babu* (boyfriend), landlord and master.

#### 4.5 Involvement in Intervention Programs

In the last year, three-fourths (75.4 percent) of the brothel-based sex workers participated in NGO intervention programs. In addition, more than one-half of the street-based sex workers

in Dhaka and Khulna and a much larger proportion (87.3 percent) in Chittagong participated in NGO intervention programs; a much smaller proportion of hotel-based sex workers were involved in programs during the last year (**Figure 4.6**).

**Figure 4.6: Percentage Participating in NGO Interventions in Last Year**



Most sex workers reported participating in education programs and receiving condoms from the NGOs in the preceding year. More than one-fourth (26.9 percent) of the street-based sex workers in Khulna received STI treatment from NGOs in the last year. Among the hotel-based sex workers in Chittagong, 70 percent reported receiving STI treatment and one-half of them attended an IHC, as well.

An overwhelming majority of the brothel- and street-based sex workers and almost one-half of the hotel-based sex workers reported learning about STIs, HIV/AIDS, safe sex and correct use of condoms from NGO intervention programs. Nevertheless, more than one-half (53.6 percent) of those hotel-based sex workers who were exposed to interventions in Sylhet also reported that they did not easily understand information disseminated by the NGOs. A good proportion of the hotel-based sex workers who were exposed to interventions in Dhaka and Chittagong also reported that they received important information but that it did not change their behavior (**Table 4.21**).

**Table 4.21: Exposure to Interventions**

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent of sex workers who participated in NGO interventions last year	75.4 (72.0-78.5)	55.7 (48.2-62.9)	87.3 (81.8-91.3)	53.2 (44.9-61.3)	20.4 (14.5-27.9)	9.3 (4.7-17.6) n=107	37.1 (28.2-46.9)
Type of interventions in last year :	n=515	n=249	n=274	n=167	n=58	n=10	n=56
Needle exchange program	0	1.9 (0.7-5.3)	0.4 (0.04-2.7)	0	4.5 (1.2-15.0)	0	0
Education program	96.5 (94.5-97.8)	71.5 (61.6-79.6)	63.1 (52.3-72.8)	88.0 (81.7-92.4)	60.1 (45.8-72.9)	40.0 (15.0-71.5)	78.6 (62.6-88.9)
Received condoms	31.1 (27.2-35.2)	33.1 (25.9-41.2)	47.8 (37.0-58.9)	88.0 (81.2-92.6)	6.5 (2.3-16.8)	10.0 (0.7-63.8)	46.4(30.5-63.1)

Indicators % (95 % CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Received STI treatment	8.5 (6.4-11.3)	4.6 (2.3-8.9)	1.8 (0.7-4.4)	27.0 (18.4-37.6)	37.2 (23.1-53.9)	70.0 (18.5-96.0)	21.4 (13.1-33.1)
Attending IHC	0	6.4 (3.3-12.0)	4.4 (2.4-7.9)	0	29.8 (19.0-43.4)	50.0 (20.1-79.9)	1.8(0.2-12.3)
Attending DIC	0.2 (0.03-1.4)	26.6 (18.0-37.5)	56.2 (45.7-66.2)	10.2 (5.7-17.4)	1.0 (0.1-8.0)	10.0 (0.7-63.8)	25.0 (12.8-43.2)
Attending VCT	0.2 (0.03-1.4)	4.3 (2.4-7.7)	0.7 (0.2-2.9)	0	0	0	0
Others*	0.4 (0.1-1.5)	8.8 (4.0-18.2)	0	16.2 (16.6-23.9)	0	0	0
Mean number of times involved with interventions in last month	3.5 (3.3-3.7) M=3 n=514	1.9 (1.6-2.2) M=1.5 n=249	2.0 (1.8-2.1) M=2 n=274	1.9 (1.6-2.3) M=1.5 n=167	0.8 (0.7-0.9) M=0.6 n=58	1.2 (0.2-2.2) M=1 n=9	0.9 (0.6-1.3) M=0.6 n=56
Percent of sex workers who participated in NGO interventions last month	33.5 (30.1-37.2)	45.0 (37.8-52.5)	69.1 (61.6-75.8)	41.7 (33.6-50.3)	13.2 (9.3-18.4)	7.4 (3.8-13.9)	33.8 (56.4-74.8)
Percent of sex workers who participated in NGO interventions last month (Denominator is who participated in NGO interventions last year)	44.5 (40.2-48.8) n=515	80.8 (73.1-86.6) n=249	79.2 (72.9-84.3) n=274	78.4 (68.5-85.9) n=167	64.8 (50.2-77.1) n=58	80.0 (38.3-96.3) n=10	91.1 (79.7-96.4) n=56
Percent of sex workers who attended meetings organized for sex workers in the last year	52.1 (48.4-55.9)	65.2 (58.5-71.4)	80.6 (71.5-87.3)	37.9 (31.0-45.4)	1.6 (0.6-4.5)	3.7 (1.1-11.6)	26.5 (18.4-36.5)
Benefits of involvement with intervention (Denominator is who had exposure to intervention in last year)	n=515	n=249	n=274	n=167	n=58	n=10	n=56
Helped in changing behavior	11.3 (8.8-14.3)	22.8 (16.1-31.3)	26.6 (19.6-35.1)	18.0 (10.4-29.3)	3.8 (0.8-16.1)	0	21.4 (10.7-38.3)
Received important information but behavior did not change	4.1 (2.7-6.2)	17.7 (11.2-26.9)	9.5 (5.6-15.7)	18.0 (11.7-26.5)	31.3 (21.7-42.9)	40.0 (15.0-71.5)	14.3 (6.7-27.9)
Learnt about HIV/AIDS/STD/safe sex and correct use of condoms	97.5 (95.7-98.5)	90.8 (83.0-95.2)	98.5 (96.2-99.5)	92.2 (86.8-95.5)	46.8 (32.0-62.2)	50 (31.1-68.9)	46.4 (28.7-65.2)
Information was hard to understand	1.6 (0.8-3.1)	0.3 (0.04-2.5)	0.4 (0.04-2.7)	1.2 (0.3-4.8)	35.6 (21.9-52.1)	0	53.6 (34.6-71.6)
Information was not relevant to their needs	0.4 (0.1-1.5)	0.3 (0.04-2.1)	0	0	9.9 (3.6-24.0)	0	1.8 (0.2-12.7)
Gained important knowledge	0	0	0	0	0	0	0
Others	0	6.7 (3.5-12.5)	6.6 (3.5-11.9)	44.9 (33.0-57.4)	0	10.0 (0.5-71.1)	1.8 (0.2-12.7)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

\***Others stated:** World AIDS Day.

#### 4.6 Impact of HIV/AIDS Prevention Programs on Consistent Use of Condoms

The findings of the bivariate analysis by location reveals that HIV/AIDS prevention programs have significant influence on the consistent use of condoms by the female sex workers, especially by the street-based female sex workers (SBFSW) in Chittagong and in Khulna. In

Chittagong, 80 percent of the SBFSW who participated in the intervention program consistently used condoms in the last week, while the same was 50 percent for those who did not participate in the intervention program. Moreover, in Khulna, 31.3 percent of the SBFSW who participated in the intervention program consistently used condoms in the last week compared with 13.8 percent among those who did not participate in the intervention program (Table 4.22).

**Table 4.22: Exposure to Interventions and Consistent Use of Condoms**

Category	Location	Use of Condom	Participating HIV/AIDS presentation program % (95 % CI)		P-value
			Yes	No	
BBFSW	National	Always	28.36 (24.48,32.59)	27.95 (21.55,35.39)	0.637
		Sometimes	69.54 (65.24,73.52)	71.43 (63.96,77.89)	
		Never	1.68 (.8411,3.33)	0.62 (.087,4.295)	
SBFSW	Dhaka	Always	43.38 (34.59,52.61)	42.74 (33.43,52.6)	0.063
		Sometimes	55.07 (45.96,63.84)	50.05 (41.24,58.86)	
		Never	0.91 (.1249,6.264)	7.21 (3.602,13.9)	
	Chittagong	Always	80.08 (74.19,84.9)	50.00 (33.46,66.54)	0.001
		Sometimes	18.33 (13.77,23.97)	47.37 (31.76,63.5)	
		Never	0.79 (.1904,3.272)	2.63 (.3588,16.87)	
	Khulna	Always	31.33 (22.97,41.11)	13.79 (8.545,21.51)	0.000
		Sometimes	56.00 (46.39,65.18)	42.24 (33.95,50.99)	
		Never	12.67 (8.041,19.39)	43.97 (35.89,52.37)	
HBFSW	Dhaka	Always	16.82 (8.46,30.68)	4.99 (2.692,9.059)	0.021
		Sometimes	83.18 (69.32,91.54)	93.27 (88.86,96.02)	
		Never	0.00 -	1.74 (.5418,5.437)	
	Chittagong	Always	0	1.087 (0.1062-10.2)	0.929
		Sometimes	100	98.91 (89.8-99.89)	
	Sylhet	Always	24.53 (12.78-41.89)	29.35 (19.96-40.9)	0.541
		Sometimes	75.47 (58.11-87.22)	70.65 (59.1-80.04)	

Although intervention programs had no significant impact on the consistent use of condoms by brothel-based female sex workers (BBFSW), they played an important role among the hotel-based female sex workers (HBFSW) for consistent use of condoms (Table 4.22). In Dhaka, 16.8 percent HBFSW who participated in the intervention program consistently used condoms in the last week compared with only 4.9 percent for those who did not participate in the program.

#### 4.7 Injecting Behavior

The female sex workers in all selected areas did not usually practice injecting drugs, except for the street- and hotel-based sex workers in Dhaka. An analysis of the findings reveals that 2.8 percent of the street-based sex workers and 0.3 percent of the hotel-based sex workers in Dhaka injected drugs in the last year (Table 4.23).

**Table 4.23: Drug-taking History of Female Sex Workers**

Indicators % (95% CI)	Brothel	Street			Hotel		
	National (n=683)	Dhaka (n=438)	Chittagong (n=314)	Khulna (n=314)	Dhaka (n=337)	Chittagong (n=108)	Sylhet (n=151)
Percent reported taking drugs other than alcohol in the last year	21.2 (18.3-24.5)	35.2 (29.3-41.6)	30.3 (25.3-35.7)	25.8 (20.4-32.1)	14.7 (11.2-19.0)	11.1 (5.2-22.3)	21.2 (14.6-29.7)
Percent reporting different types of drugs taken other than alcohol in the last year (Denominator is who reported taking drugs other than alcohol in the last year)	N=145	N=159	n=95	n=81	n=54	n=12	n=32
Cannabis	88.3 (81.9-92.6)	59.1 (49.7-67.8)	46.3 (35.7-57.3)	63.0 (50.4-74.0)	65.7 (49.5-78.8)	91.7 (60.2-98.8)	31.3 (16.6-51.0)
Phensidyl	20.0 (14.2-27.4)	32.1 (24.2-41.1)	22.1 (13.7-33.7)	7.4 (3.4-15.6)	73.6 (57.5-85.1)	66.7 (37.1-87.1)	43.8 (26.0-63.3)
Tablet	20.0 (14.2-27.4)	47.1 (39.2-55.2)	60.0 (50.3-69.0)	59.3 (46.0-71.3)	24.5 (14.3-38.9)	16.7 (3.6-52.0)	90.6 (72.8-97.2)
Heroin	2.8 (1.0-7.2)	9.5 (4.8-17.9)	2.1 (0.6-7.6)	1.2 (0.2-9.0)	0	0	6.3 (0.8-37.0)
Injections	0	7.9 (3.5-17.1)	0	0	1.5 (0.2-10.5)	0	0
Others	4.8 (2.3-9.9)	0	0	0	0	0	12.5 (3.4-36.6)
Percent reported injecting drugs in the last year	0	2.8 (1.2-6.3)	0	0	0.3 (.03-1.94)	0	0
Percent reported injecting drugs in the last two month	0	2.3 (0.9-5.9)	0	0	0	0	0
Percent reported injecting drugs in the last two month (Denominator is who reported injecting drugs in the last year)	0	82.0 (31.6-97.8) n=12	0	0	0	0	0
Sharing needles/ syringes by borrowing or lending in the last year (Denominator is who reported injected drugs in the last year)	0	85.3 (38.9-98.1) n=12	0	0	0	0	0

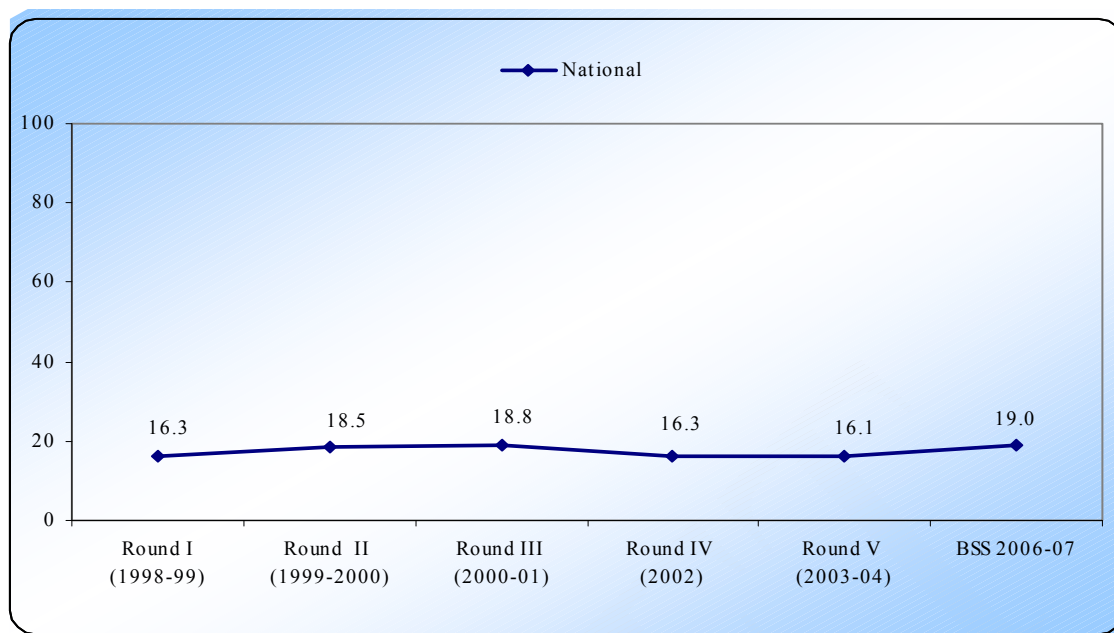
**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

#### 4.8 Change in Risk Behavior Over the Rounds

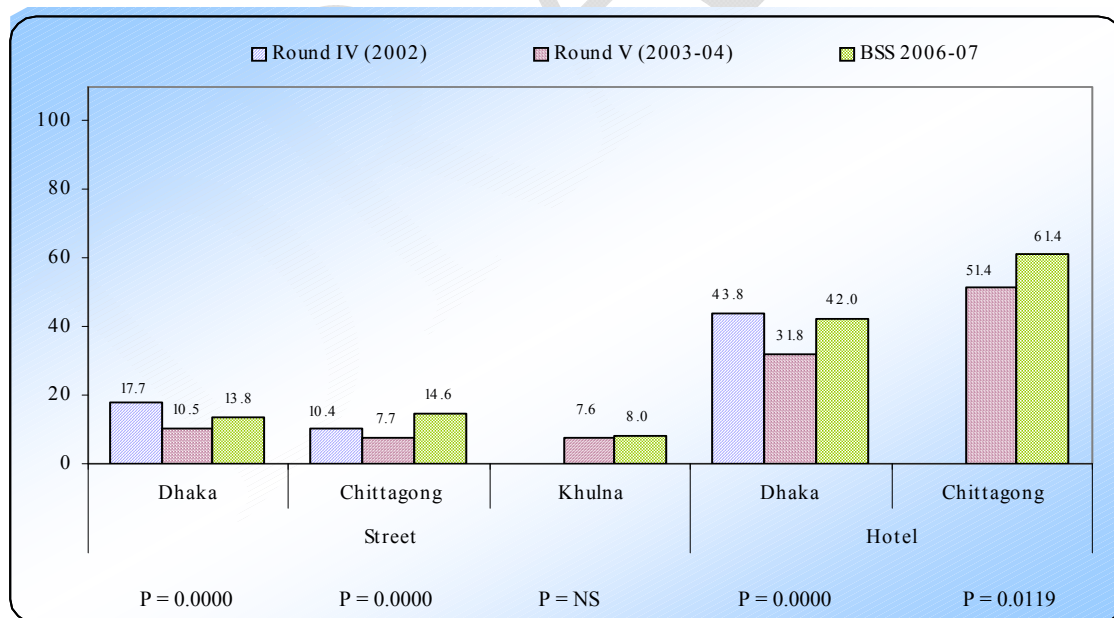
##### *Number of clients*

The mean number of clients of all the female sex workers increased in BSS 2006-07 compared with Round V (2003-04). The mean number of clients per sex worker in the brothel ranged between 16 clients and 19 clients over the rounds (Figure 4.7).

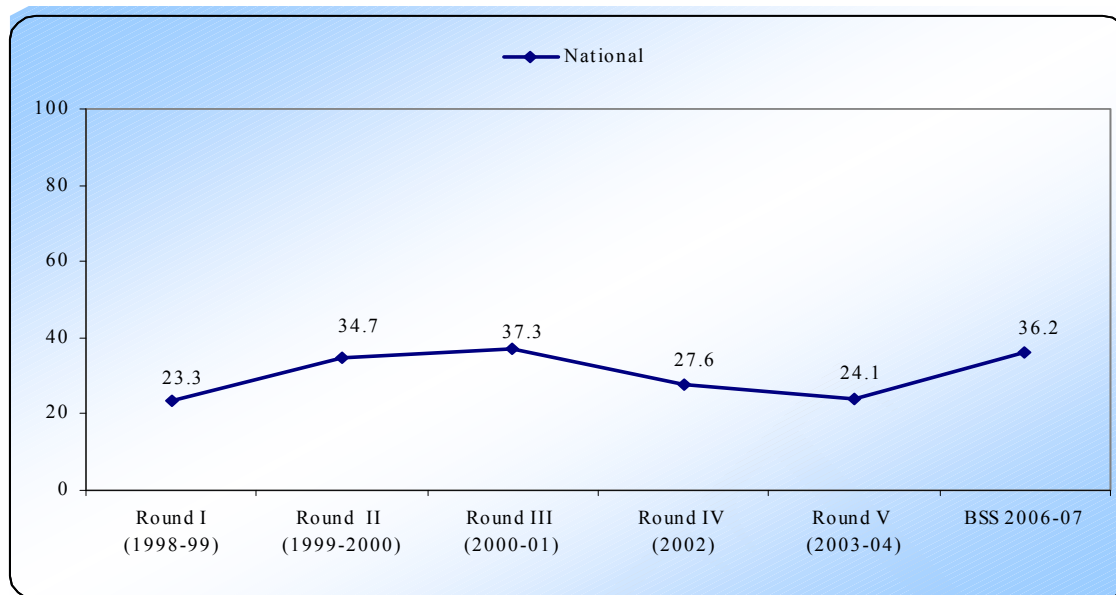


**Figure 4.7: Mean Number of Clients of BBFSW in the Last Week**

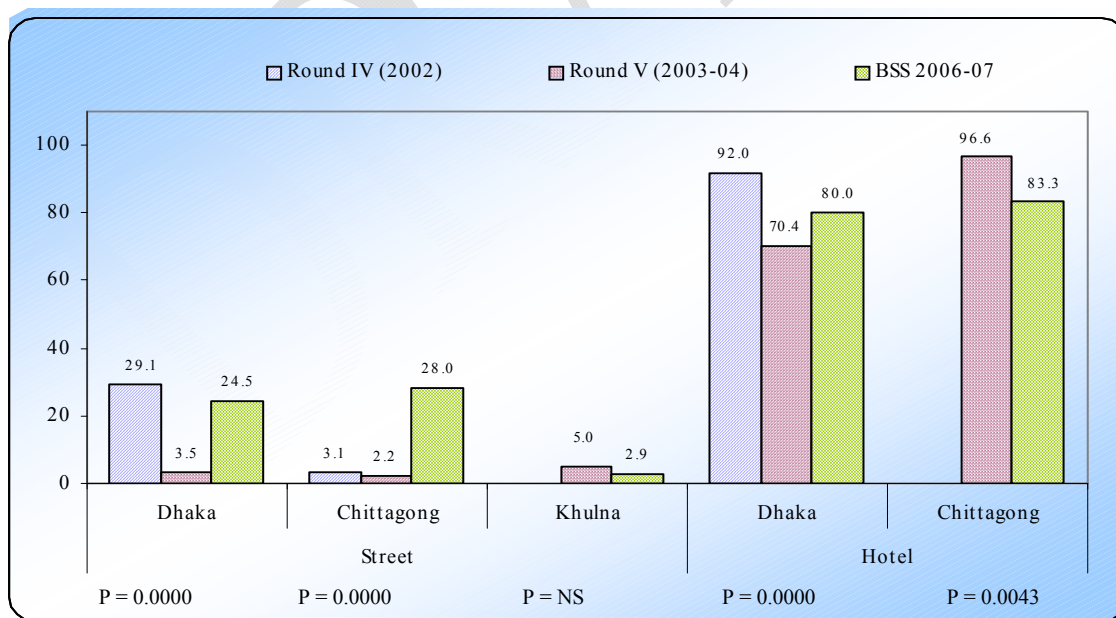
In hotels, the mean number of clients in the last week per sex worker was 32 clients during Round V increased to 42 clients in Round VI. For the street-based sex workers in Chittagong, the mean number of clients increased from 8 in Round V to 15 in Round VI. The same also increased in Dhaka from 11 clients in Round V to 14 clients in Round VI (**Figure 4.8**).

**Figure 4.8: Mean Number of Clients of SBFSW and HBFSW in Last Week**

In brothels, 36.2 percent of the sex workers in BSS 2006-07 reported having more than 20 clients as opposed to 24.1 percent in Round V (**Figure 4.9**). The percent of brothel-based sex workers reporting more than 20 clients over the rounds of BSS is presented below:

**Figure 4.9: Percentage of BBFSW Reporting More than 20 Clients in Last Week**

Among the hotel-based sex workers, 80 percent reported having more than 20 clients in the last week in BSS 2006-07, which was 70.4 percent in Round V and 92 percent in Round IV. The proportion of sex workers reporting more than 20 clients in a week was a notable increase for the street-based sex workers, particularly in Chittagong area. In Chittagong, 28 percent of the street-based sex workers reported more than 20 clients during BSS 2006-07, compared to only 2.2 percent in Round V (Figure 4.10).

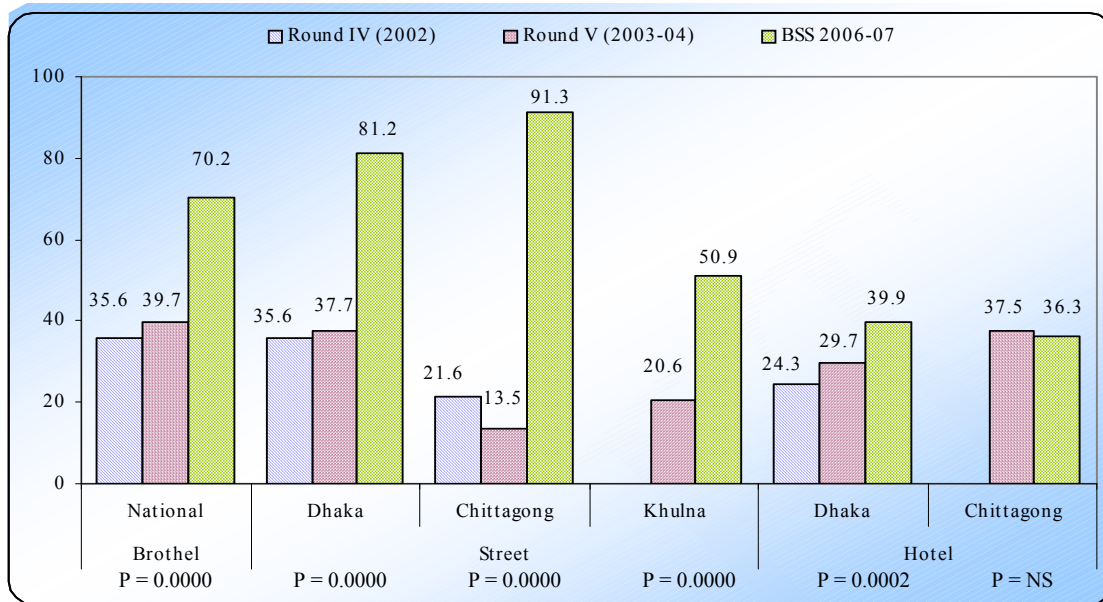
**Figure 4.10: Percentage of SBFSW and HBFSW Reporting More Than 20 Clients in Last Week**

### Use of condoms

The use of condoms during last vaginal sex with new clients in BSS 2006-07 has significantly improved for all the female sex workers. In brothels, 70.2 percent of the sex workers in BSS 2006-07 reported using condoms during last sex with new clients, compared to 39.7 percent in Round V and 35.6 percent in Round IV. For street-based sex workers in

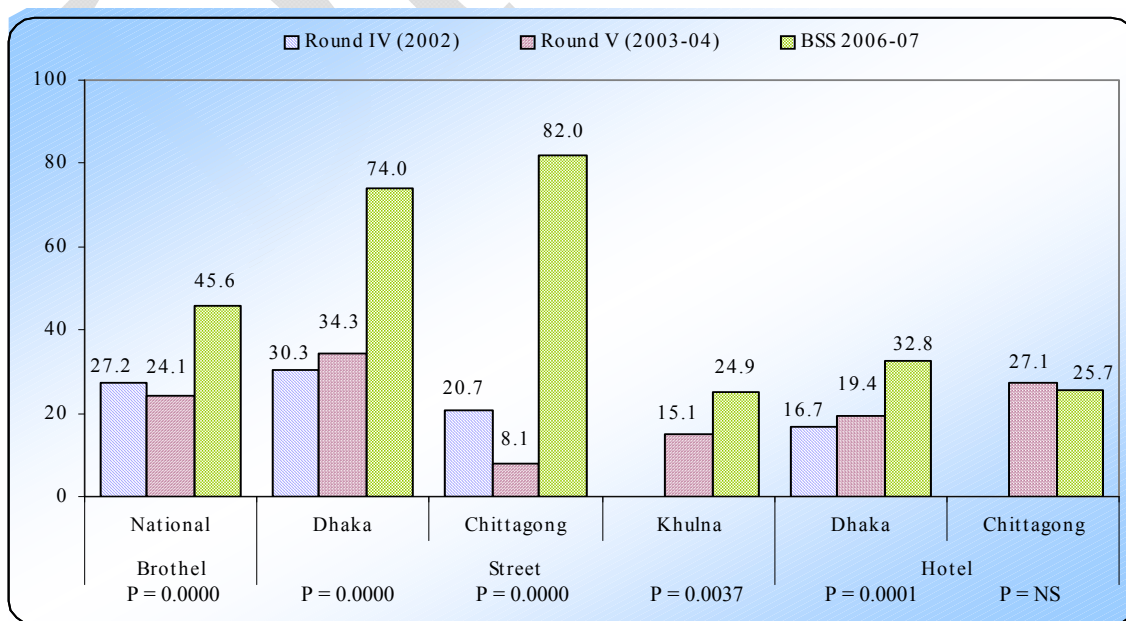
Dhaka and Chittagong, the use of condoms with new clients increased remarkably. However, the same for hotel-based sex workers in BSS round VI (2006-07) is estimated to be 39.9 percent, as compared to 29.7 percent in Round V and 24.3 percent in Round IV (**Figure 4.11**).

**Figure 4.11: Percentage Reporting Condom Use during Last Vaginal Sex with New Clients**



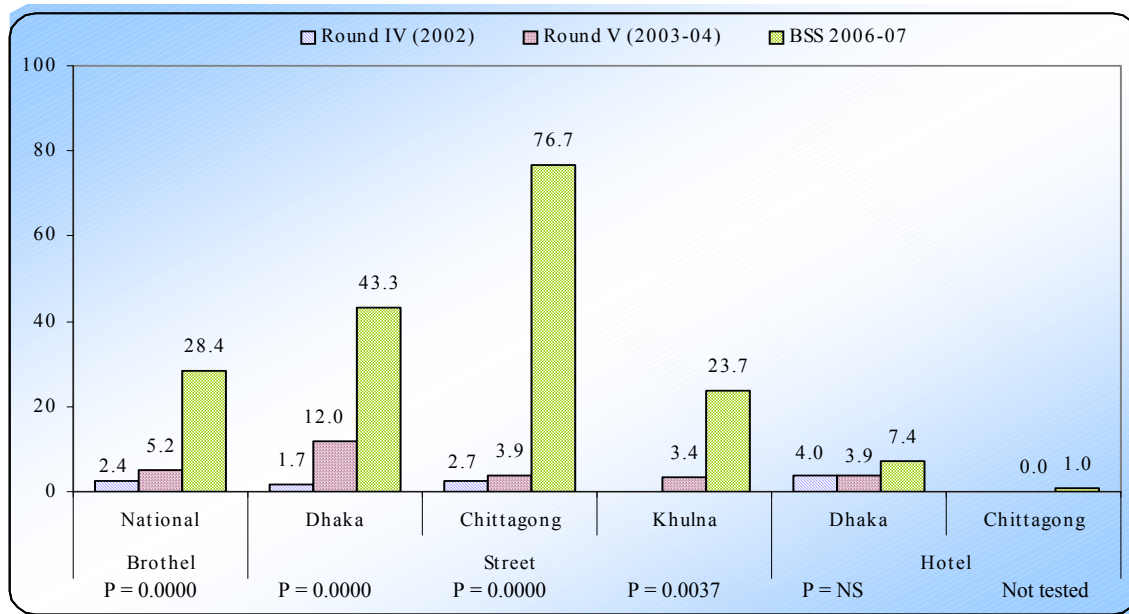
The use of condoms during last vaginal sex with regular clients in Round VI also improved for all female sex workers. In Chittagong, only 8.1 percent of the street-based sex workers in Round V reported using condoms during the last sex with regular clients, which increased to 82 percent in BSS 2006-07. For hotel-based sex workers, the percentage of sex workers using condoms during the last sex with regular clients steadily increased from 16.7 percent in Round IV to 32.8 percent in BSS 2006-07 (**Figure 4.12**).

**Figure 4.12: Percentage Reporting Condom Use During Last Vaginal Sex with Regular Clients**



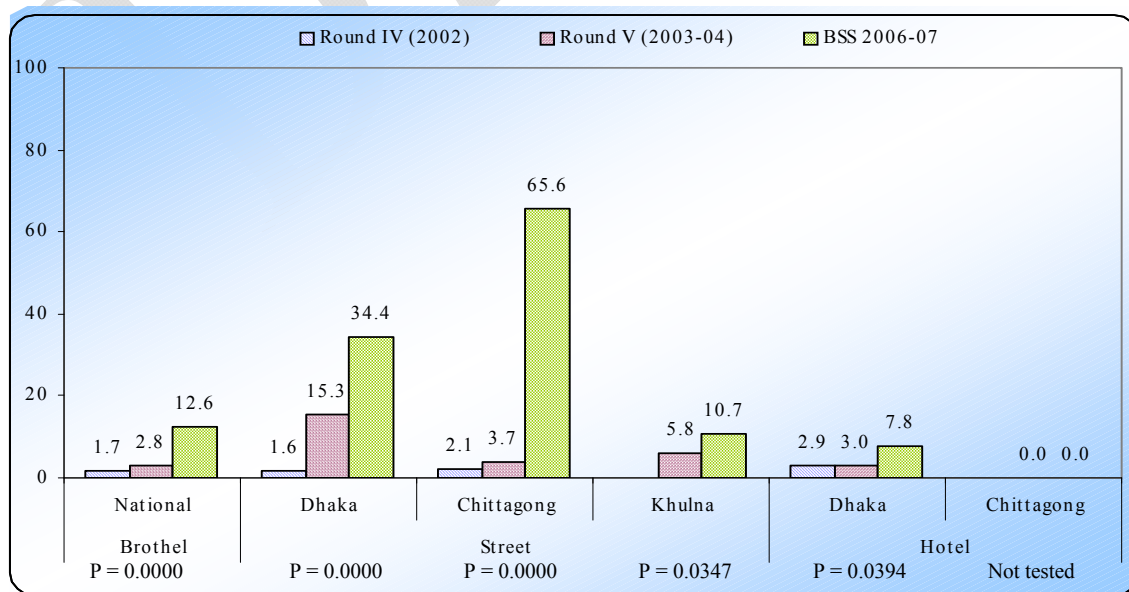
The consistent use of condoms with new clients has steadily increased among all the female sex workers. For brothel-based sex workers only 2.4 percent in Round IV reported consistent use of condoms in the last week, which increased to 28.4 percent during BSS 2006-07. The consistent use of condoms with new clients in Round VI increased remarkably among the street-based sex workers. However, for hotel-based sex workers the consistent use of condoms with new clients in the last week remained low in BSS Round VI (2006-07) compared with the other groups (**Figure 4.13**).

**Figure 4.13: Percentage Reporting Consistent Condom Use in Last Week with New Clients**



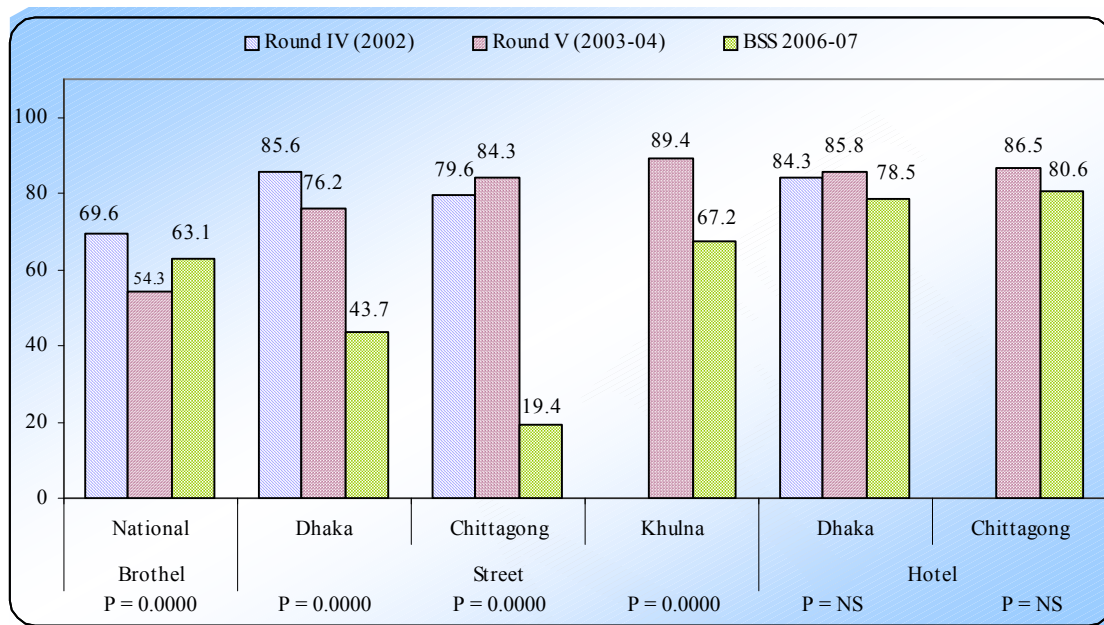
The percentage of female sex workers reporting consistent use of condoms with regular clients in the last week also increased in BSS Round VI (2006-07), compared with Round V. However, the consistent use of condoms with regular clients among street-based sex workers in Chittagong in the last week was remarkably high (**Figure 4.14**).

**Figure 4.14: Percentage Reporting Consistent Condom Use in Last Week with Regular Clients**

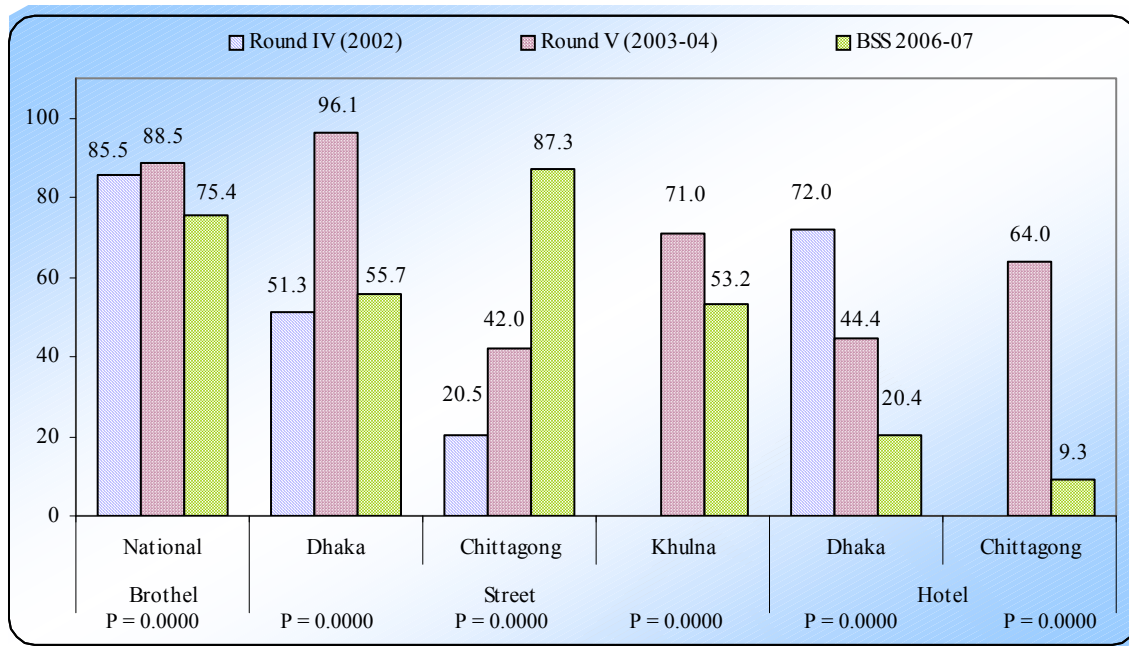


**STIs and treatment**

The percentage of street-based female sex workers who complained of at least one STI symptom in the last year decreased significantly over the rounds in Dhaka and Chittagong. The majority (79.8 percent) of street-based sex workers in Chittagong reported at least one STI symptom in Round IV, which decreased to 19.4 percent during BSS 2006-07 (**Figure 4.15**).

**Figure 4.15: Percentage Complaining of STI Symptoms in Last Year****Exposure to interventions**

The percentage of brothel-based sex workers exposed to NGO intervention programs did not change much over the rounds. Furthermore, the percentage of hotel-based sex workers participating in NGO intervention programs steadily decreased in Dhaka from 72 percent in Round IV to 20.4 percent in BSS 2006-07. Among street-based sex workers in Dhaka the same significantly decreased to 55.7 percent in BSS 2006-07 compared with 96.1 percent in Round V. In contrast, more street-based sex workers in Chittagong participated in NGO intervention programs during BSS 2006-07 compared with the previous rounds of BSS (**Figure 4.16**).

**Figure 4.16: Percentage Covered by Interventions in Last Year**

#### 4.9 Summary of Findings

The female sex workers in the selected locations usually sell sex for their livelihood. All the female sex workers in all locations had their sexual debut early in their teenage years. Except hotel-based sex workers, other categories of sex workers, on average, were engaged in this profession for five to six years. The hotel-based female sex workers in all locations seemed to be quite new in this profession. Compared with other categories, the hotel-based sex workers had a much wider clientele base in all three locations in the last week. On average, a hotel-based sex worker reported approximately 42 clients in Dhaka, 61 in Chittagong and 19 in Khulna during the last week. The average number of clients per week for all groups of female sex workers increased in BSS 2006-07, compared with the previous round.

In general, the hotel- and street-based sex workers were reluctant to request their clients to use condoms. Consistent use of condoms during vaginal/anal sex with new clients was low among the hotel-based sex workers in Dhaka (7.4 percent) and almost absent in Chittagong (less than 1 percent). Consistent condom use during sex with regular clients was even lower among female sex workers. Consistent use of condoms increased for brothel- and street-based sex workers in all the locations in BSS 2006-07. More than one-half of the hotel-based sex workers in Dhaka and Chittagong reported breakage of condoms during sex in the last month. Roughly 40 percent of the street-based sex workers in Dhaka also reported condom breakage.

More than one-half (63 percent) of the brothel-based sex workers reported at least one STI symptom during the last year. Prevalence of STI seemed to be higher among the hotel-based sex workers in all locations. In contrast, less than one-half of street-based sex workers in Dhaka and a smaller number in Chittagong reported at least one STI symptom during the last one year. The percentage of female sex workers reporting at least one symptom of STI in the last year significantly decreased in BSS 2006-07 compared with the previous rounds of BSS.

Except for some street-based sex workers in Khulna and hotel-based sex workers in Dhaka, knowledge about HIV and AIDS is almost universal among the sex workers in all locations.

Despite their awareness, a considerable number of them had misconceptions about the modes of HIV transmission. Only a negligible number of them perceived themselves to be at high risk of contracting HIV.

Most female sex workers in the study acknowledged participating in NGO intervention programs. The brothel- and street-based sex workers usually participated in education programs and received condoms from NGOs in the preceding year. An overwhelming majority of the brothel- and street-based sex workers and almost one-half of the hotel-based sex workers reported learning about STIs, HIV/AIDS and safe sex, and correct use of condoms from NGO intervention programs. The participation in NGO intervention program for all female sex workers in the selected locations, except for the street-based sex workers in Chittagong, decreased in BSS 2006-07 compared with Round V.

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## Section 5: Risk Behavior of Male Sex Workers and Hijra

Male sex workers (MSW) were interviewed in Dhaka and Chittagong, and *Hijra* were interviewed in Dhaka only. The results of the MSW and *Hijra* interviews are analyzed in the following sections.

### 5.1 Background Characteristics

The MSWs were young; the average age in Dhaka was 22 years and in Chittagong 20 years. The average age of *Hijras* was 28 years. Most MSWs and *Hijras* had had some sort of schooling. The mean monthly income of an MSW in Dhaka was Taka 4,267 and in Chittagong Taka 3,962. A *Hijra*, on average, earned Taka 3,726 per month. Almost all the MSWs and *Hijras* reported clients as their major source of income, although a wide range of other sources were also mentioned in both locations. Of the MSWs, 16.2 percent had sold blood for money in the preceding 12 months in Dhaka.

Although most of the MSWs and *Hijras* were not currently married, less than one-third of MSWs in both locations and the majority of *Hijras* (80.3 percent) were currently living with their wives or regular sex partners. The mean age at sexual debut for MSWs was 13 years in Dhaka, and 12 years in Chittagong. The mean age was 12 years for *Hijra* in Dhaka (**Table 5.1**).

**Table 5.1: Socio-demographic Characteristics**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Mean age (in years)	23.1(22.5-23.7) M=22	20.7(20.3-21.1) M=20	27.7(27.2-28.3) M=28
Percent who had no schooling	7.7(4.9-11.9) n=413	1.0(0.4-2.7)	5.1(3.2-8.2) n=410
Duration of stay in this city	n=415		n=425
Whole life	53.2(46.1-60.1)	53.8(49.2-58.3)	32.0(27.8-36.5)
≤10 years	29.8(24.5-35.7)	38.9(34.4-43.7)	16.7(12.7-21.6)
>10 years	17.1(13.2-21.8)	7.3(5.2-10.2)	51.1(45.9-56.2)
Cannot remember	0	0	0.2(0.03-1.7)
Mean income in last month (in Taka)	4267.3(4083.9-4450.6) M=4000 n=407	3962.4(3669.3-4255.5) M=3550 n=382	3726.4(3477.7-3975.1) M=3500 n=418
Sources of income			
Clients	99.8(98.6-100.0)	99.2(97.5-99.8)	100
Family	14.5(11.1-18.7)	10.2(7.1-14.5)	0
Badhai	0	0	70.0(63.3-75.9)
Dance/singing	0	0	39.7(33.1-46.7)
Cholla	0	0	54.7(48.1-61.1)
Dhol Dance	0	0	22.5(17.6-28.4)
Others*	65.5(59.9-70.7)	55.9(51.2-60.5)	0.2(0.03-1.7)
Percent who sold blood for money in last 12 month	16.2(11.8-21.9) n=414	0.3(0.04-1.9)	0.2(0.03-1.7) n=424
Percent who were currently married	13.7(10.5-17.6) n=379	14.4(11.2-18.3)	6.6(3.7-11.4) n=425
Mean age at first sex act in years (Denominator is who could recall)	12.9(12.8-13.1) M=13 n=413	11.7(11.4-12.0) M=12 n=382	12.4(12.2-12.6) M=12
Percent living with wife/regular sex partner	29.5(23.8-36.0)	28.5(23.1-34.6)	80.3(74.9-84.7)
Self-categorization	n=414		
Man/manly/general people	17.0(12.9-22.1)	24.0(20.0-28.6)	-
Parik	0.2(0.02-1.4)	1.6(0.7-3.3)	-



Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Good/honest man	0.3(0.03-2.1)	2.9(1.5-5.4)	-
Actor/actress	0.2(0.02-1.4)	3.7(2.1-6.2)	-
Gay	0.9(0.3-2.8)	-	-
Kothi	69.0(62.5-74.8)	59.8(54.5-64.8)	-
Panthi	1.9(0.9-3.9)	3.7(2.3-5.8)	-
Do-porata	10.2(7.3-14.0)	0.8(0.2-2.5)	-
<i>Hijra</i>	-	-	91.8(88.0-94.5)
Female	-	-	3.3(1.9-5.6)
Female sex worker	-	-	4.9(3.2-7.6)
Others**	-	3.7(2.1-6.3)	-

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** hotel boy, salesman, service/teaching/flower shop/garments, business, rickshaw puller, cook, tailor/sari maker, hair dresser, nut/*chanachur/jhalmur*/egg seller, vegetable seller, laborer/contractor, artist, helper/truck driver, paper seller, tea/water/cigarette seller, thief, pimp, shopkeeper, garage worker, house maid, landlord, housekeeper, car washer, flower seller, day laborer.

\*\* **Others stated:** selling saris.

## 5.2 Sexual Behavior and Practices

### *Sexual Behavior and Sex Partners*

The MSWs had been involved in this profession for 5 to 7 years on average while the *Hijra* were involved in selling sex for more than 10 years. Both these groups sold sex 4 to 6 days a week. Moreover, almost all the MSWs and *Hijra* reported that they had their first sexual experience with a male partner/client (**Table 5.2**).

**Table 5.2: Dynamics of Sex Worker**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent working as sex worker for less than one year	0	5.0(3.0-8.1)	0
Mean years in the profession of selling sex	6.9(6.6-7.3) M=6	5.3(4.9-5.7) M=5	11.6(10.9-12.5) M=12 n=422
Proportion selling sex for less than one year in the same city	0	6.3(4.1-9.5)	0
Mean years as sex workers in this city	6.6(6.2-7.0) M=6 n=415	5.0(4.6-5.3) M=5 n=382	11.3(10.6-11.9) M=12 n=423
Mean number of days had clients in last week	5.2(5.0-5.4) M=5 n=415	4.3(4.2-4.5) M=4 n=347	5.6(5.5-5.7) M=6 n=425
Gender of regular sex partners (Denominator is who live with regular sex partners)	n=119	n=109	n=338
Male	62.1(51.7-71.5)	59.6(47.7-70.5)	100
Female	37.9(28.5-48.3)	40.4(29.5-52.3)	0
Gender of first sex partners			
Male	95.1(92.7-96.8)	94.3(90.9-96.4)	99.3(97.8-99.8)
Female	4.7(3.1-7.1)	5.7(3.6-9.1)	0.7(0.2-2.2)
<i>Hijra</i>	0.2(0.03-1.4)	0	0

**Note:** M refers to median

Where responses from the total number of respondents were not available, the 'n' is provided in the particular cell

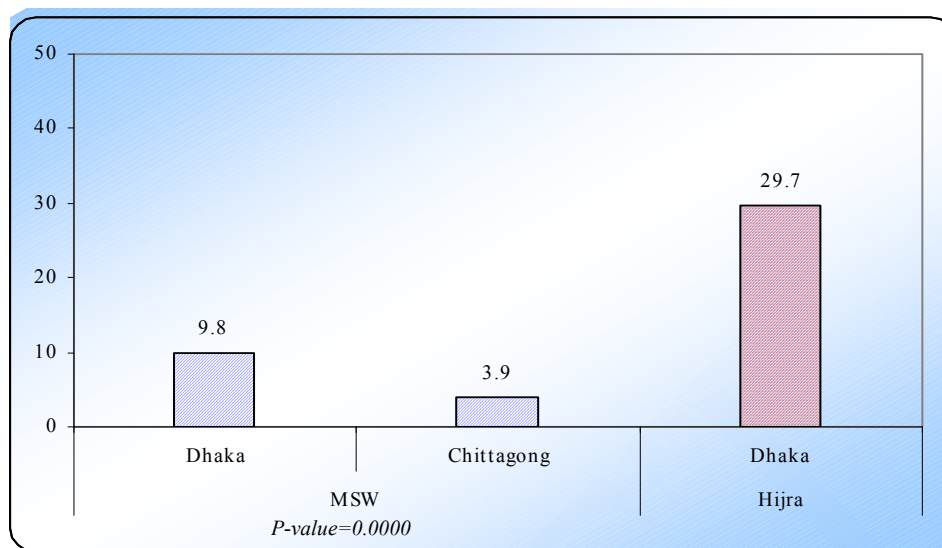
About three-fifths of the MSWs and almost all the *Hijra* reported having new clients in last week. More *Hijra* (82-99 percent) reported anal and oral sex, as compared to MSWs with both new and regular clients. About one third of the MSWs also reported non-commercial sex partners in the preceding month. However, non-penetrative sex acts were higher for *Hijras*

and MSWs in Dhaka. The MSWs and *Hijras* also reported group sex; more than one-fourth of them reported having group sex in the last month (**Table 5.3**).

**Table 5.3: Sexual Behaviors with Different Types of Clients**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent reported having anal sex with <i>Hijra</i> in last 12 months	15.9(11.6-21.3) n=415	3.7(2.1-6.3)	Not asked
Percent reported having vaginal/anal sex with female in last 12 months	39.1(33.4-45.2) n=413	32.7(27.9-37.9)	Not asked
Percent reported having anal sex with male in last 12 months	98.6(95.5-99.6) n=415	98.7(97.0-99.4)	Not asked
<b><i>New Clients</i></b>			
Percent reported having new clients (male/ <i>Hijras</i> ) last week	59.9(53.0-66.4)	63.5(56.1-70.3)	99.1(97.5-99.7)
Percent reported receptive anal sex with new clients (male/ <i>Hijras</i> ) last week	54.1(47.3-60.8)	63.5(56.1-70.3)	99.1(97.5-99.7)
Percent reported oral sex with new clients (male/ <i>Hijras</i> ) last week	19.7(14.9-25.6)	2.1(1.0-4.2)	84.5(79.2-88.7)
<b><i>Regular Clients Partner</i></b>			
Percent reported having regular clients (male/ <i>Hijra</i> ) last week	95.2(92.0-97.2)	53.8(47.3-60.2)	98.4(96.6-99.2)
Percent reported anal sex with regular clients (male/ <i>Hijra</i> ) last week	94.6(91.1-96.7)	53.3(46.7-59.7)	98.4(96.6-99.2)
Percent reported oral sex with regular clients (male/ <i>Hijra</i> ) last week	47.1(40.9-53.5)	1.0(0.4-2.8)	81.7(76.2-86.2)
Percent reported new or regular clients in last week	99.6(98.4-99.9)	82.8(76.6-87.6)	99.8(98.3-100.0)
<b><i>Buying Sex from Male/Hijra</i></b>			
Percent who reported buying sex from male last month	10.0(6.6-14.9)	1.3(0.4-4.2)	0
Percent who reported buying sex from <i>Hijras</i> last month	1.4(0.5-3.9)	0	0
Percent who reported buying sex from Male/ <i>Hijras</i> last month	11.4(7.8-16.3)	1.3(0.4-4.2)	
Percent reported anal sex with male/ <i>Hijras</i> last month while buying sex	11.4(7.8-16.3)	1.3(0.4-4.2)	0
Percent reported oral sex with male/ <i>Hijras</i> last month while buying sex	0.2(0.03-1.4)	0	0
<b><i>Non- Commercial Partner</i></b>			
Percent reported non-commercial male/ <i>Hijras</i> partner last month	34.9(28.6-41.8)	32.6(28.1-37.5)	1.9(0.9-3.7)
Percent reported anal sex with non-commercial male/ <i>Hijras</i> partner last month	34.9(28.6-41.8)	32.4(27.9-37.2)	1.9(0.9-3.7)
Percent reported oral sex with non-commercial male/ <i>Hijras</i> partner last month	8.1(5.4-12.0)	1.6(0.7-3.4)	0.7(0.2-2.2)
Percent reported non-penetrative sex with any male client in last week (new or regular) n=415	38.9(32.0-46.3) n=415	10.2(6.8-15.1)	66.2(59.6-72.2)
Percent sold sex to female last month	3.4(2.0-5.8)	3.9(2.3-6.6)	Not asked
Percent bought sex from females last month	4.8(3.0-7.6)	9.4(6.3-13.8)	Not asked
Percent reported non-commercial female sex partner last month	23.3(18.9-28.3)	12.3(9.4-15.8)	Not asked
Percent reported group sex last month	30.0(22.9-38.1)	30.3(25.2-35.9)	28.4(24.2-33.0)
Percent reported having more than 20 clients (new/regular) last week	1.0(0.2-4.9)	0.3(0.04-1.9)	70.2(63.5-76.1)

An MSW in Dhaka on an average, had approximately 10 clients (new or regular) in the last week, while MSWs in Chittagong reported 4. On the other hand, a *Hijra* had nearly 30 clients in the last week (**Figure 5.1**).

**Figure 5.1: Mean Number of Clients (new/regular) in Last Week**

The MSW who acknowledged non-commercial male/*Hijra* in the last month on an average reported one male/*Hijra* in both Dhaka and Chittagong. The same is notably higher among the *Hijra* in Dhaka who reported on an average 10 non-commercial male/*Hijra* clients in the last month. The MSW in both Dhaka and Chittagong also reported, on an average, 5 non-commercial female clients in the last month (**Table 5.4**).

**Table 5.4: Number of Clients**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
<b><i>New Clients</i></b>			
Mean number of new clients last week	3.4(2.6-4.2) M=2 n=415	2.1(1.8-2.3) M=2	14.8(13.8-15.9) M=14
Mean number of new clients last week (Denominator who had new clients last week)	5.6(4.7-6.6) M=4 n=258	3.2(3.0-3.4) M=3 n=243	15.0(14.0-16.0) M=14 n=422
<b><i>Regular Clients</i></b>			
Mean number of regular clients last week	5.5(4.8-6.2) M=4 n=414	1.9(1.4-2.3) M=1	14.5(13.4-15.6) M=14 n=424
Mean number of regular clients last week (Denominator who had regular clients last week)	5.8(5.1-6.5) M=5 n=391	3.5(2.9-4.0) M=2 n=206	14.7(13.6-15.8) M=15 n=417
Mean number of clients (new or regular) last week	9.8(8.3-11.3) M=9	3.9(3.3-4.5) M=4	29.7(27.7-31.8) M=27
<b><i>Female Sex Partner</i></b>			
Mean number of clients while selling sex to females last month	0.03(0.01-0.05) M=0 n=415	0.1(0.04-0.2) M=0	Not asked
Mean number of clients while selling sex to females last month (Denominator who sold sex to females last month)	1.1(0.9-1.2) M=1 n=15	2.5(1.7-3.2) M=2 n=15	Not asked
<b><i>Buying Sex from Male/Hijra/Female</i></b>			
Mean number of clients while buying sex from male/ <i>Hijra</i> last month	0.2(0.1-0.2) M=0	0.03(-0.003-0.1) M=0	0
Mean number of clients while buying sex from male/ <i>Hijra</i> last month (Denominator who bought sex from male/ <i>Hijra</i> last month)	1.4(1.1-1.7) M=1 n=50	2.0(0.5-3.5) M=2 n=5	0

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Mean number of clients while buying sex from female last month	0.1(0.03-0.1) M=0	0.2(0.1-0.3) M=0	Not asked
Mean number of clients while buying sex from female last month (Denominator is who bought sex from female last month)	1.2(1.0-1.4) M=1 n=22	2.1(1.7-2.6) M=2 n=36	Not asked
Mean number of sex act with female while buying sex from female last month (Denominator is who bought sex from female last month)	2.6(1.7-3.4) M=2 n=22	3.7(2.4-5.0) M=2 n=36	Not asked
<b>Non-Commercial Partner</b>			
Mean number of non-commercial male/Hijra clients last month	0.5(0.4-0.6) M=0 n=415	0.5(0.4-0.6) M=0	0.2(0.02-0.3) M=0 n=425
Mean number of non-commercial male/Hijra clients last month (Denominator is who had non-commercial male/Hijra clients last month)	1.5(1.4-1.7) M=1 n=154	1.6(1.4-1.8) M=1 n=125	9.7(3.0-16.5) M=14 n=7
Mean number of non-commercial female clients last month	1.0(0.7-1.3) M=0 n=414	0.6(0.4-0.8) M=0	Not asked
Mean number of non-commercial female clients last month (Denominator is who had non-commercial is who had non-commercial female clients last month)	4.5(3.7-5.4) M=3 n=100	4.6(3.3-5.8) M=3 n=47	Not asked
Mean number of clients during last group sex in last month (Denominator who had group sex last month)	2.5(2.4-2.6) M=2 n=135	2.8(2.6-2.9) M=3 n=116	5.4(4.6-6.2) M=4 n=121

Note: M refers to median

Where responses from the total number of respondents were not available, the 'n' is provided in the particular cell

### Use of Condoms

Approximately 61 percent of the MSWs in Chittagong asked their new clients to use condoms in the last week, while 30.5 percent did not approached the issue at all. Moreover, 47.9 percent MSWs in Dhaka and 83.6 percent of *Hijras* asked some of their new clients to use condom. Nearly two-fifths of the MSWs in Dhaka and a half of them in Chittagong who had new clients and had anal sex in the past week used condom during last anal sex act. About two-thirds of the *Hijras* used condoms during the same period. Use of condoms among the MSWs in Dhaka seemed to be lower with different types of clients. (Table 5.5).

**Table 5.5: Condom Use in Last Anal Sex with Commercial and Non-commercial Partners**

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
<b>New clients</b>			
Percent who asked new clients to use condoms in last week (Denominator is who had new clients last week)	n=259	n=243	n=420
Everyone	30.2(23.5-37.7)	60.9(55.9-65.7)	7.1(4.4-11.3)
Some of the clients	47.9(39.7-56.1)	8.6(5.4-13.6)	83.6(78.0-88.0)
None	22.0(17.2-27.6)	30.5(25.7-35.7)	9.3(6.0-14.1)
Condom use in last anal sex with new clients (Denominator is who had new clients in last week and had anal sex)	38.4(32.5-44.7) n=234	48.6(42.6-54.6) n=243	66.5(60.0-72.5) n=421
<b>Regular clients</b>			
Percent who asked regular clients to use condoms in last week	n=389	n=206	n=416
Everyone	24.7(18.9-31.5)	63.6(57.7-69.1)	5.3(3.1-8.9)
Some of the clients	32.2(25.6-39.5)	7.8(4.7-12.6)	86.3(81.4-90.0)
None	43.2(35.8-50.9)	28.6(23.2-34.8)	8.4(5.5-12.8)
Condom use in last anal sex with regular clients	22.1(17.2-27.9)	50.0(44.1-55.9)	66.5(59.9-72.5)

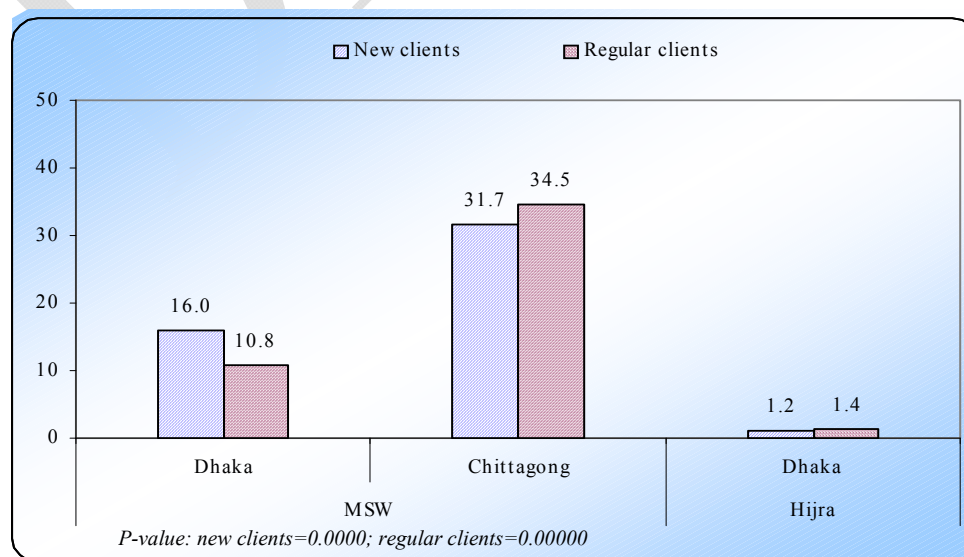
Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
(Denominator is who had regular clients last week and had anal sex)	n=390	n=204	n=418
<b>Non-commercial male/Hijra</b>			
Condom use at last anal sex act with male/Hijra non-commercial partner (Denominator is who reported sex with non-commercial partners in last month)	30.5(23.6-38.3) n=155	50.0(41.6-58.4) n=124	50.0(14.3-85.7) n=8
<b>Buying sex from male/Hijra/female</b>			
Condom use at last anal sex act while buying sex from male/Hijra (Denominator is who reported buying sex and had anal sex in last month)	27.4(16.2-42.5) n=50	80.0(0.6-100.0) n=5	0
Condom use at last vaginal/anal sex act while buying sex from females (Denominator is who reported buying sex from females in last month)	4.6 n=22	66.7 n=36	Not Asked
<b>Selling sex</b>			
Condom use in last vaginal or anal sex act while selling sex to females (Denominator is who sold sex to females in last month)	28.0(8.7-61.5) n=16	80.0(46.9-94.8) n=15	Not Asked
<b>Non-commercial female partner</b>			
Condom use in last vaginal or anal sex with female non-commercial partner (Denominator is who reported sex with non-commercial female partners in last month)	14.6(8.5-23.8) n=102	46.8(33.7-60.4) n=47	Not Asked
<b>Group sex</b>			
At least one sexual partner used condom in last group sex (Denominator is who had group sex in last month)	62.1(51.8-71.4) n=135	70.7(61.8-78.3) n=116	95.8(90.2-98.3) n=119

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### Consistent Use of Condom

Of the MSW, 16 percent of the MSWs in Dhaka, 31.7 percent in Chittagong and only 1.2 percent of the *Hijras* consistently used condoms during anal sex with new clients in the last week. In contrast, a small portion of MSWs (10.8 percent) in Dhaka and more than one-third of them in Chittagong reported using condoms consistently with their regular partners. Consistent condom use among *Hijras* with new or regular clients was negligible (**Figure 5.2**).

**Figure 5.2: Consistent Condom Use in Anal Sex with (new/regular) Clients in Last Week**



More than a half (51.7 percent) of the MSW in Dhaka and 32.3 percent in Chittagong reported that they never used condom during sex with non-commercial male/*Hijra* in last month. None of the *Hijra* reported consistent condom use with their non-commercial male/*Hijra* partners in the last month, 62.5 percent reported using condoms occasionally and another 37.5 percent did not use condom at all. The use of condoms was considerably lower among the MSW in Dhaka with their non-commercial female partners; 82.7 percent of them reported this (Table 5.6).

**Table 5.6: Frequency of Condom Use with Commercial and Non-commercial Partners**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
<b><i>New clients</i></b>			
Frequency of condom use in anal sex with new clients (male/ <i>Hijras</i> ) in last week (Denominator is who had new clients in last week and had anal sex)	n=234	n=243	n=422
Always	16.0(11.7-21.4)	31.7(26.9-36.9)	1.2(0.4-3.8)
Sometimes	58.2(49.0-66.8)	35.4(30.1-41.1)	89.3(84.2-93.0)
Never	25.8(18.4-35.0)	32.9(28.1-38.1)	9.5(6.1-14.5)
Frequency of condom use in anal sex with new clients (male/ <i>Hijras</i> ) in last month (Denominator is who had new clients and anal sex in last week)	Not asked	Not asked	n=423
Always			1.2(0.4-3.8)
Sometimes			89.4(84.2-93.0)
Never			9.5(6.0-14.5)
Frequency of condom use in oral sex with new clients (male/ <i>Hijras</i> ) in last week (Denominator is who had oral sex with new clients in last week)	n=89	n=8	N=353
Always	29.8(19.8-42.3)	37.5(8.7-79.2)	1.1(0.3-3.7)
Sometimes	4.4(1.4-13.1)	0	85.6(80.0-89.8)
Never	65.8(52.1-77.2)	62.5(20.8-91.4)	13.3(9.2-18.8)
<b><i>Regular clients</i></b>			
Frequency of condom use in anal sex with regular clients (male/ <i>Hijras</i> ) last week (Denominator is who had regular clients and had anal sex in last week)	n=388	n=203	n=418
Always	10.8(7.6-5.1)	34.5(29.0-40.4)	1.4(0.4-4.8)
Sometimes	48.7(40.7-56.7)	34.5(27.4-42.4)	88.8(83.6-92.4)
Never	40.5(33.2-48.3)	31.0(25.1-37.7)	9.8(6.4-14.7)
Frequency of condom use in anal sex with regular clients (male/ <i>Hijras</i> ) last month (Denominator is who had regular clients and had anal sex in last month)	Not asked	Not asked	n=426
Always			1.4(0.4-4.7)
Sometimes			88.3(83.1-92.0)
Never			10.3(6.8-15.3)
Frequency of condom use in oral sex with regular male/ <i>Hijras</i> ) clients in last week (Denominator is who had oral sex with regular clients in last week)	n=197	n=4	n=347
Always	10.1(6.2-16.1)	25.0(0.5-95.9)	1.2(0.3-3.8)
Sometimes	15.9(10.7-23.0)	25.0(0.5-95.9)	88.5(83.2-92.2)
Never	74.0(65.2-81.2)	50.0(2.5-97.5)	10.4(6.8-15.6)
<b><i>Non-commercial male/Hijra partner</i></b>			
Frequency of condom use in anal sex with male/ <i>Hijra</i> non-commercial partner in last month (Denominator is who reported sex with non-commercial partners and had anal sex in last month)	n=155	n=124	n=8
Always	23.4(17.8-30.0)	31.5(25.2-38.4)	0
Sometimes	25.0(18.2-33.3)	36.3(27.8-45.7)	62.5(20.8-91.4)
Never	51.7(41.8-61.4)	32.3(24.1-41.6)	37.5(8.7-79.2)
Frequency of condom use in anal sex while buying sex from male/ <i>Hijra</i> last month (Denominator is who reported buying sex from male/ <i>Hijra</i> and had anal sex in last month)	n=50	n=5	0

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Always	20.3(10.7-35.1)	80.0(0.6-100.0)	0
Sometimes	17.4(8.7-31.7)	0	0
Never	62.3(43.4-78.1)	20.0(0.04-99.4)	0
<b>Buying and selling sex to female partner</b>			
Frequency of condom use in vaginal/anal sex while buying sex from females in last month (Denominator is who reported buying sex from females in last month)	n=22	n=36	Not Asked
Always	4.6	22.2	
Sometimes	4.6	63.9	
Never	90.9	11.1	
Frequency of condom use in vaginal/anal sex while selling sex to females in last month (Denominator is who sold sex to females in last month)	n=16	n=15	Not Asked
Always	28.0(8.7-61.5)	33.3(11.8-65.2)	
Sometimes	0	60.0(31.8-82.8)	
Never	72.0(38.5-91.3)	6.7(0.8-39.1)	
<b>Non-commercial female partner</b>			
Frequency of condom use in vaginal/anal sex with female non-commercial partners in last month (Denominator is who reported sex with non-commercial female partners in last month)	n=102	n=46	Not Asked
Always	11.9(7.2-19.2)	37.0(23.2-53.2)	
Sometimes	5.3(2.0-13.5)	30.4(17.0-48.4)	
Never	82.7(73.4-89.3)	32.6(19.4-49.3)	

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### **Knowledge about and access to condoms**

Although all the MSWs could recognize a male condom, less than one-half of them in Dhaka and 58 percent in Chittagong ever used condoms during receptive sex. The ever use of condoms during penetrative sex was even worse among the MSWs and *Hijras*. NGO workers were cited to be the major source of condoms for the *Hijras* and MSWs in both locations during the last month. However, about two-thirds of the MSWs and *Hijras* in Dhaka reported friends and pharmacies, respectively, as the second major source for obtaining condoms.

Most of the MSWs and *Hijras* reported that access to condoms was usually easy. Those who reported access to condoms as difficult mentioned that they felt ashamed to buy them and were not willing to carry them. (**Table 5.7**).

### **Condom breakage**

More than one-third (38.6 percent) of the MSWs in Dhaka who ever used condoms and 6 percent in Chittagong reported condom breakage during the last month, while less than one-half (46.2 percent) of the *Hijras* reported condom breakage during a sex act in the last month (**Table 5.7**).

### **Lubricants**

Nearly 100 percent of the MSWs and 79.1 percent of the *Hijras* ever used lubricants while having anal sex. However, more than two-fifths of the MSWs and 72.2 percent of the *Hijras* used condoms with lubricants during last sex act (**Table 5.7**).

**Table 5.7: Knowledge, Ever Use, Access and Breaking of Condoms and Lubricant Use**

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent recognized male condoms	100	100	99.3(97.8-99.8) n=416
Percent were able to show a male condom to the interviewers	34.0(28.8-39.7) n=412	34.7(29.7-40.1) n=380	34.6(28.6-41.2) n=410
Percent ever used a condom during sex	95.8(93.2-97.4)	81.2(76.5-85.1)	95.5(92.3-97.5)
Percent ever used a condom during receptive sex	41.4(36.0-47.0)	58.0(52.9-62.9)	77.4(77.1-82.7) n=425
Percent ever used a condom during penetrative sex	15.1(10.5-21.2)	46.3(41.3-51.5)	17.9(13.1-23.9) n=425
Sources for condoms in last month (Denominator is who had ever used condom in last month)	n=361	n=301	n=394
Shop	17.5(13.6-22.2)	13.6(9.9-18.4)	8.4(5.1-13.4)
Pharmacy	17.5(12.8-23.4)	29.2(23.5-35.7)	62.2(56.2-67.8)
Health center	1.9(0.7-5.0)	18.6(14.0-24.4)	15.2(10.4-21.8)
Bar/guest house/hotel	0.9(0.3-2.9)	1.3(0.5-3.6)	0.5(0.1-2.0)
Friends	58.2(50.7-65.2)	23.6(18.8-29.2)	20.3(15.0-26.9)
Clients	1.1(0.4-3.1)	1.3(0.4-4.4)	8.9(6.0-13.1)
Pimp	18.0(12.8-24.7)	2.7(1.4-5.0)	4.8(2.9-8.0)
NGO workers	61.9(55.1-68.3)	73.8(68.2-78.7)	67.5(60.4-73.9)
No condom bought in last month	3.4(1.7-6.5)	0.3(0.04-2.4)	0.8(0.2-2.3)
Others *	0	0	0.5(0.1-2.0)
Percent reported easy access to condoms	81.7(76.3-86.0) n=415	71.8(67.2-76.0)	80.3(74.9-84.7)
Percent reported easy access to condoms (Denominator is who could identify a male condom and had used condom in last month)	n=360	n=301	n=394
Yes	93.3(88.8-96.0)	91.4(87.1-94.3)	86.8(82.2-90.4)
No	5.9(3.3-10.4)	8.6(5.7-12.9)	9.1(6.2-13.2)
Reasons for not having easy access to condoms (Denominator is who reported not having easy access to condoms)	n=20	n=26	n=36
Cost high	3.8(0.4-27.4)	34.6(17.2-57.4)	36.1(20.0-56.2)
Shop/pharmacy is far away	17.6(3.3-57.3)	11.5(3.5-32.3)	22.2(8.7-46.2)
Shop/pharmacy is closed	0	15.4(5.1-37.9)	27.8(11.5-53.3)
Feel ashamed to buy	29.5(12.4-55.1)	42.3(25.1-61.6)	86.1(69.1-94.5)
Do not know where to buy	17.1(4.6-46.5)	0	0
Not willing to carry	29.7(16.0-48.4)	73.1(49.7-88.2)	5.6(1.3-20.9)
Others**	0	11.5(3.3-33.5)	0
Percent ever used lubricant while having anal sex	99.7(97.9-100.0)	98.2(95.7-99.2)	79.1(73.1-84.1)
Type of lubricant used last time (Denominator is who had ever used lubricant)	n=415	n=376	n=337
Saliva	70.3(62.2-77.4)	49.7(43.1-56.4)	80.4(74.0-85.6)
Oil	32.8(26.6-39.7)	24.7(20.2-30.0)	72.7(65.7-78.8)
Water-based condom lubricant	54.2(47.7-60.6)	44.4(39.2-49.7)	67.1(59.5-73.8)
Antiseptic cream	4.7(2.7-8.0)	10.6(8.1-13.8)	4.5(2.6-7.6)
Ordinary lotion	21.5(17.3-26.3)	3.7(2.2-6.1)	14.8(10.4-20.7)
Others***	2.6(1.3-5.1)	8.5(5.8-12.3)	3.6(1.9-6.7)
Percent use condom during last sex with lubricant (Denominator is who had ever used lubricant)	42.0(36.5-47.6) n=415	42.6(37.4-47.8) n=376	72.2(65.4-78.2) n=335
Percent use condom during last sex with lubricant (Denominator is who had ever used of condoms and lubricant)	43.8(38.1-49.7) n=397	52.1(45.9-58.3) n=305	74.2(67.6-79.9) n=326
Percent ever heard about lubricant product made especially for use with condoms	67.4(60.7-73.5) n=415	77.0(72.2-81.2)	57.5(50.5-64.2)
Percent were able to mention brand name of such a product	58.9(52.6-64.9)	55.4(49.4-61.2)	44.2(37.5-51.2) n=425
Proportion were able to mention brand name of such a product (Denominator is who had ever heard about such products)	87.7(82.8-91.4) n=287	71.9(64.8-78.0) n=295	77.1(68.5-83.8) n=244
Brand name of lubricant	n=255	n=212	n=187



Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
(Denominator is who was able to mention brand name)			
Sathi	98.2(95.3-99.3)	87.3(82.4-91.0)	91.4(84.9-95.3)
KY Jelly	0.4(0.1-2.7)	0.9(0.2-3.7)	7.0(3.6-13.1)
Gono Lubricant	0	8.0(5.2-12.3)	1.6(0.5-4.9)
Modhumita	0.6(0.1-4.1)	3.8(1.8-7.9)	0
Shampoo	0.8(0.2-3.3)	0	0
Percent frequently have used special lubricant together with a condom during anal sex in last month (Denominator is who had heard about lubricant products, especially used with condoms)	n=287	n=294	n=245
Always	14.5(10.5-19.7)	24.5(19.2-30.7)	7.3(4.2-12.5)
Sometimes	62.9(55.5-69.8)	52.7(47.1-58.3)	89.8(84.3-93.5)
Never	22.2(17.0-28.5)	22.1(17.8-27.2)	2.4(1.1-5.4)
Reasons for not using special condom lubricant (never or sometimes)	n=244	n=220	n=226
High cost	10.4(5.8-17.7)	4.5(2.2-9.2)	2.7(1.2-5.7)
Shy to buy/carry lubricant	13.1(8.2-20.1)	22.3(15.9-30.4)	87.6(80.3-92.5)
Don't know where to obtain	18.3(12.2-26.5)	1.8(0.7-4.8)	3.5(1.7-7.0)
Do not need to use	8.6(5.6-13.1)	34.6(26.3-43.9)	5.3(2.5-10.8)
Use other cream/oil	19.5(14.9-25.1)	10.9(6.9-16.8)	15.0(9.7-22.5)
Supply inadequate	72.5(65.0-78.9)	46.8(39.3-54.5)	0
Not easy to carry	0.3(0.05-2.5)	25.5(18.1-34.5)	0
Others*****	9.4(5.4-15.9)	15.0(9.5-22.8)	0.9(0.2-3.5)
Reasons for always using special condom lubricant	n=42	n=72	n=18
Decrease pain/inflammation	37.8(23.0-55.3)	55.6(43.9-66.7)	5.6(0.5-38.7)
Increase feeling	96.0(83.9-99.1)	44.4(34.1-55.3)	94.4(61.4-99.5)
Decrease risk of condom breakage	49.7(34.2-65.2)	54.2(41.6-66.2)	100
To avoid HIV/AIDS/STD infection	0	65.3(52.7-76.1)	72.2(37.0-92.0)
Others*****	0	4.2(1.0-16.4)	0
Percent had a condom break in last month	33.7(27.6-40.3)	4.7(2.8-7.8)	42.7(36.3-49.4)
Percent had a condom break in last month (Denominator is who had ever used condom in last month)	38.4(31.9-45.4) n=361	6.0(3.6-9.8) n=301	46.2(39.5-53.0) n=394

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** no need, customer brought condom, from NGO clinic.

\*\***Others stated:** less use, no money, not available, client did not want to use, never like to use condoms.

\*\*\***Others stated:** egg, banana, Vaseline, shampoo, soap.

\*\*\*\* **Others stated:** did not like to use condoms, use lubricant besides condom, did not use every time, olive oil, unavailable.

\*\*\*\*\***Others stated:** can do anal sex easily, prevention from bacteria, like to use.

### Place of sex act

The *Hijra* usually sell sex in public places like parks and in residences; MSWs sell sex at hotels and residences. In Dhaka, more than two-fifths (42.7 percent) of the MSWs reported selling sex at parks as well (Table 5.8).

**Table 5.8: Place of Sex Act**

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Place of sex (Denominator is who had new clients last week)	n=259	n=243	n=422
Park	42.7(34.5-51.4)	14.8(10.6-20.3)	93.8(90.4-96.1)
Hotel	60.7(52.7-68.2)	79.4(72.1-85.2)	5.9(4.0-8.7)
Residence	66.8(57.9-74.7)	71.6(64.7-77.7)	63.0(57.0-68.7)
Car	20.9(14.9-28.5)	6.2(3.8-9.9)	38.6(32.8-44.8)
Roof	21.0(15.2-28.2)	23.9(17.8-31.2)	16.4(12.1-21.8)
Cinema Hall	24.0(18.0-31.2)	2.5(1.2-5.1)	28.7(23.9-34.0)
Street	11.7(8.0-16.9)	4.1(1.9-8.6)	52.4(46.6-58.1)
Others*	2.9(1.2-6.6)	1.6(0.6-4.3)	3.1(1.6-5.8)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

\***Others stated:** bus stand, over bridge, boat, shop, bathroom, playground, and riverbank.

### Profile of clients

The majority of the clients of MSWs are businessmen, service holders and car drivers. The main clients of *Hijra* are rickshaw pullers, car drivers and members of law enforcement agencies. Of the MSW clients, 24.2 percent in Dhaka and 17.5 percent in Chittagong were reported to be injecting drugs users. Less than 1 percent of *Hijra* clients were reported as injecting drug users (Table 5.9).

**Table 5.9: Occupational Profile of Clients**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Clients' occupation (Denominator is who knew clients' occupation)			
Students	25.3(20.3-31.0)	19.3(14.9-24.7)	9.9(6.9-13.8)
Rickshaw pullers	33.2(28.6-38.0)	22.5(18.2-27.3)	87.1(83.0-90.3)
Law enforcement agency	28.5(24.3-33.1)	20.4(16.7-24.7)	69.0(63.4-74.1)
Service holders	54.1(48.7-59.4)	65.0(59.4-70.2)	9.9(7.1-13.5)
Driver	52.1(46.0-58.1)	57.4(50.8-63.8)	81.7(77.3-85.4)
Business men	69.5(64.3-74.3)	74.2(68.0-79.5)	9.2(6.5-12.8)
Daily laborer	23.7(19.4-28.7)	34.2(29.4-39.3)	8.5(5.8-12.2)
Unemployed	10.8(7.2-15.9)	6.3(4.4-8.9)	17.6(13.5-22.6)
Others*	0.2(0.03-1.4)	0.5(0.1-3.8)	0.5(0.1-1.9)

\* **Others Stated:** helper, mechanic, heroin smoker.

### Mobility of MSW and Hijra

Less than one-half (45.8 percent) and more than one-third (36.0 percent) of the MSWs and 12 percent of *Hijras* reported having sex outside the city. Approximately 6 percent of the MSWs in Dhaka, 1 percent of MSWs in Chittagong and 2 percent of *Hijras* reported to have visit outside the country in the preceding year; almost all of them had sex there, but less than one-third used condoms during last sex act outside the country (Table 5.10).

**Table 5.10: Mobility of MSWs and Hijras**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent who had sex outside of this city (inside country)	45.8(38.5-53.2)	36.0(30.9-41.5)	12.0(8.6-16.5)
Percent who visited outside the country in last year	5.5(3.6-8.5)	1.0(0.4-2.7)	1.9(0.9-3.7)
Percent who had sex outside the country (Denominator is who visited outside country in last year)	96.5(74.8-99.6) n=26	100 n=4	100 n=8
Percent who used condom during last sex act outside country (Denominator is who visited outside country in last year)	36.4(17.1-61.3) n=24	0	28.6(4.2-78.5) n=7

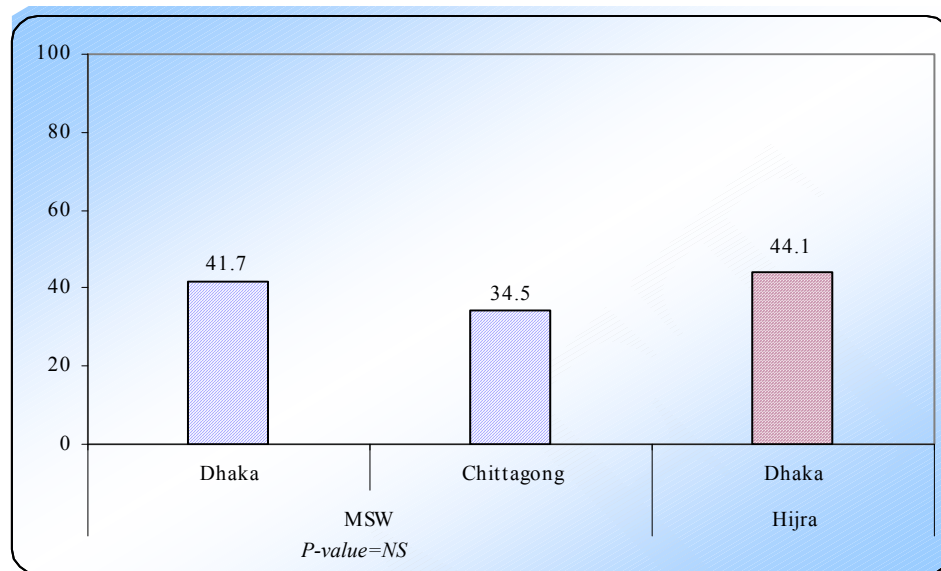
**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### 5.3 Issues of STIs and HIV/AIDS

#### *Self-reported STI and care-seeking behavior*

More than one-third of the MSWs and 44.1 percent of *Hijras* reported at least one STI symptom in the preceding year (**Figure 5.3**).

**Figure 5.3: Percentage Reporting at least One STI Symptom in Last Year**



Among those reporting STI symptoms, nearly one-half did not undergo any formal medical treatment. The MSWs who reported seeking treatment in both locations reported opting for services mostly from NGO clinics and pharmacists. The *Hijras* usually sought services from private doctors, pharmacists and private clinics. Only 15.4 percent of *Hijras* also reported visiting NGO clinics for treatment in the preceding year. Traditional healers, self-medication or advice from friends were also popular among MSWs in Dhaka. On average, an MSW spent Taka 140 and Taka 181 in Dhaka and Chittagong, respectively, for the last STI treatment in the preceding year. A *Hijra* spent Taka 234 for the same (**Table 5.11**).

**Table 5.11: Self-reported STI and Treatment-seeking Behavior**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Knowledge about STIs			
Discharge from penis	41.7(35.5-48.2)	48.8(43.5-54.2)	45.1(38.4-51.9)
Burning pain on urination	51.9(44.8-59.0)	66.1(60.4-71.3)	77.7(72.3-82.3)
Genital ulcers/sores	49.8(44.3-55.3)	53.5(47.0-59.9)	70.0(63.6-75.7)
Swellings in groin	29.6(24.2-35.8)	14.4(10.9-18.8)	19.3(14.6-24.9)
Anal discharge	35.8(29.3-42.8)	18.3(15.2-21.9)	13.2(9.4-18.0)
Anal ulcer/sores	40.6(34.6-46.9)	71.0(64.7-76.6)	18.8(14.3-24.2)
Others*	0	0.5(0.1-2.1)	1.2(0.5-2.8)
Percent reported having urethral discharge in last one year	7.4(4.8-11.2)	9.4(7.1-12.3)	25.7(19.6-32.8) n=425
Percent reported having anal discharge in last one year	36.5(31.7-41.5) n=415	21.9(17.8-26.7)	34.8(28.5-41.7) n=425
Percent reported having genital ulcer/sore in last one year	2.1(1.1-4.0) n=415	5.7(3.6-8.9)	36.2(29.7-43.4) n=425
Percent reported at least one STI symptom in the last year	41.7(36.5-47.0)	34.5(29.6-39.6)	44.1(36.8-51.7)

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent sought formal medical treatment for last STI symptom (Denominator is who had symptoms in last one year)	47.7(39.3-56.3) n=180	68.9(61.1-75.9) n=132	68.1(60.6-74.8) n=188
Percent sought formal medical treatment as a first choice for last STI symptom in last year (Denominator is who had symptoms and sought treatment in last one year)	49.3(40.4-58.2) n=174	69.5(61.2-76.6) n=131	70.0(62.4-76.5) n=183
Choice of STI treatment (Denominator is who reported STI in last year)	n=180	n=132	n=188
Hospital	3.3(1.4-7.5)	9.8(6.2-15.4)	1.1(0.3-4.2)
Pharmacy (drug seller)	25.5(19.4-32.9)	25.0(18.8-32.4)	21.8(16.5-28.2)
Private doctor	4.0(1.9-8.3)	13.6(9.1-20.0)	34.6(27.1-42.8)
Private clinic	0	1.5(0.4-5.6)	17.0(12.0-23.6)
NGO clinic**	40.4(32.6-48.8)	43.9(35.0-53.4)	15.4(9.3-24.4)
Traditional healer	8.0(4.6-13.4)	1.5(0.4-6.0)	0.5(0.1-3.8)
Advice/treatment from friends	13.0(8.3-19.7)	3.0(1.1-8.0)	5.3(2.3-11.8)
Self-medication	2.6(1.0-6.9)	0.8(0.1-5.4)	1.6(0.4-6.8)
Did not seek treatment	3.2(1.3-7.9)	0.8(0.1-5.2)	2.7(0.9-7.3)
Mean waiting days for last STI treatment (Denominator is who sought treatment in last one year)	10.9(9.9-11.8) M=10 n=173	7.5(6.5-8.6) M=6 n=131	5.5(4.0-7.0) M=4 n=181
Mean expenditure in last STI treatment in last year (Denominator is who reported STI in last year and sought treatment)	139.9(110.0-169.7) M=90 n=168	180.8(139.0-222.5) M=118.5 n=128	233.5(189.7-277.2) M=200 n=179
Percent reported to have visited STI clinics last month	18.1(14.6-22.4)	20.6(16.1-26.0)	37.6(31.4-44.2)
Name of clinics visited (Denominator is who visited STI clinic in last month)	n=78	n=79	n=160
Badhon	0	0	55.0(45.7-64.0)
Sushtha Jibon	0	0	59.4(50.3-67.8)
Modhumita	23.3(13.2-37.8)	67.1(54.8-77.4)	3.1(1.3-7.2)
Can't say	0	0	1.3(0.3-5.0)
Bondhu	56.8(41.9-70.6)	19.0(9.9-33.4)	0
Let there be light	19.8(10.0-35.5)	1.3(0.2-9.0)	0
Nishkriti	0	3.8(1.2-11.3)	0
Shurokha	0	6.3(2.7-14.4)	0
CARE	0	2.5(0.6-10.0)	0

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** bleeding, gonorrhea, scoral swelling.

\*\***NGO Clinic:** Badhon, Modhumita, Sushtha Jibon.

### Knowledge about modes of HIV transmission

The majority of MSWs and 70.4 percent of the *Hijras* had heard about HIV/AIDS. More than one-half of the MSWs and *Hijras* were aware of the modes of HIV prevention, particularly the use of condoms and not sharing needles/syringes. However, more than one-half of the MSWs in Dhaka were not aware of the risks of anal sex with different partners. Nearly one-third of the MSWs in Dhaka had the misconception that HIV could be transmitted by mosquito bites (Table 5.12).

**Table 5.12: Knowledge about Modes of HIV Transmission and Confidential HIV Testing**

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent reported to have heard about HIV/AIDS	87.0(80.9-91.3)	96.6(94.0-98.1)	70.4(64.1-76.1)
Percent mentioned condom use as a mode of prevention	64.7(57.6-71.1)	86.4(83.0-89.3)	67.6(61.2-73.4)
Percent mentioned can reduce the risk of HIV/AIDS by using a condom properly every time	61.2(54.2-67.8) n=415	78.3(73.7-82.3)	66.8(60.4-72.7) n=425
Percent mentioned not sharing needles as a mode of prevention	72.5(65.0-78.9) n=415	72.5(67.7-76.9) n=382	65.0(58.7-70.9)

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent mentioned can reduce the risk of HIV/AIDS by using a condom during anal sex	58.9(51.2-66.1) n=414	76.2(71.0-80.8)	66.8(60.3-72.6) n=424
Percent mentioned avoiding anal sex as a mode of prevention	42.6(35.5-50.0) n=412	61.8(56.2-67.2) n=380	60.1(53.7-66.2)
Portion mentioned AIDS can be transmitted by mosquito bites	30.6(25.1-36.8) n=413	14.7(10.6-19.9) n=382	0.7(0.2-2.2) n=425
Percent mentioned AIDS can be transmitted by sharing food	14.2(10.5-18.9) n=413	9.7(6.6-13.8)	1.9(0.9-3.7) n=425
Percent mentioned avoiding multiple sex as a mode of prevention	47.3(40.7-54.1) n=413	62.9(57.8-67.8)	57.4(50.8-63.7) n=422
Percent mentioned one can tell by looking at people to tell whether they are infected with HIV	5.5(2.7-10.8)	5.8(3.6-9.0) n=382	0.7(0.2-3.0) n=424
Percent knew where HIV can be tested confidentially	43.9(37.5-50.5) n=415	36.0(31.0-41.4)	38.5(32.0-45.5)
Percent ever tested for HIV (Denominator is who knew where to test for HIV)	14.4(9.0-22.1) n=186	29.7(22.1-38.6) n=138	69.5(58.8-78.5) n=164
Place of HIV testing	n=13	n=41	n=114
Bandhu	41.1(17.1-70.2)	0	0
Let there be light	36.3(10.1-74.3)	0	0
Modhumita	22.7(7.1-52.9)	46.3(28.5-65.1)	42.1(34.3-50.3)
Medical	0	14.6(5.4-33.9)	0
Jagori	0	31.7(17.8-49.9)	50.9(43.0-58.7)
Nishkriti	0	2.4(0.3-17.4)	0
Ashar Alo	0	2.4(0.3-17.4)	0
Shoraksha	0	2.4(0.3-17.4)	0
Sathi	0	0	6.1(3.1-11.9)
Sushtha Jibon	0	0	0.9(0.1-6.4)
Did you yourself request the test or did somebody ask you to have the test? (Denominator is who ever tested for HIV)	n=29	n=40	n=114
Self	64.2(39.8-83.0)	47.5(32.4-63.0)	94.7(88.9-97.6)
By someone else	35.8(17.0-60.2)	52.5(37.0-67.6)	5.3(2.4-11.2)
Percent reported to have been given the result of an HIV test (Denominator is who ever tested for HIV)	96.9(76.7-99.7) n=29	92.5(77.5-97.8) n=40	56.1(44.9-66.8) n=114
Time of the most recent HIV test (Denominator is who ever tested for HIV)	n=29	n=40	n=112
Within one year	63.5(39.3-82.4)	40.0(22.3-60.7)	54.5(42.9-65.5)
More than one year	36.5(17.6-60.7)	60.0(39.3-77.7)	45.5(34.5-57.1)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Others stated:** NGO worker, friends, doctor, colleague, health worker, CARE officer.

### Self-perception of risk

Only 5.1 percent MSWs in Dhaka thought they were at high risk and another 36.1 percent could not assess the risk of their sexual behavior. However, roughly one-third of the MSWs in Chittagong and another one-third of *Hijras* assessed themselves at high risk of HIV/AIDS (Table 5.13).

**Table 5.13: Self-perception of Risk**

Indicators % (95 % CI)	MSW		Hijra
	Dhaka N=416	Chittagong n=383	Dhaka n=426
Risk of HIV/AIDS :		n=381	n=423
High risk	5.1(3.1-8.1)	38.1(32.3-44.1)	31.4(25.2-38.4)
Medium risk	11.1(8.0-15.2)	24.2(19.2-29.9)	41.8(34.9-49.2)
Little or no risk	47.7(41.0-54.6)	23.9(19.5-28.9)	0.9(0.3-3.1)
Could not assess their risk	36.1(28.7-44.3)	13.9(10.7-17.9)	25.8(20.0-32.6)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

The MSWs and *Hijras* who considered themselves at high risk usually reported frequent anal sex and inconsistent use of condoms during sex as the main reasons for HIV/AIDS risk. In Contrast, the reasons for assessing themselves at low/no risk were that they choose clean and healthy clients, sometimes used condom during sex and never shared needle/syringe. (Table 5.14).

**Table 5.14: Reasons for Self-perception of Risk**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Reasons for self-perception of risk (Denominator is who thought themselves at high or medium risk)	n=66	n=237	n=310
Risky profession	25.1(16.4-36.4)	51.1(41.9-60.2)	68.1(60.4-74.9)
Frequent anal sex	59.4(44.7-72.7)	30.4(23.1-38.9)	71.9(64.2-78.6)
Do not use condom	23.2(14.0-35.9)	27.0(20.9-34.1)	61.0(53.1-68.3)
Sometimes use condom	57.8(44.2-70.3)	59.5(52.3-66.3)	49.0(41.4-56.7)
Sharing needle/syringe	2.8(0.7-11.3)	1.7(0.7-4.2)	15.5(10.3-22.7)
Others*	0	0.4(0.1-3.1)	0
Reasons for assessing themselves at little or no risk (Denominator is who perceived themselves to be at little or no risk)	n=202	n=91	n=4
Always use condoms	4.6(2.4-8.8)	81.3(72.4-87.8)	25.0(0.1-99.6)
Irregular use of condoms	60.7(53.6-67.3)	8.8(4.7-15.7)	50.0(0.2-99.8)
Clean clients	37.9(31.0-45.4)	12.1(5.9-23.0)	0
Healthy clients	15.7(10.7-22.4)	1.1(0.1-8.2)	25(0.0-99.6)
Avoid sex with foreigners	19.4(14.0-26.3)	5.5(2.5-11.7)	0
Never share needles/syringes	59.6(50.3-68.2)	12.1(6.2-22.1)	0
Others**	2.9(1.3-6.4)	4.4(1.6-11.4)	0

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** condom bursts.

\*\***Others stated:** sometimes do sex, take medicine, wash with soap, never do risky work.

### Measures taken to avoid STIs and HIV/AIDS

To avoid STIs and HIV/AIDS, MSWs sometimes used condoms and some of them washed their genital organs with Dettol or urine. More than two-thirds of *Hijras* usually washed their genital organs with Dettol/urine and almost an equal proportion used condoms to avoid STI and HIV/AIDS. Nearly one-tenth of the *Hijras* also reported taking medicine to avoid the same. Nevertheless, almost one-third MSWs in Dhaka, one-fifth in Chittagong and a small portion of *Hijras* did not take any steps to avoid STIs and HIV/AIDS (Table 5.15).

**Table 5.15: Measures Taken to Avoid STIs and HIV**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Steps taken to avoid STIs			
Nothing	34.7(27.9-42.3)	20.6(16.6-25.4)	5.2(3.0-8.7)
Wash genital organs with water/soap/Dettol/urine	28.1(22.4-34.5)	22.2(18.8-26.0)	69.5(62.6-75.6)
Always use condoms	2.1(1.1-4.0)	25.6(21.7-29.9)	0.5(0.1-3.3)
Sometimes use condoms	51.3(43.5-59.1)	43.3(37.9-49.0)	68.5(61.8-74.6)
Take medicine	2.7(1.4-5.2)	2.1(0.9-5.0)	11.3(7.7-16.3)
Others*	3.6(2.0-6.5)	8.4(5.7-12.0)	0
Steps taken to avoid HIV (Denominator is who has heard about HIV)	n=369	n=370	n=300
Nothing	31.9(25.0-39.7)	17.6(14.2-21.5)	4.0(1.9-8.1)
Never share needle/syringe	0	0	18.0(12.1-26.0)
Wash genital organs with water/soap/Dettol/urine	25.6(19.6-32.6)	21.9(18.3-26.0)	75.3(68.0-81.5)
Always use condoms	2.4(1.3-4.6)	26.5(22.5-31.0)	0.7(0.1-4.7)

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Sometimes use condoms	59.3(51.8-66.4)	44.3(39.1-49.7)	76.0(69.0-81.9)
Take medicine	2.4(1.2-4.8)	1.6(0.6-4.2)	15.7(10.7-22.3)
Others**	2.4(1.1-5.3)	5.9(3.5-9.9)	0

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** sex with reliable client, stay neat and clean, awareness, less sexual intercourse.

\*\***Others stated:** select healthy client, reliable sex partner, always stay neat and clean, blood test, less sexual intercourse, wash with soap, be careful.

### Confidential HIV testing

More than two-fifths (43.9 percent) of the MSWs in Dhaka and more than one-third of them in Chittagong were aware of confidential HIV testing and nearly two-fifths of *Hijras* were aware of this. However, only 6.3 percent of MSWs in Dhaka and 10.7 percent in Chittagong had ever tested for HIV. Of these, most were aware of the test results. On the other hand, 26.8 percent of *Hijras* had ever tested for HIV and about one-half of them (44.9 percent) did not receive their test results (**Table 5.16**).

**Table 5.16: Confidential HIV Testing**

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent knew where HIV can be tested confidentially	43.9(37.5-50.5) n=415	36.0(31.0-41.4)	38.5(32.0-45.5)
Percent ever tested for HIV	6.3(3.8-10.1)	10.7(7.7-14.6)	26.8(21.1-33.3)
Percent ever tested for HIV (Denominator is who knew where to test for HIV)	14.4(9.0-22.1) n=186	29.7(22.1-38.6) n=138	69.5(58.8-78.5) n=164
Place of testing HIV	n=13	n=41	n=114
Bandhu	41.1(17.1-70.2)	0	0
Let there be light	36.3(10.1-74.3)	0	0
Modhumita	22.7(7.1-52.9)	46.3(28.5-65.1)	42.1(34.3-50.3)
Medical	0	14.6(5.4-33.9)	0
Jagori	0	31.7(17.8-49.9)	50.9(43.0-58.7)
Nishkriti	0	2.4(0.3-17.4)	0
Ashar Alo	0	2.4(0.3-17.4)	0
Shurakkha	0	2.4(0.3-17.4)	0
Sathi	0	0	6.1(3.1-11.9)
Sushtha Jibon	0	0	0.9(0.1-6.4)
Did you yourself request the test or did somebody ask you to have the test? (Denominator is who ever tested for HIV)	n=29	n=40	n=114
Self	64.2(39.8-83.0)	47.5(32.4-63.0)	94.7(88.9-97.6)
By someone else	35.8(17.0-60.2)	52.5(37.0-67.6)	5.3(2.4-11.2)
Percent reported to have been given the HIV test results (Denominator is who ever tested for HIV)	96.9(76.7-99.7) n=29	92.5(77.5-97.8) n=40	56.1(44.9-66.8) n=114
Time of the most recent HIV test (Denominator is who ever tested for HIV)	n=29	n=40	n=112
Within one year	63.5(39.3-82.4)	40.0(22.3-60.7)	54.5(42.9-65.5)
More than one year	36.5(17.6-60.7)	60.0(39.3-77.7)	45.5(34.5-57.1)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Others stated:** NGO worker, friends, doctor, colleague, health worker, CARE officer, Gotia.

## 5.4 Incidences of Harassment

Approximately, one-third (38 percent) of the MSWs in Dhaka, 24.5 percent of the MSWs in Chittagong and 27 percent of the *Hijras* reported having been beaten in the preceding year, mostly by local mastans (extorshonist) and members of law enforcement agencies. About one-third of the MSWs (31.8 percent) in Dhaka also reported being beaten by their clients.

Moreover, one-third (33.2 percent) of MSWs in Dhaka, 24.1 percent MSWs in Chittagong and 17.2 percent of the *Hijras* reported to have been raped in the preceding year. The MSWs were usually raped by *mastans*, members of law enforcement agencies and by their clients. Again, most *Hijras* reported to have been raped by *mastans* and members of law enforcement agencies (Table 5.17).

**Table 5.17: Violence Against Male Sex Workers and Hijra**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent reported to have beaten in last year	38.0(31.1-45.4)	24.8(20.8-29.3)	27.0(22.0-32.7)
Beating done by: (Denominator is who reported being beaten in last year)	n=172	n=95	n=115
Law enforcement agents	51.7(42.2-61.0)	29.5(19.4-42.0)	87.0(77.3-92.9)
Mastans (extorshonist)	24.3(17.5-32.8)	44.2(34.6-54.2)	98.3(93.3-99.6)
New clients	14.7(10.6-20.1)	7.4(2.4-20.8)	0
Regular clients	31.8(24.8-39.9)	7.4(3.7-14.3)	7.0(3.5-13.3)
Others*	0.9(0.1-6.3)	11.6(6.0-21.2)	0
Percent reported to have raped in last year	33.2(27.0-40.0)	24.1(19.6-29.2)	17.2(12.9-22.5)
		n=382	n=425
Percent reported beaten or raped in past year	45.2(38.0-52.7)	38.4(33.2-43.9)	27.9(22.9-33.6)
Violence done by: (Denominator is who reported being raped in last year)	n=151	n=92	n=73
Law enforcement agents	26.0(19.8-33.3)	13.0(6.7-23.8)	78.1(65.7-86.9)
Mastans (extorshonists)	35.2(27.3-43.9)	58.7(46.1-70.2)	97.3(89.6-99.3)
New clients	23.4(17.9-30.1)	22.8(13.4-36.2)	4.1(1.2-12.7)
Regular clients	32.0(22.8-42.8)	8.7(4.2-17.1)	8.2(3.7-17.4)
Others**	1.5(0.3-6.0)	5.4(2.3-12.1)	0
Percent reported ever being jailed in the last year	4.5(2.6-7.4)	7.3(5.0-10.5)	0

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

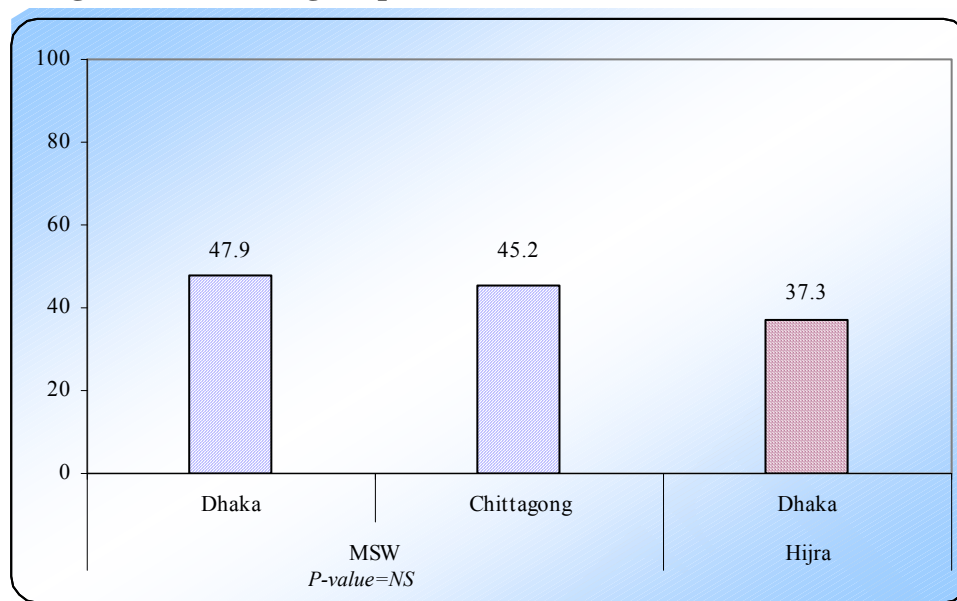
\***Others stated:** colleague, sailor, shopkeeper, hotel owner, friend, neighbor, family member, pimp.

\*\***Others stated:** bus driver, friend, colleague, brother.

## 5.5 Involvement in Intervention Programs

Nearly one-half of the MSWs and 37.3 percent of the *Hijras* participated in HIV/AIDS intervention programs in the preceding year. MSWs mostly participated in education programs, received condoms and attended drop-in centers (DIC). Approximately 32 percent of the MSWs in Chittagong also received STI treatment, while almost one-half of the MSWs in Dhaka attended DICs. *Hijra* usually collected condoms, participated in needle/syringe exchange programs, received STI treatment and attended DICs in the last year (Figure 5.4).



**Figure 5.4: Percentage Exposed to HIV/AIDS Interventions in Last Year**

Most of the MSWs and *Hijras* reported learning about STIs, HIV/AIDS, safe sex and appropriate use of condoms from intervention programs. A good proportion of them also reported that these interventions had helped them change their behavior. However, 16.9 percent of MSWs in Dhaka reported that the information was hard to understand and 28.7 percent of MSWs in the same location also reported that the information was not sufficient enough for them to change their behavior (**Table 5.18**).

**Table 5.18: Exposure to Interventions**

Indicators % (95 % CI)	MSW		<i>Hijra</i>
	Dhaka n=416	Chittagong n=383	Dhaka n=426
Percent exposed to HIV/AIDS interventions in last year	47.9(41.4-54.5)	45.2(39.1-51.4)	37.3(31.2-43.9)
Type of interventions in last year	n=198	n=173	n=159
Needle exchange program	0.8(0.2-3.2)	3.5(1.4-8.1)	2.5(0.7-8.1)
Education program	47.7(38.5-57.0)	56.1(47.0-64.8)	66.7(56.5-75.5)
Received condoms	54.9(45.1-64.4)	66.5(58.1-73.9)	70.4(60.8-78.6)
Received STI treatment	8.4(4.9-14.0)	31.8(23.7-41.2)	64.2(53.1-73.9)
Attending IHC	47.5(36.7-58.5)	4.6(2.1-9.8)	54.1(42.9-64.9)
Attending DIC	31.1(21.7-42.4)	23.7(18.0-30.6)	46.5(35.7-57.8)
Attending VCT	1.3(0.4-3.9)	0	0
Others	0	3.5(1.5-8.0)	0
Mean number of years involved with interventions	2.0(1.7-2.3) M=2 n=198	1.6(1.4-1.8) M=1.3 n=173	1.9(1.6-2.1) M=1.5 n=159
Percent exposed to intervention in last one month (Denominator is who was exposed to interventions in last year)	65.3(56.1-73.5) n=198	72.8(66.5-78.4) n=173	92.5(87.0-95.8) n=159
Percent exposed to intervention in last one month	31.3(25.8-37.3)	32.9(27.4-38.9)	34.5(28.8-40.7)
Mean number of times involved with interventions in last month (Denominator is who was exposed to interventions in last month)	2.3(1.4-3.2) M=1 n=189	1.8(1.4-2.2) M=1 n=173	4.4(4.0-4.7) M=5 n=148
Percent reported to have benefited from intervention (Denominator is who was exposed to interventions in last year)	n=198	n=173	n=159
Helped in changing behavior	23.5(16.4-32.5)	41.6(34.0-49.7)	58.5(48.1-68.2)
Received useful information but behavior did not change	28.7(20.9-38.1)	8.1(4.7-13.5)	6.9(3.1-14.7)
Learnt about HIV/AIDS/STD/safe sex and correct	70.7(59.9-79.5)	95.4(91.0-97.7)	97.5(93.4-99.1)

Indicators % (95 % CI)	MSW		Hijra
	Dhaka n=416	Chittagong n=383	Dhaka n=426
use of condom			
Information was hard to understand	16.9(10.4-26.1)	0.6(0.1-4.2)	1.3(0.3-4.9)
Information was not relevant to their needs	9.0(4.8-16.1)	0	0
Others*	1.7(0.4-6.6)	0	0

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

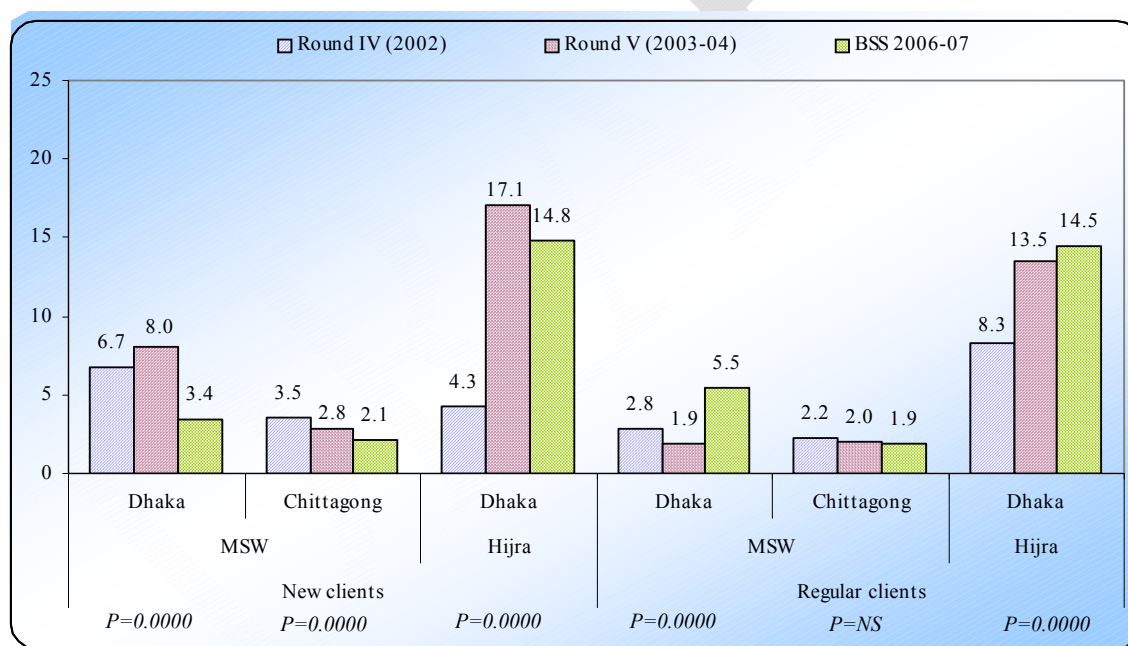
\***Others stated:** got free condoms.

## 5.6 Change in Risk Behaviors Over the Rounds

### Number of clients

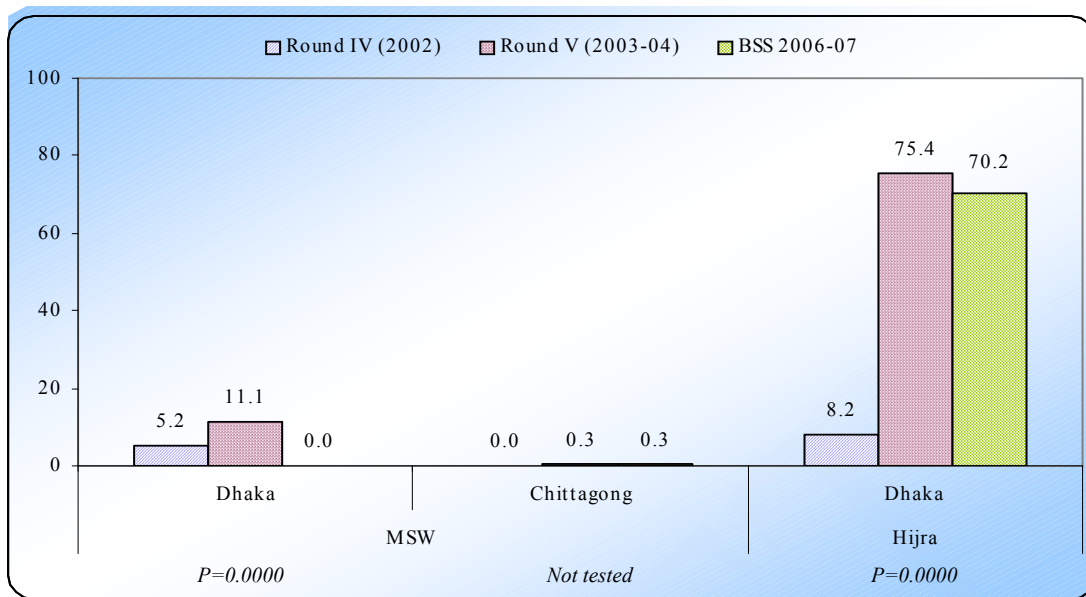
The mean number of new clients for MSWs in both Dhaka and Chittagong declined during BSS 2006-07, compared with previous rounds. The mean number of regular clients of MSWs increased in Dhaka in BSS 2006-07 and remained unchanged in Chittagong compared with Round V. Both the new and regular number of clients of *Hijras* in Dhaka was high, and the average number of regular clients of *Hijras* steadily increased over the BSS rounds (**Figure 5.5**).

**Figure 5.5: Mean Number of Clients in Last Week**



An insignificant proportion of MSWs in both Dhaka and Chittagong reported more than 20 clients in the last week over the BSS rounds. Most of the *Hijras* in Round V and BSS 2006-07 reported more than 20 clients in the last week, while the same was only 8.2 percent in Round IV (**Figure 5.6**).

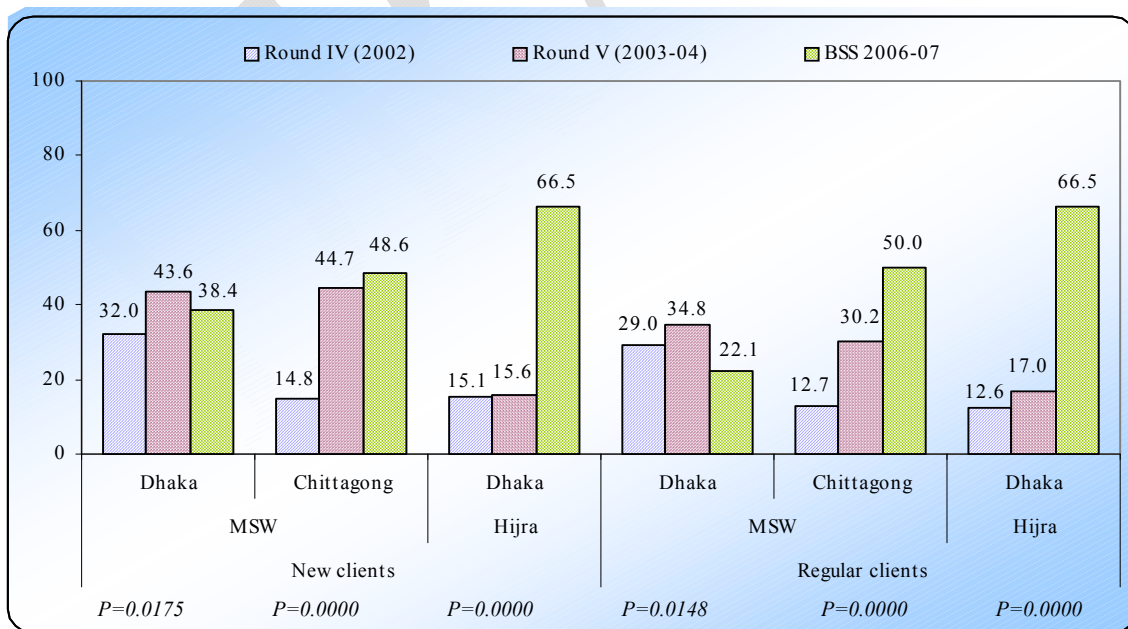
**Figure 5.6: Percentage Reporting More Than 20 Clients in Last Week**



**Condom use during anal sex**

The use of condoms during last anal sex act with both new and regular clients slightly declined among the MSWs in Dhaka during BSS 2006-07 compared with Round V. The use of condoms by MSWs in Chittagong with new and regular clients increased over the same period. Nevertheless, the use of condoms by *Hijras* with both the new and regular clients significantly increased during BSS 2006-07 compared with that of previous BSS rounds (Figure 5.7).

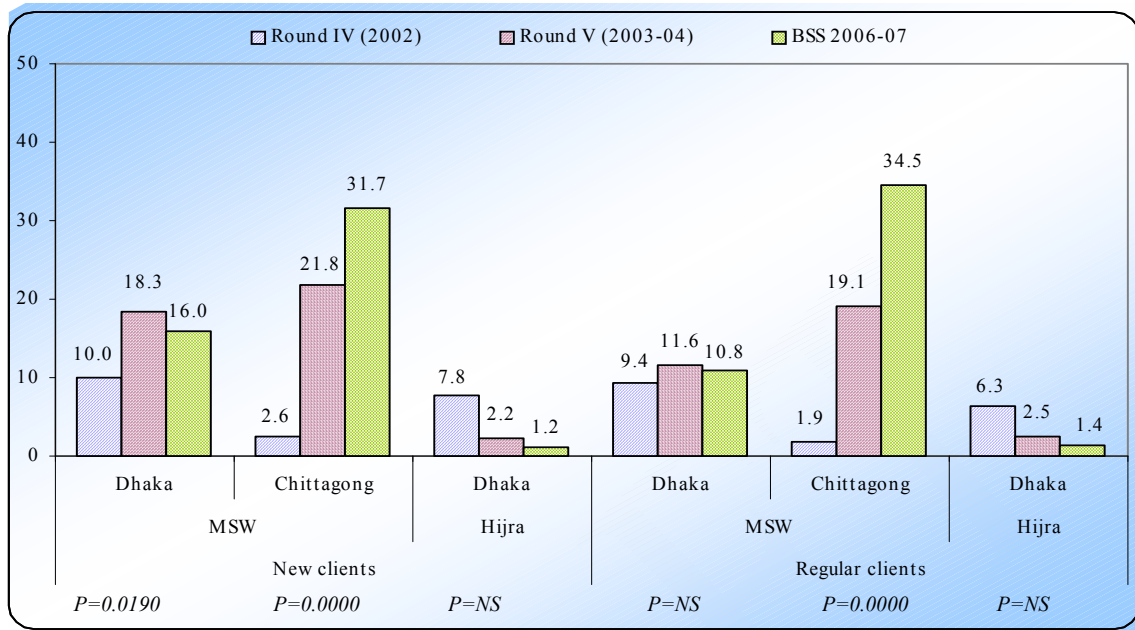
**Figure 5.7: Condom Use during Last Anal Sex Act**



The consistent use of condoms among MSWs with new clients in Dhaka slightly decreased during BSS 2006-07, while it remained unchanged with regular clients. The consistent use of condoms with new or regular clients increased significantly among MSWs in Chittagong over the rounds. Although the use of condoms by *Hijras* during last sex act with both new and

regular clients increased during BSS 2006-07, consistency in regular condom use was significantly low and declining over the BSS rounds (**Figure 5.8**).

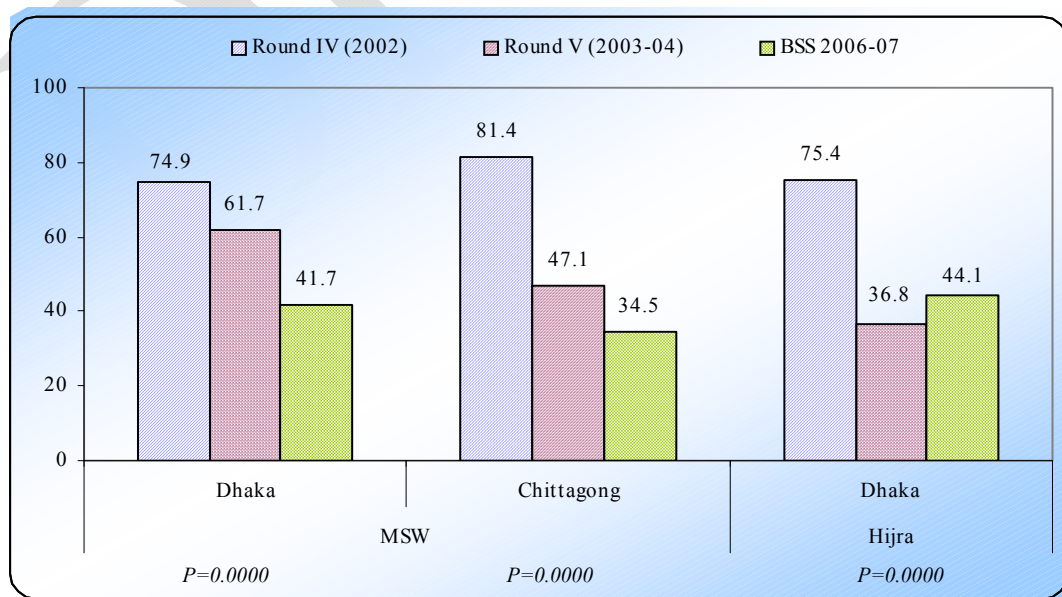
**Figure 5.8: Consistent Use of Condoms during Anal Sex in Last Week**



**Self-reported STIs and treatment**

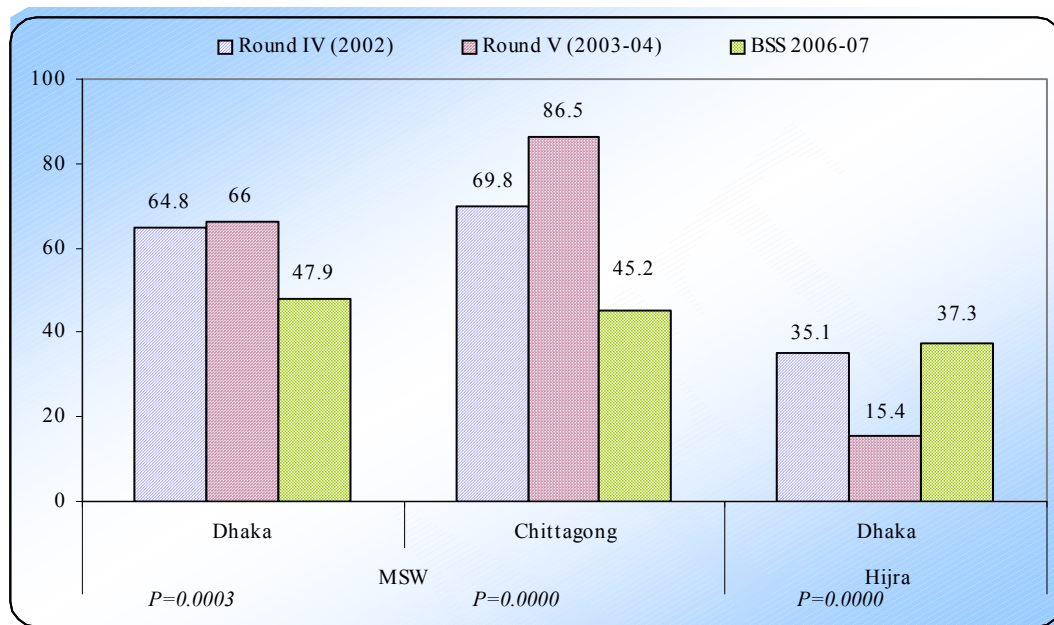
The prevalence of self-reported STIs among the MSW in Dhaka and Chittagong decreased steadily over the BSS rounds. In Dhaka, 41.7 percent of MSW reported symptoms of STIs during BSS 2006-07, which was 74.9 percent in Round IV. Moreover, 34.5 percent of MSWs in Chittagong reported STI symptoms during BSS 2006-07, which was 81.4 percent in Round IV. On the contrary, STIs among *Hijras* slightly increased in BSS 2006-07 when compared with Round V, but decreased significantly compared with Round IV (**Figure 5.9**).

**Figure 5.9: Percentage Reporting STI Symptoms in Last Year**

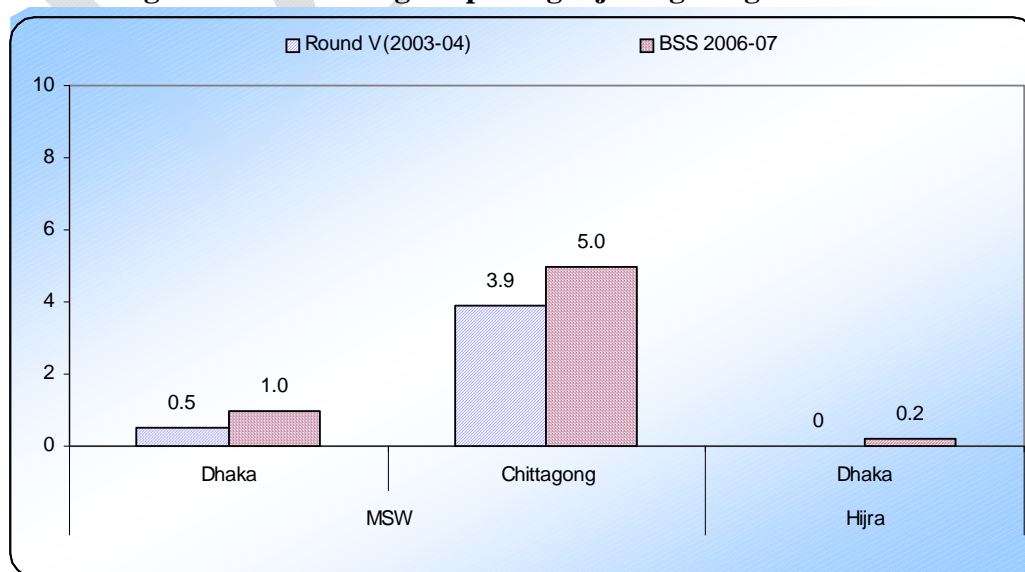


**Exposure to interventions**

The percentage of MSWs participating in HIV/AIDS intervention programs during the last year declined in BSS 2006-07 compared with the previous round in Dhaka and Chittagong. The participation of *Hijras* in intervention programs, however, increased to 37.3 percent in BSS 2006-07 from 15.4 percent in Round V and 35.1 percent in Round IV (**Figure 5.10**).

**Figure 5.10: Percentage Exposed to Interventions in Last Year****Injecting behavior**

The injecting practice among the MSWs in Chittagong increased to 5.0 percent in BSS 2006-07 during the last year, which was 3.9 percent in Round V. Moreover, 0.5 percent of MSWs in Dhaka reported injecting in the last year during Round V, which also increased to 1.0 percent in BSS 2006-07. In BSS 2006-07, however, only 0.2 percent of *Hijras* reported injecting in the last year (**Figure 5.11**).

**Figure 5.11: Percentage Reporting Injecting Drugs in Last Year**

## 5.7 Summary of Findings

Both the MSWs and *Hijras* were young and had their first sex act experiences at an early age (12 to 13 years). The MSWs and *Hijras*, on average, had been involved in their profession for 5 to 10 years. They sold sex 4 to 6 days a week. On average, an MSW in Dhaka had approximately 10 clients (new or regular) in the last week, while for MSW in Chittagong it was only 4. The *Hijras*, on average, had nearly 30 clients in the last week. The mean number of new clients for MSWs in Dhaka and Chittagong declined during BSS 2006-07 compared with the previous rounds. The number of both new and regular clients of *Hijras* in Dhaka was high. The average number of regular clients of *Hijras* steadily increased over the rounds of BSS.

More than one-half of the MSWs and almost all the *Hijras* reported having new clients in the last week. Less than one-half of the MSWs and nearly two-thirds of the *Hijras* used condoms with new clients during sex in the last week. The use of condoms during last anal sex act with new and regular clients slightly declined among the MSWs in Dhaka during BSS 2006-07 compared with Round V. The use of condoms by the MSWs in Chittagong with new and regular clients increased over the same period. Nevertheless, the use of condoms by the *Hijras* with new and regular clients significantly increased during BSS 2006-07 compared with the previous rounds. Only a small proportion of MSWs and *Hijras* used condoms consistently during anal sex with new clients in the last week.

Almost one-fourth (24.2 percent) of clients of MSWs in Dhaka and 17.5 percent of clients in Chittagong were reported to inject drugs. More than one-third of the MSWs and 12 percent of the *Hijras* reported having sex outside the city. More than one-third of the MSWs and *Hijras* reported at least one STI symptom in the preceding year. Among them, nearly one-half did not seek any formal medical treatment.

Nearly 50 percent of the MSWs and 37.3 percent of the *Hijras* participated in HIV/AIDS intervention programs in the preceding year. The MSWs mostly participated in education programs, received condoms and attended DIC. *Hijras* usually collected condoms, participated in needle/syringe exchange programs, received STI treatment and attended DICs in the last year. The percentage of MSWs participating in HIV/AIDS intervention programs during the last year declined in BSS 2006-07 compared with the previous round in both Dhaka and Chittagong. However, the participation of *Hijras* in HIV/AIDS intervention programs increased to 37.3 percent in BSS 2006-07 from 15.4 percent in Round V and 35.1 percent in Round IV.

## Section 6: Risk Behavior of Males Who have Sex with Males

For BSS 2006-07 Dhaka and Sylhet were selected for monitoring the behavioral changes of males who have sex with males (MSM). The findings on MSM are presented in the following sections.

### 6.1 Background Characteristics

The MSM in Dhaka and Sylhet were, on average, 28 years old, and an overwhelming majority of them had some sort of formal education. More than one-third of the MSM in both locations were currently married. Nearly 40 percent of the MSM were currently living with their regular sex partners. The average monthly income of the MSM in Dhaka was Taka 6,383 and in Sylhet it was Taka 8,651. Most of the MSM were service holders or doing business. Less than 1 percent of them sold blood in the preceding year for extra earnings (**Table 6.1**).

**Table 6.1: Socio-demographic Characteristics**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Mean age (in years)	29.0(28.1-29.9) M=28	28.9(28.4-29.5) M=28
Percent who had no schooling	5.0(3.0-8.4) n=417	1.9(1.0-3.6) n=422
Duration of stay in this city	Whole life ≤10 years >10 years	36.5(31.2-42.1) 49.5(45.3-53.8) 14.0(10.9-17.8)
Mean income in last month	6383.2(5666.6-7099.7) M=4500 n=414	8651.5(7463.5-9839.6) M=5500 n=422
Sources of income in last month	Business Service Driver Teaching Family Others*	38.1(32.9-43.6) 38.8(33.9-44.0) 9.6(6.7-13.7) 0.9(0.3-3.1) 5.4(3.0-9.6) 6.4(4.6-8.8)
Percent who sold blood in the last year	0.5(0.1-2.0)	0.9(0.4-2.4)
Percent who were currently married	36.3(31.5-41.5)	39.3(35.4-43.3)
Mean age at first sex in years (Denominator is who could recall)	15.4(15.1-15.8) M=16	16.9(16.7-17.1) M=17 n=424
Percent living with spouse/regular sex partners	40.6(35.3-46.2)	40.2(35.9-44.7)
Self-categorization	Man/manly/general population Parik Honest man Film hero/ hero Gay Panthi Kothi Do-parata Others	48.2(43.5-53.0) 4.9(3.7-6.6) 0.7(0.2-2.2) 0.2(0.02-1.9) 0.7(0.2-3.1) 16.7(13.7-20.2) 24.0(21.4-26.9) 4.5(2.7-7.4) 0

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** rickshaw puller, helper, day laborer, painter, cook, artist, hijacker, hotel boy, tailor, cultural function, land lord, driver.

## 6.2 Sexual Behavior and Practices

### *Sexual behavior and sex partners*

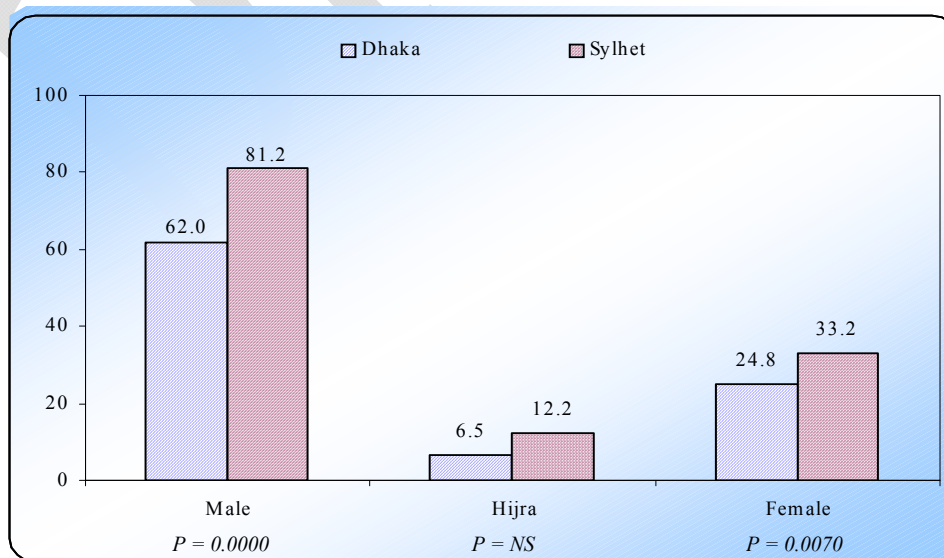
Some 33 percent of the MSM in Dhaka and 25 percent in Sylhet reported that the gender of their regular sex partner was male. Less than 1 percent (0.5 percent) in Dhaka also reported that their regular sex partner was *Hijra*. Of the MSM, 75 percent in Dhaka and 61.4 percent in Sylhet reported having their first sexual act with a male partner. Moreover, all the MSM reported having anal sex with a man last year. More than one-half of them also reported having sex with a woman and 15.1 percent reported having sex with a *Hijra* during the last year (Table 6.2).

**Table 6.2: Dynamics of Sex**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Gender of regular sex partner (Denominator is who lives with a regular sex partner)	n=176	n=171
Male	33.0(25.4-41.6)	25.2(20.1-31.0)
Female	69.5(61.3-76.7)	74.9(69.0-79.9)
<i>Hijra</i>	0.5(0.1-3.6)	0
Gender of first sex partner		
Male	75.3(70.8-79.4)	61.4(57.5-65.2)
Female	24.4(20.4-28.9)	38.1(34.4-42.0)
<i>Hijra</i>	0.3(0.1-1.2)	0.5(0.1-2.0)
Percent reported anal sex with a <i>Hijra</i> last year	14.4(10.7-19.2)	15.1(11.3-19.8)
Percent reported to have anal/vaginal sex with a female (not <i>Hijra</i> ) in last year	56.0(52.0-60.1)	60.2(56.1-64.3)
Percent reported to have anal sex with a male (not <i>Hijra</i> ) last year	100	100

In the preceding month, an overwhelming majority of the MSM reported having sex with non-commercial male/*Hijra* partners (85 percent to 92 percent). In addition, 62 percent in Dhaka and 81.2 percent in Sylhet reported buying sex from commercial males in the last month (Figure 6.1).

**Figure 6.1: Percentage Reported Buying Sex from Different Partners in Last Month**





About two-fifths of the MSM also reported having sex with non-commercial females in the last month and a lower proportion bought sex from commercial females and *Hijras* as well. Oral sex with non-commercial male/*Hijra* partners was also noticeable, especially in Sylhet where nearly two-fifths (38.1 percent) of MSM reported having oral sex. More than one-tenth of MSM also reported having group sex in the last month (Table 6.3).

**Table 6.3: Sexual Behavior**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent who bought sex from males in last month	62.0(56.3-67.5)	81.2(77.2-84.6)
Percent who bought sex from <i>Hijra</i> in last month	6.5(4.0-10.3)	12.2(8.8-16.8)
Percent who bought sex from females in last month	24.8(20.4-29.8)	33.2(29.3-37.3)
Percent who had non-commercial male/ <i>Hijra</i> sex partners in last month	92.0(88.3-94.6)	84.7(80.5-88.1)
Percent who had non-commercial female sex partners in last month	37.6(33.4-42.1)	40.0(35.3-44.9)
Percent reported group sex in last month	13.3(9.3-18.6)	12.9(10.2-16.4)
Percent who reported having oral sex with non commercial male/ <i>Hijra</i> partners	23.5(18.4-29.4)	38.1(34.1-42.3)
Percent who reported having oral sex with commercial male (not <i>Hijra</i> ) partners	16.9(12.0-23.3)	31.1(25.8-36.8)
Percent who reported having oral sex with commercial <i>Hijra</i> partners	0.3(0.03-2.0)	4.7(3.0-7.4)
Percent who reported having anal sex with commercial <i>Hijra</i> partners	6.5(4.0-10.3)	12.2(8.8-16.8)
Percent who reported having anal sex with commercial male partners	61.7(55.8-67.3)	79.8(76.1-83.0)

On average, an MSM had approximately 5 partners of any type in the preceding month. The mean number of partners was 4 during group sex (Table 6.4).

**Table 6.4: Sex Partners**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Mean number of male commercial partners in last month	1.3(1.1-1.5) M=1	1.8(1.7-2.0) M=2
Mean number of male commercial partners in last month (Denominator is who had commercial male partners in last month)	2.1(1.9-2.3) M=2 n=255	2.2(2.1-2.4) M=2 n=345
Mean number of sex acts with male commercial partners in last month (Denominator is who had commercial male partners in last month)	2.4(2.1-2.7) M=2 n=254	2.8(2.7-2.9) M=3 n=339
Mean number of commercial <i>Hijra</i> partners in last month	0.1(0.05-0.1) M=0	0.2(0.1-0.2) M=0
Mean number of commercial <i>Hijra</i> partners in last month (Denominator is who had commercial <i>Hijra</i> partners in last month)	1.4(1.2-1.7) M=1 n=26	1.4(1.2-1.6) M=1 n=52
Mean number of non-commercial male/ <i>Hijra</i> a partners in last month	2.5(2.3-2.7) M=2	1.7(1.6-1.8) M=2
Mean number of non-commercial male/ <i>Hijra</i> partners in last month (Denominator is who had non-commercial male/ <i>Hijra</i> partners in last month)	2.7(2.5-2.9) M=2 n=387	2.0(1.9-2.1) M=2 n=360
Mean number of sex acts with non-commercial male/ <i>Hijra</i> partners in last month (Denominator is who had non-commercial male partners in last month)	4.8(4.4-5.1) M=4 n=387	4.8(4.4-5.2) M=4 n=360
Mean number of commercial female partners in last month	0.4(0.3-0.5) M=0	0.6(0.5-0.7) M=0
Mean number of commercial female partners in last month (Denominator is who had commercial female partners in last	1.7(1.5-1.9)	1.8(1.7-2.0)

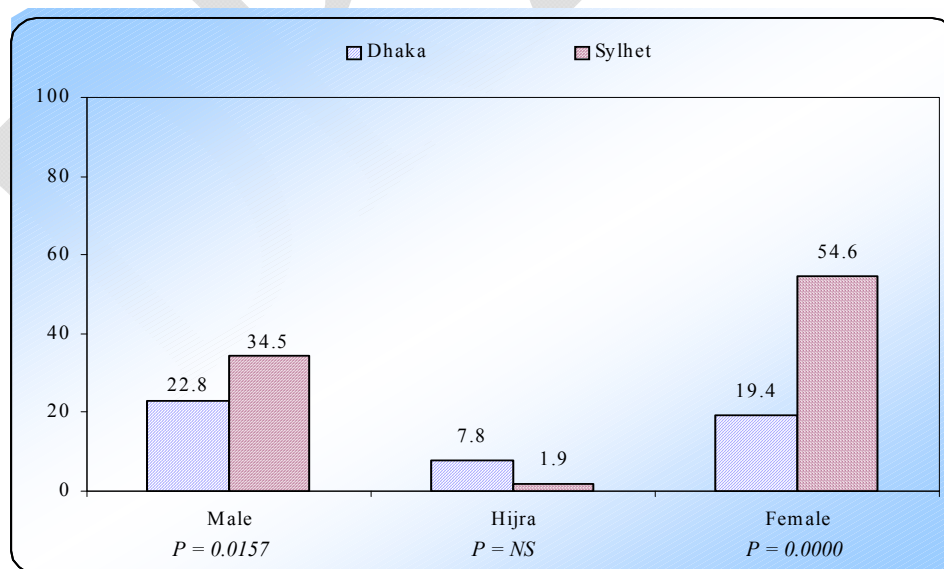
Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
month)	M=2 n=101	M=2 n=141
Mean number of sex acts with commercial female partner last month	1.9(1.7-2.1) M=2 n=101	2.2(2.1-2.3) M=2 n=141
Mean number of non-commercial female partners in last month	0.4(0.4-0.5) M=0	0.4(0.4-0.5) M=0
Mean number of non-commercial female partners in last month (Denominator is who had non-commercial female partners in last month)	1.1(1.0-1.1) M=1 n=159	1.0(1.0-1.1) M=1 n=170
Mean number of sex acts with non-commercial female partner in the last month	4.2(3.7-4.6) M=4 n=159	5.6(5.0-6.3) M=6 n=170
Overall mean number of partners in last month (commercial/non-commercial male/female/Hijra)	4.7(4.4-5.0) M=5	4.7(4.5-4.9) M=5
Mean number of partners during group sex (Denominator is who had group sex in last month)	3.6(3.4-3.8) M=3.5 n=56	3.7(3.5-3.9) M=4 n=55

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### Use of condoms

More than one-fifth (22.8 percent) of the MSM in Dhaka and one-third (34.5 percent) in Sylhet used condoms during last anal sex act with commercial male partners. While only 7.8 percent in Dhaka and 1.9 percent in Sylhet reported using condoms during sex with commercial *Hijra* partners, nearly one-fifth (19.4 percent) of the MSM in Dhaka and more than one-half (54.6 percent) in Sylhet used condoms during sex with commercial female sex partners in the preceding month (**Figure 6.2**).

**Figure 6.2: Condom Use during Last Sex Act with Commercial Partner**



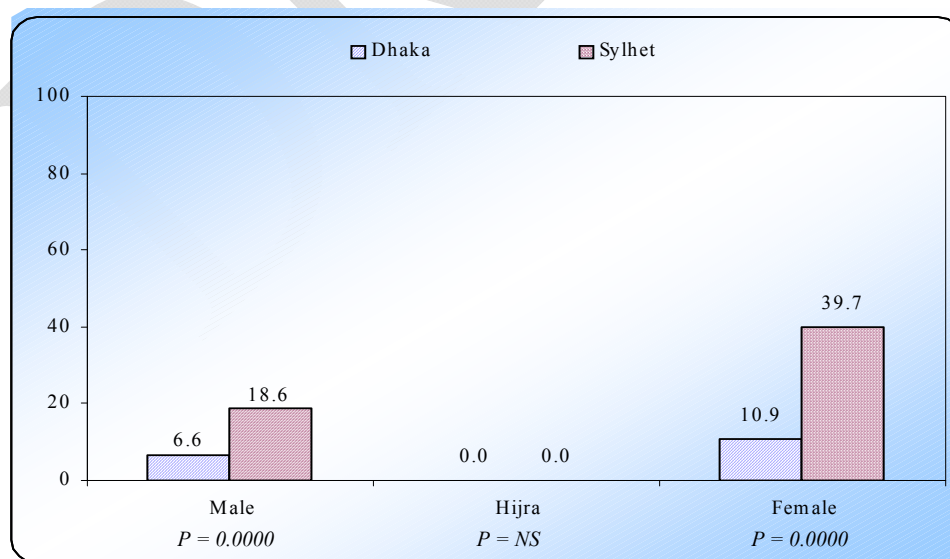
The MSM use of condoms was lower when having sex with non-commercial partners. In Dhaka 21.6 percent and in Sylhet 27.2 percent reported using condoms during sex with their non-commercial male/*Hijra* partners (**Table 6.5**).

**Table 6.5: Condom Use during Last Sex with Commercial and Non-commercial Partners**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Condom use in last anal sex act with commercial male partners (Denominator is MSM who reported anal sex with commercial male partners in last month)	22.8(16.4-30.8) n=254	34.5(28.4-41.1) n=339
Condom use in last anal sex act with commercial <i>Hijra</i> partners (Denominator is MSM who reported anal sex with commercial <i>Hijra</i> partners in last month)	7.8(1.6-30.1) n=26	1.9(0.3-13.0) n=52
Condom use in last vaginal/anal sex act with commercial female partners (Denominator is MSM who reported vaginal/anal sex with commercial female partners in last month)	19.4(11.6-30.8) n=101	54.6(43.6-65.2) n=141
Condom use in last anal sex act with non-commercial male/ <i>Hijra</i> sex partners (Denominator is MSM who reported anal sex with non-commercial male sex partners in last month)	21.6(16.8-27.2) n=387	27.2(22.5-32.6) n=360
Condom use in last vaginal/anal sex with non-commercial female sex partners (Denominator is MSM who reported vaginal/anal sex with non-commercial female sex partners in last month)	17.4(11.7-25.0) n=152	19.4(13.2-27.6) n=170
At least one sexual partner used condoms in last group sex (Denominator is who had group sex in last month)	10.5(4.9-21.1) n=56	15.7(7.9-28.8) n=51
Percent who used condoms during last group sex (Denominator is who had group sex in last month)	14.7(6.9-28.6) n=56	7.3(2.8-17.6) n=55

Note: Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

The MSM consistent use of condoms with different sex partners was lower in Dhaka than in Sylhet. Only 6.6 percent of the MSM in Dhaka reported using condoms consistently during sex with commercial male partners in the last month and one-half of them did not use condoms at all in the reference period. In Sylhet, 18.6 percent of MSM reported consistent use of condoms with commercial male partners during the same period. Consistent use of condoms with commercial *Hijra* partners was even lower. Approximately 10.9 percent of the MSM in Dhaka and 39.7 percent in Sylhet reported consistent condom use with commercial female sex partners in the past month (Figure 6.3).

**Figure 6.3: Consistent Condom Use during Sex with Commercial Partners in Last Month**

While having sex with non-commercial male partners, only 4.9 percent in Dhaka and 14.2 percent in Sylhet reported using condoms consistently during the last month. In contrast, 43.4

percent of MSM in Dhaka and another 33.6 percent in Sylhet never used condoms with their non-commercial male sex partners in the same period (Table 6.6).

**Table 6.6: Frequency of Condom Use with Commercial and Non-commercial Partners**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Frequency of condom use with commercial male partners in last month (Denominator is MSM who reported anal sex with commercial male partners in last month)	n=253	n=339
Always	6.6(4.0-10.9)	18.6(15.0-22.8)
Sometimes	43.0(35.5-51.0)	42.8(37.6-48.1)
Never	50.3(42.4-58.2)	38.6(31.7-46.0)
Frequency of condom use with commercial <i>Hijra</i> partners in last month (Denominator is MSM who reported anal sex with commercial <i>Hijra</i> partners in last month)	n=25	n=52
Always	0	0
Sometimes	26.0(12.4-46.6)	25.0(14.4-39.7)
Never	74.0(53.4-87.6)	75.0(60.3-85.6)
Frequency of condom use in vaginal/anal sex with commercial female partners in last month (Denominator is MSM who reported vaginal/anal sex with commercial female partners in last month)	n=101	n=141
Always	10.9(5.4-20.8)	39.7(30.1-50.2)
Sometimes	29.3(20.3-40.4)	34.0(26.5-42.5)
Never	59.7(48.5-70.1)	26.2(18.0-36.6)
Frequency of condom use with non-commercial male sex partners in last month (Denominator is MSM who reported anal sex with non-commercial male sex partners in last month)	n=387	n=360
Always	4.9(3.2-7.7)	14.2(10.8-18.4)
Sometimes	51.6(45.2-58.0)	52.2(46.7-57.7)
Never	43.4(37.3-49.7)	33.6(27.6-40.2)
Frequency of condom use in vaginal or anal sex with non-commercial female sex partners in last month (Denominator is MSM who reported vaginal/anal sex with non-commercial female sex partners in last month)	n=151	n=170
Always	12.2(7.3-19.8)	10.0(5.7-16.9)
Sometimes	31.2(22.0-42.2)	32.4(25.5-40.0)
Never	56.6(46.2-66.4)	57.7(47.3-67.4)

**Note:** Where responses from the total number of respondents were not available, 'n' is provided in the appropriate cell.

### **Knowledge and Access to Condoms**

All the MSM in Dhaka and 99.5 percent in Sylhet could recognize a male condom. About three-quarters (76.4 percent) of the MSM in Dhaka and another 83.1 percent in Sylhet ever used condoms. The MSM in both locations reported that they usually collected condoms from sex partners, pharmacies/shops and from friends. Around one-quarter of MSM in both cities cited NGO workers as an important source for obtaining condoms in the last month. In addition, 79.9 percent of the MSM in Dhaka and 91.6 percent in Sylhet reported that access to condoms was easy. The main difficulties in accessing condoms were the high cost, the shop/pharmacy was far away or closed. Over and above, most of them felt ashamed to buy condoms or were not willing to carry them (Table 6.7).

### **Condom breakage**

A significant number of MSM in both locations experienced condom breakage in the last month, approximately 30.9 percent MSM in Dhaka and 23.3 percent in Sylhet (Table 6.7).

### **Lubricants**

All the MSM in Dhaka and 99.8 percent in Sylhet ever used lubricants while having anal sex. Approximately, one-half of the MSM in both locations had heard about the special lubricant

products to use with condoms, although only one-third used such lubricants during last sex. In the preceding month, only 7.9 percent MSM in Dhaka and 25.1 percent in Sylhet consistently used special lubricants along with condoms during anal sex. (Table 6.7).

**Table 6.7: Knowledge of, Ever Use, Access To, Breaking of Condoms and Lubricant Use**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent recognized male condom	100	99.5(98.0-99.9)
Percent were able to show a male condom to the interviewers	21.3(17.0-26.3)	28.2(24.5-32.1) n=419
Percent ever used a condom in life	76.4(71.4-80.8)	83.1(79.0-86.5)
Percent used condom during last receptive sex act in the last year (Denominator is who ever had receptive sex and ever used condoms in the last year)	24.8(17.8-33.5) n=138	30.1(22.5-38.9) n=113
Percent used condom during last penetrative sex act in the last year (Denominator is who ever had penetrative sex and ever used condoms in the last year)	37.2(30.7-44.2) n=236	34.4(29.0-40.4) n=270
Sources of condom in last month (Denominator is who have ever used condoms in last month)	n=258	n=309
Shop	7.7(4.6-12.7)	21.0(16.8-26.0)
Pharmacy	37.0(30.7-43.9)	45.0(36.6-53.7)
Health center	0.6(0.1-2.3)	0
Bar/guest house/hotel	6.1(3.1-11.7)	5.2(3.0-8.7)
Friends	28.2(20.8-37.0)	22.3(18.6-26.6)
Pimp	0	0.6(0.2-2.6)
NGO workers	27.2(21.1-34.3)	25.2(20.0-31.3)
No condom bought in last month	0.9(0.2-3.4)	0.3(0.04-2.7)
Sex partners	62.4(56.1-68.3)	65.4(59.2-71.1)
Percent reported easy access to condoms	49.1(42.2-56.0)	66.6(61.3-71.5)
Percent reported easy access to condoms (Denominator is who identified male condom and used condoms in last month)	n=258	n=309
Yes	79.9(72.7-85.5)	91.6(87.8-94.3)
No	16.8(11.7-23.4)	5.8(3.6-9.3)
Reasons for not having easy access to condoms (Denominator is who reported not having easy access to condoms)	n=44	n=18
Cost high	10.9(4.5-24.1)	11.1(2.3-39.8)
Shop/pharmacy is far away	22.8(11.0-41.4)	44.4(20.3-71.6)
Shop/pharmacy is closed	14.1(5.9-29.7)	27.8(11.1-54.2)
Feel ashamed to buy	69.7(47.5-85.4)	50.0(31.1-68.9)
Do not know where to buy	1.5(0.2-10.9)	5.6(0.5-38.8)
Not willing to carry	96.2(75.3-99.5)	77.8(50.8-92.2)
Do not need	10.5(3.9-25.4)	11.1(2.1-42.3)
Others (Sex partner)*	5.3(1.3-19.7)	0
Percent ever used lubricant while having anal sex	100	99.8(98.2-100.0)
Type of lubricant used last time (Denominator is who have ever used lubricant)	n=418	n=424
Saliva	98.4(96.1-99.3)	98.1(96.2-99.1)
Oil	49.1(41.3-57.0)	35.4(29.5-41.8)
Water-based condom lubricant	47.0(41.2-52.9)	46.7(40.2-53.4)
Antiseptic cream	21.5(16.4-27.7)	14.4(10.9-18.7)
Ordinary lotion	46.2(40.2-52.0)	43.4(37.3-49.7)
Cream/petroleum jelly	70.9(64.5-76.6)	59.9(54.4-65.2)
Others**	2.5(1.4-4.4)	3.5(2.2-5.7)
Percent who used condom during last sex act with lubricant (Denominator is who have ever used condoms and lubricant)	29.5(23.6-36.2) n=320	34.7(29.4-40.3) n=352
Percent who used condoms during last sex with lubricant	22.6(17.6-28.4)	28.8(24.5-33.5) n=424
Percent ever heard about lubricant products made especially for use with condoms	48.8(42.7-54.9)	49.4(42.6-56.3)
Percent able to mention brand name of such a product	42.5(36.8-48.5)	35.3(29.4-41.7)
Percent able to mention brand name of such a product (Denominator is who heard about such product)	87.2(77.2-93.2) n=204	71.4(65.8-76.5) n=210

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent frequently used special lubricant together with a condom during anal sex in last month (Denominator is who heard about lubricant product especially use with condoms and had anal sex in last month)	n=202	n=207
Always	7.9(4.7-12.8)	25.1(20.0-31.1)
Sometimes	73.2(65.3-79.8)	65.2(59.2-70.8)
Never	19.0(13.7-25.7)	9.2(6.5-12.9)
Don't remember	0	0.5(0.1-3.6)
Reasons for not using special condom lubricants (never or sometimes)	n=185	n=154
Cost is high	4.5(2.4-8.3)	10.4(6.3-16.6)
Shy to buy lubricant	10.4(6.0-17.5)	14.3(8.5-23.0)
Don't know where to obtain	4.1(2.1-8.0)	27.3(21.0-34.6)
Do not need to use	37.5(27.5-48.7)	24.0(18.9-30.0)
Use other cream/oil	66.6(57.3-74.8)	36.4(28.4-45.2)
Inadequate supply	65.6(56.6-73.6)	58.4(50.4-66.1)
Do not want to carry	15.4(10.5-22.1)	2.6(1.0-6.5)
Others***	1.7(0.5-5.6)	0.6(0.1-4.8)
Reasons for always using special condom lubricant	n=17	n=52
Decrease pain/inflammation	55.7(28.4-80.0)	36.5(27.5-46.6)
Increase feeling	65.7(32.6-88.4)	96.2(85.2-99.1)
Decrease risk of condom breakage	93.0(58.0-99.2)	88.5(78.4-94.2)
Prevent HIV/AIDS/STI infection	44.0(18.8-72.7)	9.6(3.6-23.4)
Others****	16.8(4.6-45.7)	3.8(0.9-14.4)
Percent had a condom break in last month	19.0(14.4-24.6)	16.9(14.5-19.7)
Percent had a condom break in last month (Denominator is who ever used condom in last month)	30.9(24.0-38.7) n=258	23.3(20.0-27.0) n=309

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** sex partner.

\*\* **Others stated:** shampoo, soap, condensed milk, orange juice, honey, and egg.

\*\*\* **Others stated:** male sex partner did not like to use condom, not available in the pharmacy, did not like to use condom.

\*\*\*\* **Others stated:** for own safety, for easy sexual intercourse.

### 6.3 Issues of STIs and HIV/AIDS

#### *Self-reported STIs and care-seeking behavior*

Roughly one-fifth (19.7 percent) of MSM in Dhaka and another 27.1 percent in Sylhet reported at least one symptom of STIs in the preceding year. Among them, only 22.5 percent in Dhaka and 27 percent in Sylhet opted for health care services. More than one-half of the MSM sought services from drug sellers and another 9.2 percent in Dhaka and 14.8 percent in Sylhet visited NGO clinics during the last one year. Nevertheless, a considerable number of MSM (21.9 percent in Dhaka and 11.3 percent in Sylhet) also consulted traditional providers for STI treatment. The MSM, on average, waited more than 7 days and spent Taka 340 in Dhaka and Taka 322 in Sylhet for treatment (**Table 6.8**).

**Table 6.8: Self-reported STIs and Health Care-seeking Behavior**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Knowledge about STIs		
Discharge from penis	69.4(63.8-74.5)	59.5(54.3-64.5)
Burning pain on urination	65.5(59.3-71.2)	57.7(53.6-61.6)
Genital ulcers/sores	67.4(60.1-73.9)	59.3(55.6-62.9)
Swellings in groin area	9.6(7.0-13.0)	6.4(4.3-9.3)
Anal discharge	10.6(7.4-15.0)	20.7(16.9-25.2)
Anal ulcer/sores	24.5(20.5-28.9)	27.1(23.5-31.0)
Others*	5.1(2.9-8.8)	2.4(1.3-4.1)
Percent reported to have urethral discharge in last one year	13.1(10.1-16.8)	13.4(10.3-17.4)
Percent reported to have anal discharge in last one year	2.0(1.0-4.0)	6.1(4.3-8.6)

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent reported to have genital ulcer/sore in last one year	9.4(6.8-12.8)	10.6(7.9-14.0)
Percent reported at least one STI symptom in last one year	19.7(16.0-23.9)	27.1(22.8-31.8)
Percent visited formal medical facility as first choice of treatment for last STI in last year (Denominator is who reported STI in last one year)	22.5(14.6-33.0) n=83	27.0(20.0-35.2) n=115
First choice of last STI treatment (Denomination is who reported STI in last year)	n=83	n=115
Hospital	2.3(0.3-15.5)	5.2(2.3-11.6)
Pharmacy (drug seller)	53.0(41.9-63.7)	61.7(53.9-69.0)
Private doctor	11.0(5.7-20.0)	6.9(2.9-15.6)
Private clinic	0	0
NGO clinic**	9.2(4.6-17.4)	14.8(11.2-19.3)
Traditional healer	21.9(14.1-32.2)	11.3(6.4-19.3)
Advice/treatment from friends	0.7(0.1-5.3)	0
Self-medication	0.7(0.1-5.3)	0
Did not seek treatment	1.2(0.2-8.6)	0
Proportion visited formal medical facility as first choice of treatment for last STI in last year (Denominator is who had reported STI in last one year and sought treatment)	22.8(14.8-33.4) n=82	27.0(20.0-35.2) n=115
Mean waiting days before seeking treatment for last STI (Denominator is who had reported STI in last one year and sought treatment)	7.9(6.7-9.1) M=7 n=82	9.0(8.4-9.7) M=10 n=115
Mean expenditure (in Taka) in last STI treatment last year (Denominator is who had reported STI last year and sought treatment)	340.3(255.5-425.1) M=200 n=81	322.1(224.6-419.6) M=250 n=115
Percent reported to have visited STI clinics in last month organized by NGOs	1.9(0.9-3.7)	3.1(2.0-4.7)
Name of clinics visited (Denominator is who visited STI clinics in last month)	n=8	n=13
Modhumita	60.4(18.8-91.0)	69.2(35.1-90.4)
Let there be light	26.4(4.1-74.9)	0
Marie Stopes	13.2(1.0-69.6)	0
Bondhu	0	30.8(9.6-64.9)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** boils, unhealthy penis, pain on the anal side, bleeding on the anal side

\*\* **NGO Clinic:** Let there be light, Modhumitha, Marie Stopes, Bondhu

### **Knowledge about modes of HIV transmission**

All the MSM in Sylhet and 99.8 percent in Dhaka had heard about HIV/AIDS. Although an overwhelming majority of the MSM knew that using condoms and not sharing needles/syringes were ways to prevent HIV infection, few (10 percent to 13 percent) of them mentioned that by avoiding anal sex with different partners one could prevent transmission of HIV. In both locations, about one-fourth of the respondents had a misconception that HIV could be transmitted by mosquito bites and more than one-tenth perceived that sharing food could cause transmission (**Table 6.9**).

**Table 6.9: Knowledge about Modes of HIV Transmission and Confidential HIV Testing**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent reported to have heard about HIV/AIDS	99.8(98.7-100.0)	100
Percent mentioned condom use as a mode of prevention	97.5(95.3-98.6)	83.5(79.1-87.1)
Percent mentioned that the risk of HIV/AIDS can be reduced by using a condom properly every time	97.5(95.3-98.6) n=416	83.5(79.1-87.1)
Percent mentioned avoiding anal sex as a mode of prevention	10.1(7.2-14.0)	13.2(10.7-16.1)
Percent mentioned the risk of HIV/AIDS can be reduced by using a condom during anal sex	97.5(95.3-98.6) n=416	83.3(78.9-86.9)
Percent mentioned avoiding multiple sex as a mode of prevention	46.3(39.7-53.1)	41.5(36.3-46.9) n=424

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent mentioned AIDS can be transmitted by mosquito bites	25.6(20.5-31.4) n=417	23.1(19.7-26.8)
Percent mentioned AIDS can be transmitted by sharing food	12.8(9.2-17.6)	11.5(8.8-15.0)
Percent mentioned not sharing needles as a mode of prevention	96.4(93.8-97.9)	98.6(96.1-99.5)
Percent mentioned that by looking at people one can tell whether they are infected with HIV	23.3(18.7-28.7)	16.2(12.9-20.3)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

### Self-perception of risk

Few of the MSM (5.1 percent in Dhaka and 3.5 percent in Sylhet) perceived themselves to be at high risk of contracting HIV/AIDS because of their sexual behavior. Most of the MSM thought they had little or no risk at all (**Table 6.10**).

**Table 6.10: Self-perception of Risk**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
MSM who perceived themselves to be at high risk	5.1(3.2-7.9)	3.5(2.0-6.1)
MSM who perceived themselves to be at medium risk	17.8(14.1-22.2)	17.4(14.3-21.1)
MSM who perceived themselves to be at little or no risk	70.3(64.1-75.9)	69.2(64.4-73.6)
MSM who could not assess their risk	6.8(4.1-11.2)	9.9(6.7-14.3)

The main reasons behind the perception of low or no risk were that they always selected clean and healthy partners, had sex with single trusted partner as well as irregular use of condom. On the other hand, the MSM who perceived themselves to be at high risk thought that their sexual behavior as well as irregular or no use of condom were the major reasons for such risk of HIV/AIDS (**Table 6.11**).

**Table 6.11: Reasons for Self-perception of Risk**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Reasons for self-perception of risk (Denominator is those who thought themselves at high or medium risk)	n=98	n=89
Risky job	65.8(54.1-75.8)	37.1(25.9-49.9)
Frequent anal sex	43.1(31.1-56.1)	21.4(13.1-32.9)
Do not use condoms	59.8(48.4-70.2)	41.6(30.9-53.1)
Irregular use of condoms	38.5(29.1-48.8)	58.4(47.0-69.1)
Sharing needle/syringe	2.1(0.3-14.1)	0
Others*	3.0(0.8-10.1)	1.1(0.1-8.3)
Reasons for not assessing themselves at risk or little risk (Denominator is who perceived themselves at little or no risk)	n=295	n=294
Always use condoms	5.4(3.2-8.9)	8.2(5.1-12.8)
Clean sex partners	77.8(71.6-83.0)	74.2(69.1-78.7)
Healthy sex partners	45.0(34.7-55.7)	48.0(41.2-54.8)
Never share needle/syringe	19.9(14.8-26.1)	18.4(14.3-23.3)
Irregular use of condoms	66.6(58.7-73.7)	59.2(55.4-62.9)
Always have sex with single trusted partner	46.3(36.4-56.4)	45.2(39.9-50.7)
Didn't have sex with FSW	22.5(17.6-28.5)	12.2(8.7-16.9)
Others**	6.1(3.7-9.8)	6.1(3.6-10.1)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** heroin addiction.

\*\* **Others stated:** wash with urine, sex with fewer partners, after sex work stay neat and clean, no sex work with sick partner, sex with young partner, oral sex, less sexual intercourse, use condoms with female sex worker, take bath after sex work, had HIV test, no diseases in body.



**Measures taken to avoid STIs and HIV/AIDS**

The MSM mentioned that they usually checked STIs of their partner before sex, had sex with a trusted single partner, washed their genital organs with Dettol/urine and sometimes used condoms to avoid STIs. Almost one-half of the MSM in Dhaka also reported that they stayed away from female sex workers to avoid STIs and sometimes used condoms to avoid HIV/AIDS (**Table 6.12**).

**Table 6.12: Measures Taken to Avoid STIs and HIV**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Steps taken to avoid STIs		
Do nothing	2.7(1.5-5.0)	1.6(0.7-3.7)
Wash genital organ with Dettol/urine	30.9(26.0-36.3)	26.1(21.8-30.9)
Always use condoms	3.8(2.3-6.2)	5.6(3.5-9.0)
Sometimes use condoms	55.3(48.4-62.0)	63.1(58.6-67.3)
Always have sex with a trusted single partner	39.6(31.3-48.5)	35.5(30.5-40.9)
Avoid having sex with FSW	42.9(37.9-47.9)	28.2(23.5-33.5)
Check sex partner before sex/sex with clean partner	69.9(63.1-75.9)	65.2(60.4-69.7)
Others*	3.9(2.4-6.4)	1.9(0.9-3.8)
Steps taken to avoid HIV	n=417	
Do nothing	2.7(1.5-4.7)	1.9(0.9-3.9)
Wash genital organ with Dettol/urine	29.6(24.6-35.1)	27.1(22.6-32.1)
Always use condoms	3.8(2.3-6.2)	5.4(3.3-8.8)
Sometimes use condoms	55.1(48.2-61.9)	63.1(58.9-67.1)
Take medicine	0.6(0.2-2.4)	0.2(0.02-1.8)
Always have sex with a trusted single partner	41.6(33.2-50.6)	36.0(30.9-41.4)
Avoid having sex with FSW	44.6(39.5-49.7)	29.2(24.6-34.3)
Check sex partner before sex/sex with clean partner	73.8(67.6-79.2)	64.7(60.0-69.1)
Others*	5.0(3.1-7.7)	3.3(1.9-5.6)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** after sexual intercourse stay neat and clean, never exchange injection material, wash with soap, sexual intercourse with young boys, use condoms with female sex worker, oral sex, less sex work, take bath.

**Confidential HIV testing**

Roughly one-half of the MSM were aware that HIV could be tested confidentially, while only 5.8 percent in Dhaka and 8.2 percent in Sylhet had ever tested for HIV. Of those, all in Dhaka and 30 out of 35 MSM in Sylhet had tested within one year and all of them in Dhaka and a majority in Sylhet were aware of the test results (**Table 6.13**).

**Table 6.13: Confidential HIV Testing**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent knew where HIV can be tested confidentially *	49.1(42.7-55.5)	55.5(48.2-62.7)
Percent ever tested for HIV	5.8(3.7-8.8)	8.2(5.6-12.0)
Did you yourself request the test or did somebody ask you to have the test? (Denominator is who every tested for HIV)	n=26	n=35
Self	44.2(23.3-67.5)	68.6(55.7-79.1)
By someone**	55.8(32.6-76.7)	20.0(10.6-34.6)
Needed	0	11.4(4.1-28.0)
Percent reported to have the HIV test results (Denominator is who every tested for HIV)	100	85.7(72.2-93.3)
	n=26	n=35
When did you have the most recent HIV test? (Denominator is who every tested for HIV)	n=26	n=35
Within one year	26.8(12.8-47.8)	42.9(27.8-59.3)
More than one year	73.2(52.2-87.2)	57.1(40.7-72.2)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Place of confidential testing:** Jagori, Modhumita, PG Hospital, Red Crescent, Holy Family Hospital, CMH, Osmani Hospital, private clinic, Bondhu.

\*\* **Others stated:** NGO worker, blood donor, foreigner, friend, Red Crescent.

#### 6.4 Incidences of Harassment

Although less than one-tenth of the MSM reported to have been beaten, about one-third of them reported being raped in the preceding year. The new or regular sex partners and local mastans usually harassed the MSM. More than one-tenth of the MSM reported that members of law enforcement agencies also harassed them during the last year. A small proportion of the MSM (2.8 percent in Dhaka and 3.1 percent in Sylhet) were also sent to jail in the last year (Table 6.14).

**Table 6.14: Violence against MSM**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent reported to have beaten in last year	7.9(5.2-11.6)	8.2(5.9-11.3)
Beating done by: (Denominator who reported violence in last year)	n=36	n=35
Law enforcement agency	23.7(11.3-43.1)	20.0(9.8-36.5)
Mastans (extorshonists)	35.9(19.8-55.9)	37.1(23.2-53.6)
New sex partners	2.4(0.3-16.8)	5.7(1.5-19.1)
Regular sex partners	8.1(1.7-31.6)	54.3(39.0-68.8)
Local people	5.5(1.4-19.4)	0
Others*	41.8(24.6-61.2)	5.7(1.5-20.0)
Percent reported to have been raped in last year	33.0(26.9-39.8)	30.8(27.4-34.5)
Percent reported to have been beaten or raped in last year	35.6(29.3-42.3)	32.7(29.0-36.7)
Raped by: (Denominator is who reported violence in last year)	n=143	n=131
Law enforcement agency	14.5(8.4-24.0)	14.5(9.0-22.5)
Mastans (extorshonists)	32.5(25.4-40.4)	27.5(21.0-35.1)
New sex partners	38.1(31.2-45.6)	42.8(34.3-51.7)
Regular sex partners	24.7(17.9-33.0)	17.6(12.9-23.5)
Local people	9.0(4.9-15.8)	5.3(2.6-10.5)
Others*	1.0(0.2-4.0)	3.1(1.2-7.6)
Percent reported ever been jailed in last year	2.8(1.6-5.0)	3.1(1.7-5.6)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell

\***Others stated:** female sex worker, friend, hotel manager, night guard.

#### 6.5 Involvement in Intervention Programs

In the preceding year, only 14.9 percent of MSM in Dhaka and 10.6 percent in Sylhet participated in NGO intervention programs. In Dhaka, MSM mostly participated in education programs, received condoms and attended DICs, while in Sylhet most MSM attended DIC and received condoms from NGOs.

An overwhelming majority of the MSM who participated in NGO intervention programs reported learning about STIs, HIV/AIDS, safe sex and correct use of condoms from such intervention programs. Almost 30 percent in Dhaka reported that although they received useful information, their behavior did not change in any way (Table 6.15).

**Table 6.15: Exposure to Interventions**

Indicators % (95 % CI)	MSM	
	Dhaka (n=418)	Sylhet (n=425)
Percent who participated in NGO interventions last year	14.9(10.8-20.3)	10.6(8.6-13.0)
Type of interventions in last year :	n=60	n=45
Education program	61.4(41.7-78.0)	13.3(5.5-29.1)
Received condoms	47.0(30.1-64.6)	91.1(80.1-96.3)
Received STI treatment	8.2(3.5-18.2)	2.2(0.3-16.3)
Attended IHC	21.2(11.0-36.8)	0
Attended DIC	33.8(21.0-49.5)	91.1(79.6-96.4)
Attended VCT	14.5(6.8-28.1)	0
Others (Rally)	50.0(33.6-66.3)	8.9(3.7-19.9)
Mean number of years involved with interventions	2.0(1.4-2.5) M=1.8 n=60	3.0(2.7-3.4) M=3.2 n=45
Mean number of times involved with interventions in last month	0.6(0.3-0.9) M=1 n=59	0.7(0.1-1.4) M=0 n=44
Percent of sex workers who participated in NGO interventions in last month	6.6(4.3-9.8)	3.5(2.3-5.5)
Percent of sex workers who participated in NGO interventions in last month (Denominator is who participated in NGO interventions last year)	44.0(27.6-61.8) n=60	33.3(22.0-46.9) n=45
Percent exposed to intervention in last month (Denominator is who were exposed to intervention in last year)	n=60	n=45
Helped change behavior	59.5(42.8-74.2)	13.3(6.5-25.3)
Received useful information but behavior did not change	30.2(18.6-45.2)	2.2(0.3-15.6)
Learnt about HIV/AIDS/STD/safe sex and correct use of condoms	90.1(76.5-96.2)	100
Information was hard to understand	1.2(1.2-9.0)	0

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

## 6.6 Impact of HIV/AIDS Prevention Programs on Consistent Condom Use

The MSM who participated in the intervention program were more likely to use condoms while having sex with men, particularly in Sylhet. In Sylhet, 63.9 percent of MSM who participated in the intervention program used condoms during male to male sex compared with 31 percent who did not participate in an intervention program during the last one year. The intervention program had a significant impact on confidential HIV testing by MSM in Dhaka and Sylhet (**Table 16**).

**Table 6.16: Characteristics of MSM Participating in Intervention Programs**

Location % (95 % CI)	Indicators	Participating in HIV/AIDS Prevention Program		P-value
		Yes	No	
<i>Condom use while having sex with men</i>				
Dhaka	Yes	18.69 (6.617,42.7)	23.22 (16.53,31.6)	0.655
	No	81.31 (57.3,93.38)	76.78 (68.4,83.47)	
Sylhet	Yes	63.89 (44.04,79.91)	31.02 (25.19,37.53)	0.002
	No	36.11 (20.09,55.96)	68.98 (62.47,74.81)	

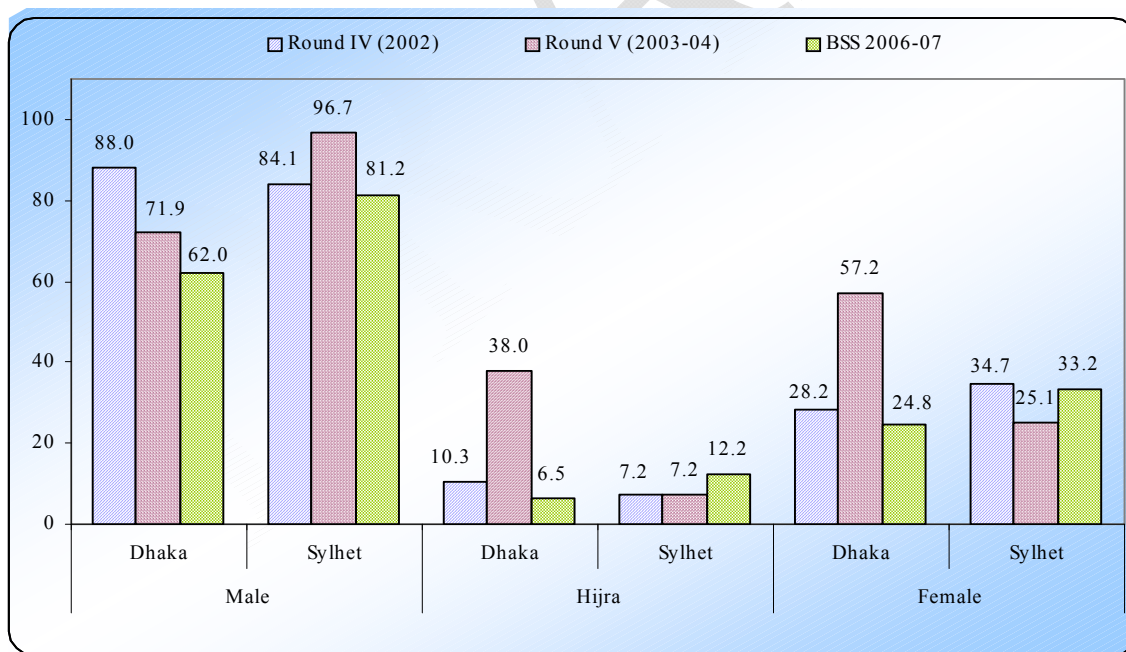
Location % (95 % CI)	Indicators	Participating in HIV/AIDS Prevention Program		P-value
		Yes	No	
<i>Confidential HIV testing</i>				
Dhaka	Yes	23.14 (12.93,37.89)	7.06 (4.115,11.86)	0.002
	No	76.86 (62.11,87.07)	92.94 (88.14,95.88)	
Sylhet	Yes	31.82 (17.6,50.48)	10.94 (7.079,16.53)	0.005
	No	68.18 (49.52,82.4)	89.06 (83.47,92.92)	

## 6.7 Change in Risk Behavior Over the Rounds

### *Buying sex from different partners*

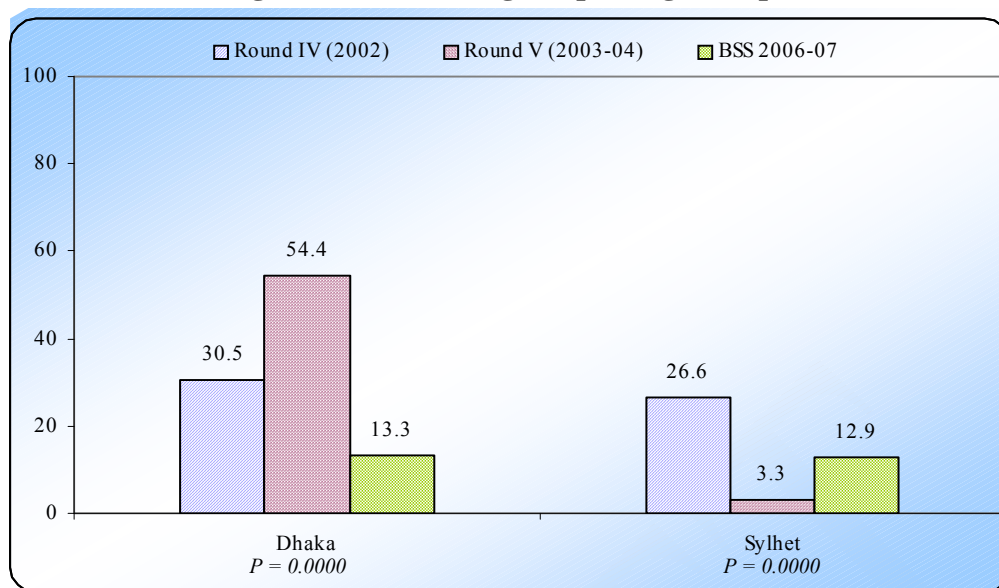
In Dhaka the percentage of MSM who reported buying sex from males, *Hijra* and female sex workers in the last month decreased in BSS 2006-07 compared with the previous BSS rounds. However, in Sylhet the percentage of MSM reported buying sex was 96.7 in Round V, which decreased to 81.2 in BSS 2006-07. Buying sex from *Hijras* in Sylhet steadily increased from 7.2 percent in Round IV to 12.2 percent in BSS 2006-07. Buying sex from female sex workers decreased in Dhaka and slightly increased in Sylhet during BSS 2006-07, compared with Round V (**Figure 6.4**).

**Figure 6.4: Percentage Buying Sex from Males, *Hijra* and Female Sex Workers**

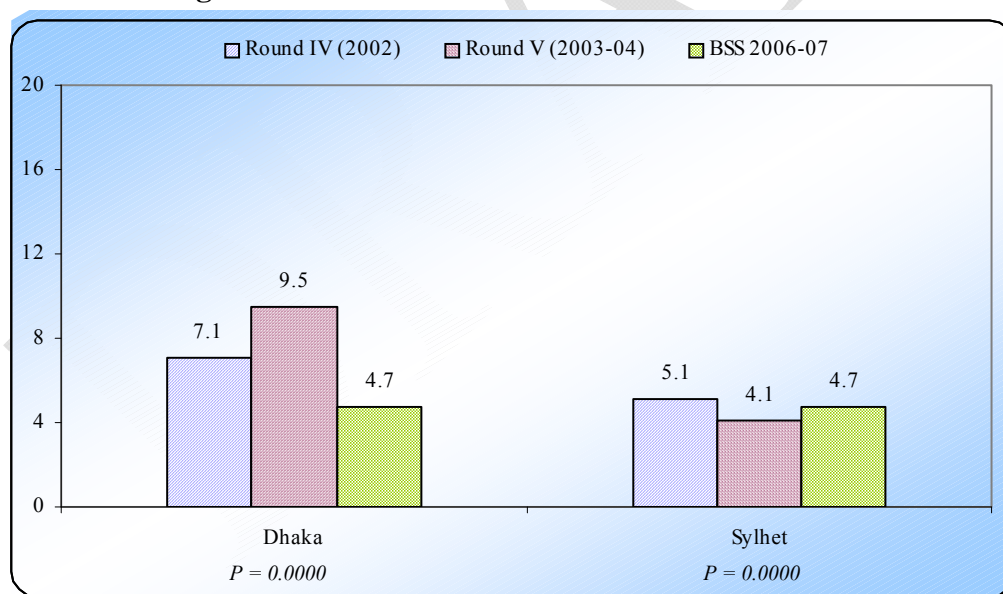


### *Group sex*

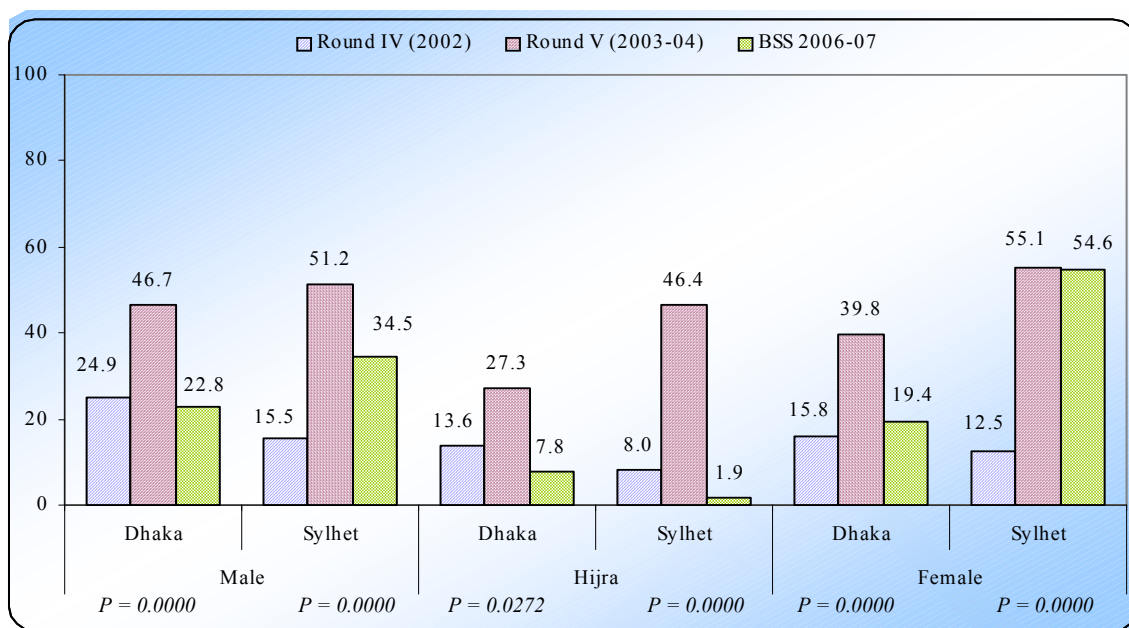
Group sex among MSM in Dhaka decreased in BSS 2006-07 compared with the previous BSS rounds. In Sylhet, however, group sex increased in BSS 2006-07 compared with Round V (**Figure 6.5**).

**Figure 6.5: Percentage Reporting Group Sex****Number of clients**

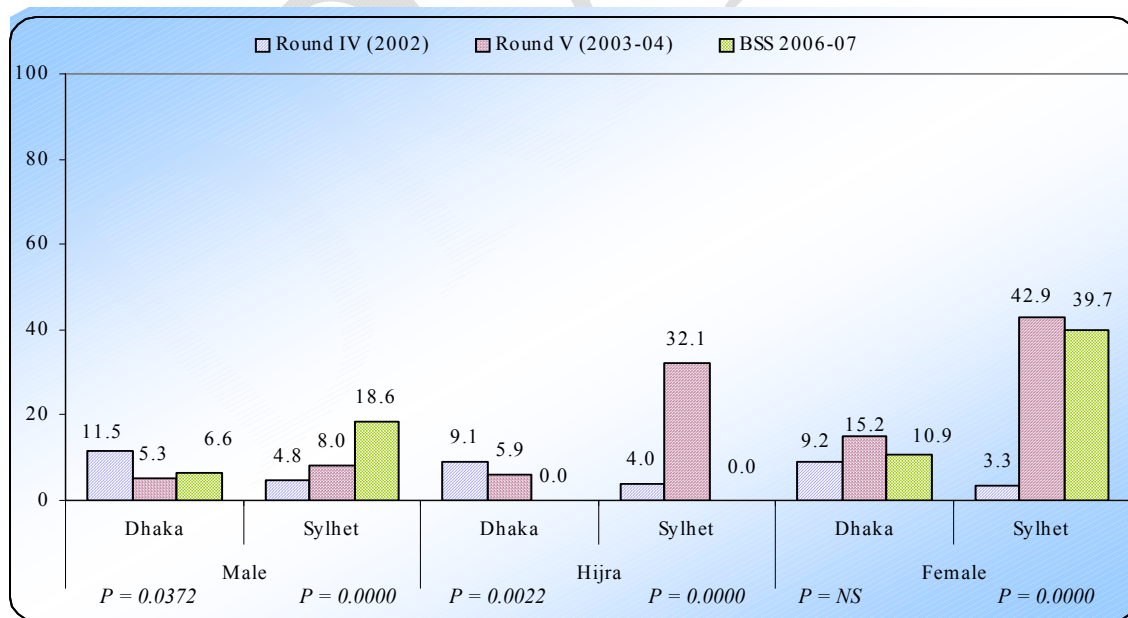
The mean number of MSM sex partners in Dhaka decreased to 5 partners in BSS 2006-07, compared with 10 partners in Round V. The average number of sex partners per MSM in Sylhet did not change over the rounds of BSS (**Figure 6.6**).

**Figure 6.6: Mean Number of Sex Partners in Last Month****Use of condoms**

The use of condoms by the MSM during last sex act with all groups of commercial sex workers in Dhaka and Sylhet decreased notably in BSS 2006-07 compared with Round V. However, the use of condoms with female sex workers in Sylhet remained the same in BSS 2006-07 and Round V (**Figure 6.7**).

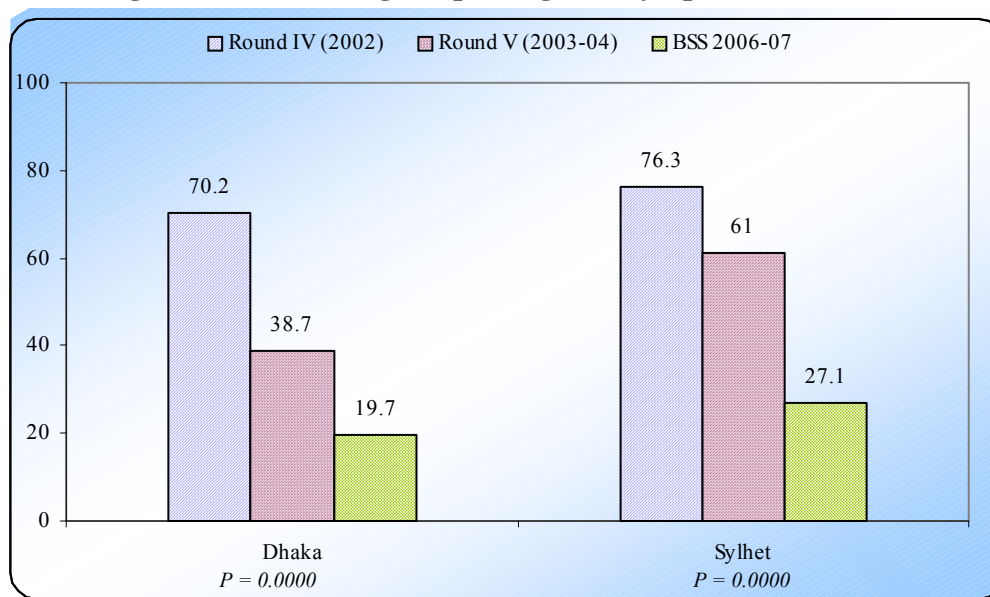
**Figure 6.7: Condom Use in Last Sex Act with Commercial Sex Workers**

The consistent use of condoms by MSM during sex in the last month in Dhaka with all groups of commercial sex workers was reported to be quite low over the BSS rounds. However, in Sylhet, consistent use of condoms by MSM decreased with *Hijra* and female sex workers in BSS 2006-07 compared with Round V, while it increased with male sex workers over the rounds of BSS (**Figure 6.8**).

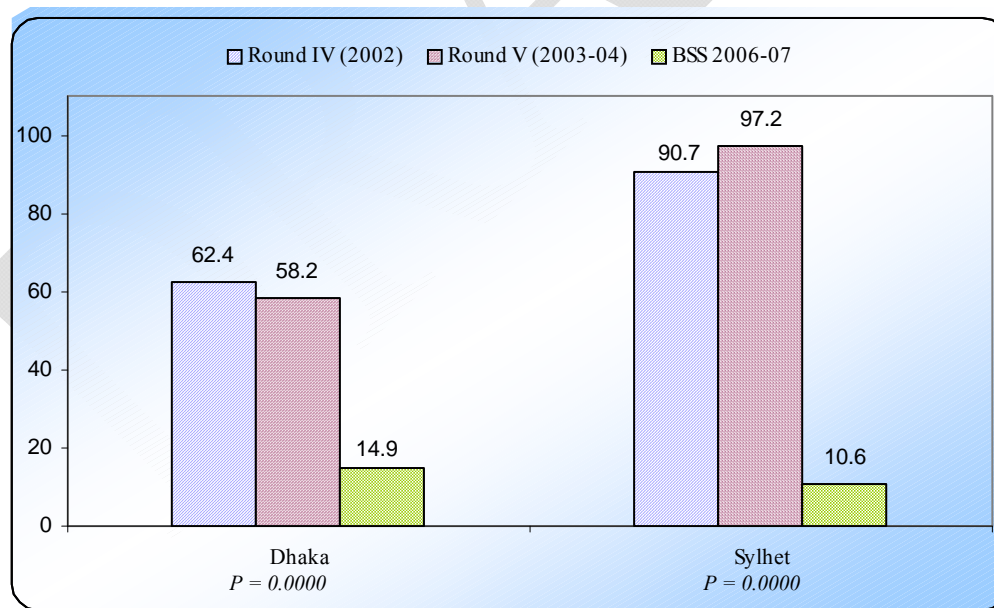
**Figure 6.8: Consistent Use of Condoms with Commercial Sex Workers in Last Month**

### STI and treatment

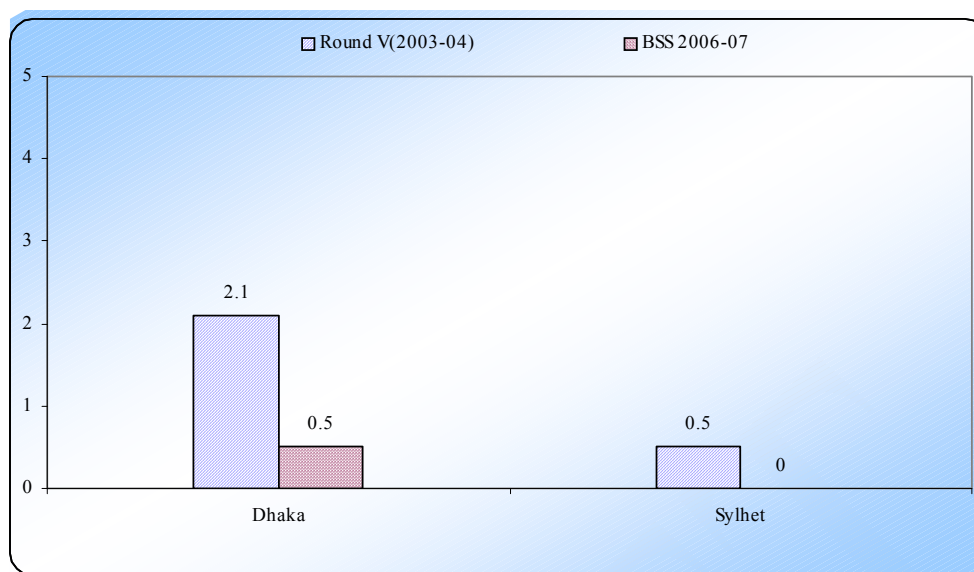
The percentage of MSM reporting at least one STI symptom in the last year steadily declined over the rounds of BSS in Dhaka and Sylhet (**Figure 6.9**).

**Figure 6.9: Percentage Reporting STI Symptoms in Last Year****Exposure to interventions**

The percentage of MSM who were exposed to any HIV/AIDS intervention program significantly decreased in BSS 2006-07 compared with the previous rounds of BSS in both Dhaka and Sylhet (Figure 6.10).

**Figure 6.10: Percentage Exposed to Intervention Programs****Injecting behavior**

In BSS 2006-07, a small proportion of MSM in both locations reported having injected drugs in the last year. The percentage of MSM decreased in BSS 2006-07 compared with Round V in Dhaka, while in Sylhet none of the selected MSM reported injecting drugs in BSS 2006-07 (Figure 6.11).

**Figure 6.11: Percentage Reported Injecting Drugs in Last Year**

## 6.8 Summary of Findings

The MSM in Dhaka and Sylhet were, on average, 28 years old, and more than one-third of the MSM were currently married. All the MSM reported having anal sex with any male last year. More than one-half of them also reported having sex with any female and approximately 15 percent had sex with a *Hijra* during the last year. On average, an MSM had approximately 5 partners of all types in the preceding month. The mean number of sex partners of MSM in Dhaka decreased to 5 in BSS 2006-07 compared with 10 in Round V. The average number of sex partners per MSM in Sylhet did not change over the rounds of BSS. Group sex decreased among the MSM in Dhaka in BSS 2006-07 and increased in Sylhet. More than one-tenth of MSM also reported having group sex in the last month. The mean number of partners was 5 during group sex.

In general, the use of condoms by MSM was quite low. The use of condoms by the MSM during last sex with all groups of commercial sex workers in Dhaka and Sylhet decreased notably in BSS 2006-07 compared with Round V. However, the use of condoms with female sex workers in Sylhet remained the same in BSS 2006-07 and Round V. Only 7 percent of the MSM in Dhaka reported consistently using condoms during sex with commercial male partners and one-half of them did not use condoms at all in the preceding month. Consistent use of condoms with commercial *Hijra* partners was even lower. The consistent use of condoms by MSM during sex in the last month in Dhaka with all groups of commercial sex workers was observed to be quite low over the rounds of BSS. However, in Sylhet, consistent use of condoms by the MSM decreased with *Hijra* and female sex workers in BSS 2006-07 compared with Round V, while it increased with male sex workers over the rounds of BSS.

All the MSM were aware of HIV and AIDS. Although an overwhelming majority of the MSM knew that using condoms and avoiding sharing needles/syringes were prime modes of HIV prevention, most of them were not aware about the risks associated with unprotected anal sex with multiple partners. They also had misconceptions on the ways of prevention and modes of transmission of HIV. Like other study groups, most of the MSM were complacent about their susceptibility to HIV infection.

In the preceding year, only 14.9 percent MSM in Dhaka and 10.6 percent in Sylhet participated in NGO intervention program. The percentage of MSM who were exposed to any HIV/AIDS intervention program significantly decreased in BSS 2006-07 compared with the previous rounds of BSS in Dhaka and Sylhet.



## Section 7: Risk Behavior of Rickshaw Pullers and Truckers

In the BSS 2006-07, rickshaw pullers (RP) were surveyed from Dhaka and Chittagong and truckers from Dhaka alone. The analyses of the findings of risk behavior of these groups are presented in the following sections.

### 7.1 Background Characteristics

The mean age of rickshaw pullers in Dhaka was 28 years and in Chittagong 27 years. For truckers it was 32 years. Slightly above one-fifth (20.5 percent) of rickshaw pullers and truckers in Dhaka had no schooling and nearly one-fourth (23.6 percent) of the rickshaw pullers in Chittagong belonged to the same category. Few of the rickshaw pullers and truckers were permanent residents of the city in which they were interviewed; more than four-fifths of the rickshaw pullers in Dhaka (80.9 percent) and Chittagong (83.0 percent) had lived there for less than 10 years. More than two-thirds (70.4 percent) of the truckers had been living in Dhaka for a similar duration. The last month's mean income for rickshaw pullers in both cities was a little below Taka 4,500; truckers had a higher mean income of Taka 6,653.

Around three-quarters of the rickshaw pullers in both locations and 60 percent of the truckers were currently married. Around four-fifths of the rickshaw pullers in Dhaka (80.5 percent) and Chittagong (76.7 percent) and more than two-thirds (68.4 percent) of the truckers reported living either with their wives or with regular sex partners. The mean age at first sex ranged from 17 to 18 years for the three groups (**Table 7.1**).

**Table 7.1: Socio-demographic Characteristics**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Mean age (in years)	28.3(27.6-29.0) M=27	27.1(26.6-27.7) M=26	31.8(30.9-32.6) M=30
Percent who had no schooling	20.5(15.5-26.5)	23.6(17.4-31.2)	20.5(17.0-24.5)
Duration of stay in this city		n=312	n=472
Whole life	2.2(1.2-4.0)	11.0(7.9-15.2)	12.8(9.3-17.5)
≤10 years	80.9(76.4-84.6)	83.0(78.1-87.0)	70.4(64.7-75.6)
>10 years	16.6(12.9-21.0)	6.0(3.7-9.5)	16.8(12.9-21.5)
Could not remember	0.3(0.1-1.6)	0	0
Mean income in last month	4344.2(4164.8-4523.7) M=4000 n=429	4479.4(4341.7-4617.2) M=4500 n=310	6653.1(6235.3-7070.9) M=7000 n=471
Percent who were currently married	76.3(72.3-79.8)	73.2(68.3-77.6)	60.0(55.2-64.5)
Percent living with regular sex partners	80.5(76.5-84.0)	76.7(71.8-81.0)	68.4(64.0-72.5) n=472
Mean number of years as rickshaw pullers/truckers	6.3(5.8-6.8) M=5	5.5(5.1-6.0) M=5	8.6(7.9-9.3) M=6
Percent working as rickshaw pullers/truckers for less than one year	9.6(6.8-13.5)	4.7(2.9-7.7)	6.4(4.2-9.6)
Mean age at first sex act (Denominator is who had sexual experience and could recall)	16.7(16.2-17.1) M=17 n=418	16.8(16.4-17.2) M=16 n=311	18.3(17.9-18.7) M=18 n=468

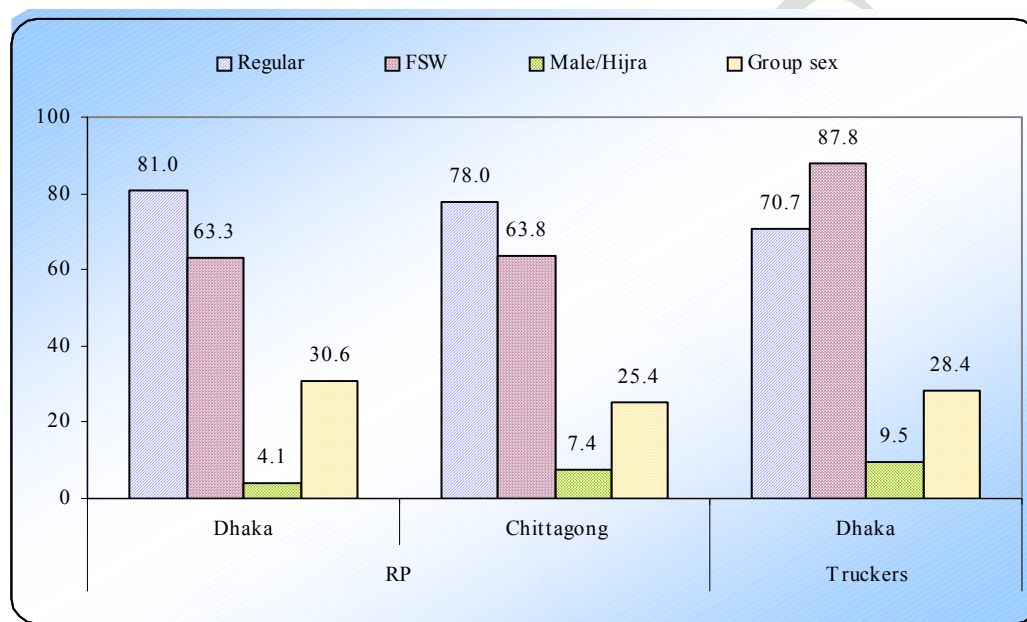
**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

## 7.2 Sexual Behavior and Practices

### Sex Acts

The large majority (71 percent to 81 percent) of the rickshaw pullers and truckers had sex with wife or regular female partners in the preceding year. Although nearly two-thirds of the rickshaw pullers in both locations had sex with commercial female sexual partners in the preceding year, 87.8 percent of the truckers had sex with similar partners in the reference period. Moreover, less than one-tenth of the three groups had sex with commercial male/*Hijra* partners in the preceding year. More than a quarter of the three groups of respondents had experienced group sex in the previous year (**Figure 7.1**).

**Figure 7.1: Percent Who Had Sex with Different Sex Partners in Last Year**



The mean number of regular sex partners in the preceding year was around one (1.0) for rickshaw pullers while for the truckers it was a little higher at about two (1.8). The mean number of commercial female sex partners was 5 for the rickshaw pullers and 8 for the truckers. The mean number of commercial male/*Hijra* partner for those who had sex with them in the same period was about two (1.7 to 2.0) for the three groups. The overall mean numbers of commercial sex partners, inclusive of female and male/*Hijra* in the preceding year, were 3.0 and 3.6 for rickshaw pullers respectively in Dhaka and Chittagong while it was a little higher at 7.2 for truckers. The mean number of group sex partners for those who had such sex in the preceding month among the three groups of transport workers was just below four. (**Table 7.2**).

**Table 7.2: Sexual Partners and Sex Acts**

Indicators % (95% CI)	Rickshaw pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
<b>Regular non-commercial sex partners</b>			
Mean number of regular sex partners in last one year	1.0(0.9-1.1) M=1	0.9(0.8-0.9) M=1	1.3(1.0-1.5) M=1
Mean number of regular sex partners in last one year (Denominator is who had sex with non-commercial regular female partners in last year)	1.3(1.2-1.4) M=1 n=350	1.1(1.1-1.2) M=1 n=242	1.8(1.5-2.1) M=1 n=338
Mean number of sex acts with regular sex partners in last one month	7.1(6.3-7.9) M=7	6.8(6.2-7.5) M=8	3.4(2.8-3.9) M=2

Indicators % (95% CI)	Rickshaw pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Mean number of sex acts with regular sex partners in last one month (Denominator is who had sex with non-commercial regular female partners in last month)	10.7(10.0-11.3) M=10 n=293	10.1(9.6-10.6) M=10 n=212	5.6(4.7-6.4) M=4 n=288
Percent who had sex with regular female partners in the last year	80.9(76.9-84.5)	78.0(72.8-82.5)	70.7(66.1-74.9)
Percent who had sex with regular female partners in the last month	66.5(60.6-71.9)	67.9(61.9-73.4)	60.6(55.4-65.6)
<b>Commercial female sex partners</b>			
Mean number of commercial female sex partners in the last year	3.0(2.6-3.4) M=2	3.4(3.0-3.9) M=3	7.0(6.1-7.9) M=5
Mean number of commercial female sex partners in the last year (Denominator who had commercial sex last year)	4.7(4.2-5.2) M=4 n=260	5.4(4.8-6.0) M=4 n=202	7.9(7.0-8.8) M=6 n=412
Mean number of commercial female partners in the last month	1.0(0.9-1.2) M=0	1.2(1.0-1.4) M=1	1.0(0.9-1.1) M=1
Mean number of commercial female partners in the last month (Denominator who had commercial sex last month)	2.0(1.9-2.2) M=2 n=199	2.2(2.0-2.4) M=2 n=167	1.7(1.6-1.9) M=2 n=284
Mean number of sex acts with commercial female sex partners in last month (Denominator is who had sex with commercial regular female partners in last month)	3.7(3.2-4.3) M=3 n=199	4.3(3.8-4.8) M=4 n=167	2.3(2.1-2.5) M=2 n=284
Percent who had sex with commercial female partner in the last year	63.3(57.5-68.7)	63.8(58.7-68.7)	87.8(82.5-91.7)
Percent who had sex with commercial female partner in the last month	41.9(43.7-56.1)	53.4(47.9-58.9)	58.4(52.7-63.9)
<b>Commercial male sex partners/Hijras</b>			
Mean number of commercial male/Hijra partners in the last year	0.1(0.02-0.1) M=0	0.1(0.1-0.2) M=0	0.2(0.1-0.3) M=0
Mean number of commercial male/Hijra partners in the last year (Denominator who had sex with commercial male/Hijra partners last year)	1.7(1.3-2.2) M=1 n=18	1.9(1.6-2.2) M=2 n=21	2.0(1.5-2.5) M=1 n=48
Mean number of commercial male/Hijra partners in the last month	0.009(-0.002-0.02) M=0	0.02(0.0003-0.03) M=0	0.01
Mean number of commercial male/Hijra partners in the last month (Denominator who had sex with commercial male/Hijra partners last month)	1.4(-0.1-2.9) M=1 n=3	1.2(0.6-1.8) M=1 n=4	1.1(0.8-1.5) M=1 n=7
Percent who had sex with commercial male/Hijras in the last year	4.1(2.4-6.9)	7.4(4.7-11.4)	9.5(7.0-12.7)
Percent who had sex with commercial male/Hijras in the last month	0.7(0.2-2.2)	1.6(0.6-4.3)	1.0(0.4-2.5)
<b>Group sex</b>			
Mean number of partners during group sex in the last month (Denominator who had group sex last month)	3.6(3.4-3.8) M=3 n=119	3.7(3.5-3.9) M=4 n=75	3.5(3.3-3.6) M=3 n=137
Overall mean number of commercial sex partners last year (female and male or Hijra)	3.0(2.6-3.4) M=2	3.6(3.1-4.0) M=3	7.2(6.3-8.0) M=5
Percent who had group sex in the last year	30.6(25.9-35.6)	25.4(20.7-30.7)	28.4(24.0-33.4)
Percent who had group sex in the last month	18.3(13.8-23.8)	13.8(10.1-18.6)	4.8(3.1-7.5)

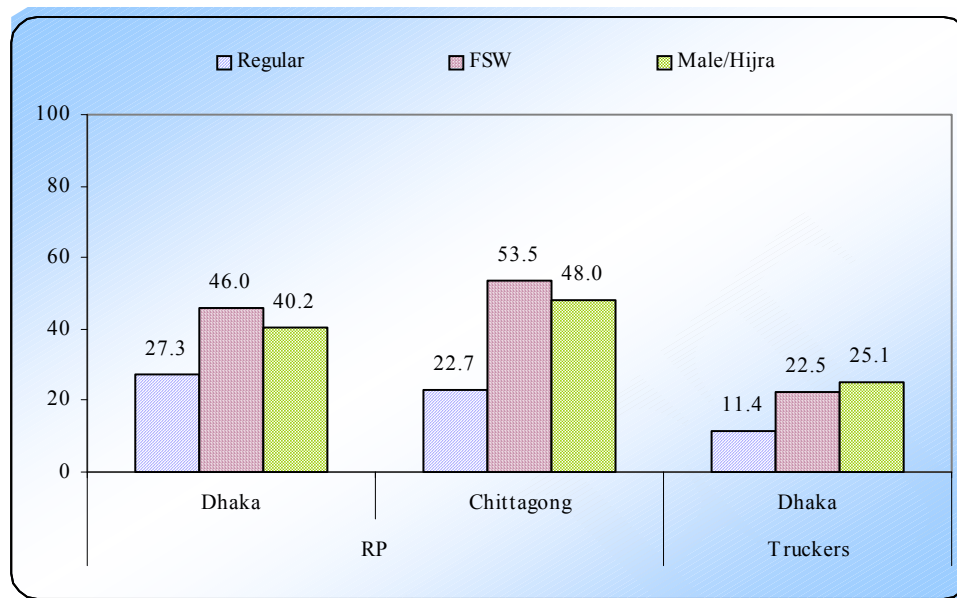
**Note:** M refers to median. Where responses from the total number of respondents were not available, the 'n' is provided in the particular cell.

### Use of condoms with different sexual partners

More than one-fourth (27.3 percent) of rickshaw pullers in Dhaka and 22.7 of them in Chittagong used condoms during their last sexual episode in the preceding year. The use of condoms by the truckers was found to be lower, at 11.4 percent. Use of condoms during their last sex act by those who had sex with commercial sex partners in the preceding year was reported by 53 percent among the rickshaw pullers and 23 percent among truckers. Those

who reported group sex in the preceding year 44 percent and 48 percent of the rickshaw pullers respectively in Dhaka and Chittagong and 21 percent of the truckers used condom during the last episode of group sex (**Figure 7.2**).

**Figure 7.2: Percent Using Condoms during Last Sex Act with Different Partners in Last Year**



An assessment of condom use frequency revealed that a little above or below 50 percent of the rickshaw pullers and truckers had *'never'* used condoms with non-commercial regular sex partners in the preceding year. Nearly a half had responded that they *'sometimes'* used condoms in the same period. Similar frequency of condom use also showed that 62 percent truckers and more than half of the rickshaw pullers had *'never'* used condoms in the preceding month.

The frequency of condom use in the preceding year showed that only about 7 percent to 12 percent consistently used condoms while three-fifths of the rickshaw pullers and nearly a half of the truckers *'sometimes'* used condom in the same period. The frequency of condom use in the preceding month also showed that 19 and 25 percent of the rickshaw pullers respectively in Dhaka and Chittagong and 12.3 percent of the truckers had always used condom. Here again, *'sometimes'* used was the response of larger proportion of rickshaw pullers while three-fifths (58.9 percent) had the same response.

Nearly two-thirds of the rickshaw pullers as well as only 15 percent of the truckers reported that at least any one of the group members used condom during the last group sex act (**Table 7.3**).

Table 7.3: Use of Condoms with Different Sexual Partners

Indicators % (95% CI)	Rickshaw pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
<b>Regular non-commercial sex partners</b>			
Percent who used condom during last sex with non-commercial regular partner in last year (Denominator is who had sex with non-commercial regular partner in last year)	27.3(21.8-33.4) n=350	22.7(17.1-29.4) n=242	11.4(8.3-15.4) n=338
Frequency of condom use during sex with non-commercial regular partner in last year :	n=350	n=242	n=338
Always	1.3(0.5-3.2) 45.2(38.9-51.6)	0 46.8(39.8-53.9)	1.4(0.5-3.5) 49.4(42.4-56.5)
Sometimes	53.5(47.2-59.8)	53.2(46.0-60.3)	49.2(42.1-56.4)
Never (Denominator is who had sex with non-commercial regular partner in last year)			
Frequency of condom use during sex with non-commercial regular partner in last month :	n=293	n=212	n=288
Always	1.4(0.5-3.6) 47.9(40.6-55.3)	0 45.4(37.5-53.5)	4.5(2.4-8.1) 33.5(27.7-39.9)
Sometimes	50.7(43.4-57.9)	54.6(46.5-62.6)	62.0(54.7-68.8)
Never (Denominator is who had sex with non-commercial regular partner in last month)			
<b>Commercial female sex partners</b>			
Condom use in last anal/vaginal sex with commercial female sex partners (Denominator is who reported sex with commercial female sex partners last year)	53.1(46.0-60.0) n=260	53.5(46.2-60.7) n=201	22.5(17.6-28.3) n=412
Frequency of condom use during sex with commercial sex partner in last year :	n=260	n=201	n=412
Always	12.0(7.7-18.0)	7.6(4.5-12.6)	6.9(4.0-11.5)
Sometimes	61.7(53.5-69.3)	59.9(53.3-66.2)	48.7(42.8-54.6)
Never (Denominator is who had sex with commercial sex partner in last year)	26.3(20.3-33.4)	32.5(26.5-39.0)	44.4(38.3-50.8)
Frequency of condom use during sex with commercial regular partner in last month :	n=199	n=167	n=283
Always	18.6(12.9-26.0)	25.1(18.3-33.4)	12.3(7.9-18.7)
Sometimes	58.9(50.8-66.6)	46.2(38.6-53.9)	28.8(23.2-35.2)
Never (Denominator is who had sex with commercial sex partner in last month)	22.5(16.3-30.2)	28.8(22.7-35.7)	58.9(51.3-66.0)
<b>Commercial male sex partners/Hijra</b>			
Condom use in last anal sex with commercial male or Hijra sex partners (Denominator is who reported sex with commercial male or Hijra sex partners last year)	40.2(18.1-67.2) n=18	48.0(26.9-69.9) n=21	25.1(12.9-43.1) n=48
Frequency of condom use during sex with commercial male/Hijra in last year:	n=18	n=21	n=48
Always	12.4(3.1-38.6)	37.4(20.0-58.8)	25.1(12.9-43.1)
Sometimes	43.6(17.8-73.6)	20.1(6.8-46.2)	10.8(3.2-31.1)
Never (Denominator is who had sex with male/Hijra in last year)	44.0(18.4-73.2)	42.6(22.8-65.0)	64.1(45.2-79.4)
Frequency of condom use during sex with commercial male/Hijra in last month :	n=3	n=4	n=7
Always	0 39.2(0.1-99.8)	23.6(0.4-95.7) 0	0 0
Sometimes	60.8(0.2-99.9)	76.4(4.3-99.6)	100
Never (Denominator is who had sex with male/Hijra in last month)			

Indicators % (95% CI)	Rickshaw pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
<b>Group Sex</b>			
Percent who used condom during last group sex in last year (Denominator is who had group sex in last year)	44.2(34.0-54.9) n=119	47.9(36.7-59.2) n=75	21.2(12.5-33.4) n=137
Percent reported at least one group sex partners used condom during last sex in last year (Denominator is who had group sex in last year)	66.0(55.8-74.8) n=119	66.4(53.3-77.4) n=75	15.1(8.7-24.9) n=137

**Note:** Where responses from the total number of respondents were not available, the 'n' is provided in the particular cell.

### ***Knowledge and ever use of and access to condoms***

Rickshaw pullers' and truckers' recognition of a male condom in all geographical locations was nearly universal. About three-fifths of the rickshaw pullers and nearly two-fifths of the truckers had ever used a male condom. Moreover 32.5 percent rickshaw pullers in Dhaka and 30.7 percent in Chittagong as well as 16 percent of the truckers had used condoms during the last sex act. The 2 most frequently cited sources from which condoms were available to those who had used condoms in the preceding month were pharmacies and shops. About one-half of the rickshaw pullers in both locations and almost one-third of the truckers reported easy access to condoms. For those who had used condoms in the preceding month, 94.3 percent of the rickshaw pullers in Dhaka and 98.2 percent in Chittagong and 85.7 percent of the truckers reported easy access to condoms. Among the small number of those who reported not having easy access to condoms, the most prominent reasons given were "feel shy to buy" and "not willing to carry." A large proportion of truckers (45 percent to 47 percent) also mentioned "shop/pharmacy is far away" and "shop pharmacy is closed." Of the three groups of transport workers who had sex in the last month, 3.0 percent to 3.8 percent reported condom bursts (Table 7.4).

**Table 7.4: Knowledge and Ever Use of, Access To and Breaking of Condoms**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Percent recognized male condom	96.7(94.5-98.0)	98.5(96.5-99.4)	98.1(96.2-99.0)
Percent recognized male condom (Denominator is who had sexual experience)	99.3(97.7-99.8) n=419	99.7(97.9-100.0) n=311	99.2(98.0-99.7) n=468
Percent who knew where condoms are available	93.5(90.7-95.5)	97.7(95.2-98.9)	96.9(94.5-98.2)
Percent who knew where condoms are available (Denominator is who had sexual experience and can identify condom)	96.6(94.4-98.0) n=416	99.2(96.4-99.8) n=310	98.8(97.1-99.5) n=463
Percent who ever used a male condom	61.7(56.5-66.7)	57.4(51.6-62.9)	36.8(32.2-41.6)
Percent who ever used a male condom (Denominator is who had sexual experience)	63.4(58.0-68.4) n=419	58.0(52.2-63.7) n=311	37.2(32.7-42.0) n=468
Percent who had used condom during last sex act (Denominator is who had sexual experience)	32.5(27.2-38.4) n=419	30.7(25.5-36.4) n=311	16.0(13.0-19.6) n=468
Percent who had used condom during last sex act (Denominator is who ever used condom)	51.3(45.1-57.6) n=258	52.8(45.6-60.0) n=177	25.5(20.5-31.3) n=287
Sources of condom in last month (Denominator is who had used condom in last month)	n=214	n=151	n=173
Shop	59.4(51.8-66.5)	76.7(68.5-83.3)	44.0(33.7-54.8)
Pharmacy	66.1(59.1-72.4)	66.6(56.8-75.2)	38.4(29.1-48.6)
Health center	1.3(0.4-3.7)	0.6(0.1-4.2)	2.1(0.7-5.7)
Bar/guest house/hotel	0.9(0.1-6.7)	0.5(0.1-3.9)	31.9(25.1-39.5)

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Friends	2.4(0.8-6.6)	8.7(4.7-15.4)	7.8(3.6-15.9)
NGO workers	1.3(0.4-3.6)	0	4.9(2.3-9.8)
Did not buy condom in last month	1.6(0.4-6.0)	1.0(0.2-4.4)	4.4(2.2-8.7)
Others*	0.2(0.02-1.4)	0.3(0.04-2.3)	1.1(0.3-4.9)
Percent reported easy access to condoms	49.6(43.2-56.0)	48.4(42.8-54.0)	32.8(27.6-38.5) n=472
Reasons for not having easy access to condoms (Denominator is who reported not having easy access to condoms)	n=15	n=3	n=26
Cost high	5.1(0.5-35.9)	0	0
Shop/pharmacy is far away	4.2(0.4-31.2)	0	47.1(26.1-69.1)
Shop/pharmacy is closed	0	0	44.7(23.9-67.4)
Feel ashamed to buy	77.8(33.8-96.0)	100	47.1(26.5-68.7)
Do not know where to obtain	0	0	0
Not willing to carry	53.7(25.0-80.2)	0	31.8(14.4-56.4)
Others	0	0	0
Percent complained of condom breaking during sex in last month	1.8(0.8-3.8) n=430	1.9(0.8-4.2)	1.1(0.4-3.6) n=472
Percent complaining of condom breaking during sex in last month (Denominator is who ever used condom in last month)	3.4(1.6-7.2) n=214	3.8(1.7-8.4) n=151	3.0(0.9-9.2) n=173

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** from sex worker.

### 7.3 Issues of STIs and HIV/AIDS

#### *Self-reported STI and care-seeking behavior*

When asked about the multiple symptoms of STIs, about two-thirds of the rickshaw pullers and truckers in Dhaka and more than three-quarters of the rickshaw pullers in Chittagong cited genital ulcer/sores as the prime symptom. Burning pain during urination was the second most important symptom cited by 52.3 percent of the rickshaw pullers in Dhaka and 65.1 percent in Chittagong and nearly two-thirds of the truckers. Discharge from the penis was the third response in descending order as more than 50 percent (51.2 percent) of the truckers and around 25 percent of the rickshaw pullers from both locations had this response. Among the three groups, 14 percent to 19 percent experienced urethral discharge in one year preceding the interview. Anal discharge during the same period was less than 0.5 percent except for rickshaw pullers of Chittagong, with 2.3 percent. Although 18.6 percent of the rickshaw pullers in Dhaka and 23.4 percent in Chittagong experienced genital ulcers/sores in the year preceding the survey, a much higher proportion (38.5 percent) of truckers had the same experience. A similar trend was observed as 25 percent to 29 percent of the rickshaw pullers reported at least one STI symptom during the preceding year; a much higher proportion of truckers (53.9 percent) reported the same. Around one-fifth of the rickshaw pullers and 61.8 percent of the truckers who had sexual experience but never used condoms in the preceding year reported at least one STI symptom. Of those who had such symptoms, more than two-fifths (42.2 percent) of the rickshaw pullers in Dhaka and less than one-third (31.9 percent) of the rickshaw pullers in Chittagong and truckers (29.6 percent) sought formal medical treatment. The preferred first choice of their last STI treatment for transport workers was the pharmacy (drug seller), with 40 percent to 55 percent preferring this. The second choice was a private doctor for 21 percent to 27 percent of the group. Mean waiting days before seeking last STI treatment was about 20 for the rickshaw pullers and 14 for the truckers and the mean expenditure for the same treatment for the three groups ranged from Taka 475 to Taka 809 (Table 7.5).

Table 7.5: Knowledge Regarding STI, Self-reported STIs and Health Care-seeking Behavior

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Knowledge about STIs			
Discharge from penis	24.0(18.6-30.3)	27.8(20.6-36.5)	51.2(46.5-56.0)
Burning pain on urination	52.3(45.2-59.4)	65.1(58.5-71.2)	40.1(34.3-46.1)
Genital ulcers/sores	65.6(59.5-71.3)	78.3(72.2-83.5)	64.5(59.5-69.1)
Swellings in groin area	1.7(0.5-5.0)	7.6(4.3-13.1)	7.5(5.0-11.0)
Anal discharge	0	0.3(0.4-2.2)	0.5(0.1-1.5)
Anal ulcer/sores	0.5(0.1-3.4)	0.9(0.3-3.0)	1.8(0.9-3.4)
Others*	2.3(1.2-4.2)	1.6(0.5-4.8)	10.3(7.2-14.4)
Percent reported urethral discharge in last one year	14.4(10.6-19.2)	17.3(12.9-22.9)	19.0(15.2-23.5)
Percent reported anal discharge in last one year	0.4(0.1-1.6)	2.3(1.2-4.7)	0.3(0.1-1.2)
Percent reported genital ulcer/sore in last one year	18.6(14.9-23.1)	23.4(18.7-28.9)	38.5(32.8-44.6)
Percent reported at least one STI symptom in last year	24.4(20.2-29.2)	28.6(23.6-34.3)	53.3(46.8-59.6)
Percent reported at least one STI symptom in last year (Denominator is who reported sexual experience)	25.1(20.8-29.9) n=419	28.9(23.9-34.7) n=311	53.9(47.6-60.0) n=468
Percent who had sexual experience and never used condoms reported at least one STI symptom in last one year	19.2(13.4-26.8) n=161	20.9(14.1-29.6) n=134	61.8(51.6-71.1) n=181
Percent sought formal medical treatment as first option for last STI symptom in last year (Denominator is who had sexual experience and reported STI in last year)	42.2(30.3-55.0) n=98	31.9(21.9-43.7) n=86	29.6(23.0-37.2) n=237
First choice of last STI treatment (Denominator is who had sexual experience and reported STI in last year)	n=103	n=89	n=253
Hospital	11.4(6.0-20.6)	6.6(2.9-14.4)	4.8(2.5-9.2)
Drug seller	39.5(29.1-50.9)	53.3(42.1-64.2)	54.6(47.4-61.6)
Private doctor	27.4(17.4-40.3)	23.5(14.5-35.7)	20.5(15.5-26.7)
Private clinic	1.5(0.4-6.2)	0.9(0.1-6.1)	0.3(0.04-2.0)
NGO clinic**	0	0	2.4(1.0-5.5)
Traditional healer	4.8(1.9-11.6)	8.0(3.9-15.6)	8.4(5.3-13.2)
Advice/treatment from friends	8.9(4.7-16.2)	4.8(1.9-11.5)	1.8(0.7-4.6)
Self-medication	2.2(0.6-7.5)	0	1.7(0.7-4.3)
Did not seek treatment	4.4(1.8-10.6)	3.0(0.9-9.2)	5.5(2.9-10.1)
Mean waiting days for last STI treatment (Denominator is who had sexual experience, reported STI in last year and sought treatment)	20.1(17.1-23.2) M=16 n=98	18.6(16.4-20.7) M=17 n=86	14.4(12.2-16.7) M=10 n=237
Mean expenditure in last STI treatment last year (Denominator is who had sexual experience, reported STI last year and sought treatment)	806.9(527.8-1086.1) M=300 n=98	670.6(506.2-835.1) M=380 n=86	475.4(408.7-542.1) M=300 n=237
Percent reported to have visited STI clinics last month organized by NGO	0	0	1.4(0.5-3.5)
Name of clinics visited (Denominator is who visited STI clinics in last month)			n=6
Jagoroni Foundation	0	0	18.3(0.6-88.7)
Marie Stopes			38.9(6.8-84.7)
Yobabandhob Health Center			9.2(0.3-77.2)
Smiling Sun			33.6(5.7-81.0)

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** AIDS, Itching

\*\***NGO clinic:** CARE, Marie Stopes.



**Knowledge about modes of transmission and ways of prevention**

Nearly 100 percent of rickshaw pullers and truckers in Dhaka had ever heard about HIV/AIDS (91.6 percent for rickshaw pullers in Chittagong). About three-quarters of the rickshaw pullers in both locations and more than two-thirds of truckers (68.6 percent) knew that the correct use of condoms would reduce the risk of HIV transmission. Again, slightly less than two-thirds of the rickshaw pullers and a much lower proportion (19.0 percent) of truckers knew that one could reduce the risk of HIV transmission by avoiding anal sex. About three-fifths of the rickshaw pullers and one-fifth of the truckers could tell that using condoms during anal sex could reduce the risk of transmission. About three-quarters of the rickshaw pullers and more than two-thirds of the truckers knew that sharing needles/syringes was a mode of transmission. More than three-quarters of the rickshaw pullers in Dhaka and more than two-thirds in Chittagong knew that avoiding multiple sex partners was a mode of prevention; 44.3 percent of the truckers had the same knowledge (Table 7.6).

**Misconception about modes of transmission**

That HIV could be transmitted by mosquito bites was reported by 58.7 percent of the truckers and 50.6 percent of the rickshaw pullers in Dhaka and 39.3 percent in Chittagong. The rickshaw pullers in Dhaka (56.3 percent) and in Chittagong (47.2 percent) and truckers (55.6 percent) also reported that sharing food with an HIV-infected person could transmit the disease (Table 7.6).

**Table 7.6: Knowledge about Modes of HIV Transmission and Confidential HIV Testing**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Percent heard about HIV/AIDS	97.8(95.7-98.9)	90.6(86.4-93.7)	98.9(97.5-99.5)
Percent knew that condom use is a mode of prevention	77.4(72.1-81.9)	73.4(67.1-78.9)	55.4(49.2-61.6)
Percent mentioned can reduce the risk of HIV/AIDS by using a condom properly every time	73.7(68.0-78.7)	72.7(66.3-78.4) n=314	55.2(48.9-61.3)
Percent knew that avoiding anal sex is a mode of prevention	62.7(56.3-68.7) n=429	64.4(58.0-70.4) n=314	19.0(14.4-24.6) n=471
Percent mentioned can reduce the risk of HIV/AIDS by using a condom during anal sex	61.0(55.4-66.3) n=430	60.6(53.6-67.2)	20.8(15.8-26.8) n=472
Percent knew that avoiding multiple sex partners is a mode of prevention	75.3(68.1-81.3)	67.8(60.2-74.6) n=314	44.3(38.0-50.9) n=472
Percent reported that HIV can be transmitted by mosquito bite	50.6(44.7-56.5)	39.3(33.1-45.9)	58.7(52.9-64.2) n=472
Percent believed that HIV can be transmitted by sharing food	56.3(50.1-62.3)	47.2(41.0-53.5)	55.6(49.4-61.7)
Percent knew that not sharing needles/syringes is a mode of prevention	74.4(68.1-79.9)	74.3(67.1-80.3)	68.6(62.9-73.8)
Percent believed that one can tell by looking at someone whether they are infected with HIV	12.1(8.7-16.6)	14.9(11.3-19.4)	24.2(19.4-29.7)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

**Confidential HIV testing**

Rickshaw pullers and truckers had virtually no idea where one could test for HIV confidentially --only 16 rickshaw pullers and 65 truckers in Dhaka knew this. Of these, only one rickshaw puller and 10 truckers, mostly motivated by friends and co-workers, reported having test results (Table 7.7).

**Table 7.7: Confidential HIV Testing**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Percent knew where HIV can be tested confidentially	3.1(1.8-5.5)	0.6(0.1-2.2)	13.2(10.2-16.9)
Percent who had ever been tested for HIV*	4.0(0.4-30.5) n=16	0	13.4(6.5-25.6) n=65
Did you yourself request the test or did somebody ask you to have the test? (Denominator is who ever tested for HIV)	n=1	0	n=10
Self	0	0	10.5(1.1-56.6)
By some one else**	100	0	89.5(43.4-98.9)
Needed the test	0	0	0
Percent reported to have the result of HIV test (Denominator is who ever tested for HIV)	100	0	88.3(32.9-99.2) n=10
Time of the most recent HIV test (Denominator is who ever tested for HIV)	n=1	0	n=10
Within one year	0	0	0
More than one year	100	0	100

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\* **Others stated:** CARE.

\*\***Others stated:** friends, truck driver.

### Measures taken to avoid STIs and HIV

Although less than one-fourth (23.0 percent) of the rickshaw pullers and more than one-third (36.2 percent) of the truckers would do nothing to prevent STI and HIV, the most common practice cited by rickshaw pullers was to “wash genitalia with Dettol/urine” (39.9 percent and 46.3 percent) followed by “sometimes use condom (28.0 percent). For truckers, the practice order was reversed as 40.7 percent would “sometimes use condoms” and 23.7 percent “wash genitalia with Dettol/urine.”

More than one-third (35 percent to 39 percent) of all transport workers said they would do nothing to prevent HIV/AIDS. For the remaining respondents, the most preferred measure for prevention would be to “wash genitalia with Dettol/urine.” There was hardly any response in favor of always using condoms (**Table 7.8**).

**Table 7.8: Measures Taken to Avoid STIs and HIV**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Steps taken to avoid STIs			
Do nothing	22.7(18.7-27.3)	23.0(18.8-27.8)	36.2(31.1-41.6)
Wash genitalia with Dettol/urine	39.9(34.7-45.4)	46.3(39.7-53.0)	23.7(19.9-28.0)
Always use condoms	1.4(0.6-3.2)	0.3(0.04-2.2)	0.8(0.3-1.9)
Sometimes use condoms	28.2(23.2-33.7)	28.4(23.1-34.4)	40.7(35.6-45.9)
Take medicine	0.8(0.3-2.1)	0	4.0(2.1-7.3)
Others*	35.5(29.7-41.7)	33.1(25.9-41.2)	7.1(4.8-10.4)
Steps taken to avoid HIV (Denominator is who heard about HIV/AIDS)	n=420	n=285	n=467
Do nothing	34.6(29.5-40.0)	39.4(33.5-45.6)	37.4(33.4-41.7)
Do not share needles/syringes	13.7(9.7-19.1)	11.2(7.6-16.2)	1.2(0.3-4.5)
Wash genitalia with Dettol/urine	36.2(30.5-42.2)	46.6(40.1-53.3)	23.8(20.1-28.0)
Always use condoms	1.5(0.6-3.3)	0.3(0.05-2.5)	0.9(0.4-2.2)
Take medicine	0.1(0.01-0.5)	0	2.5(1.2-5.1)
Others*	16.8(13.4-21.0)	12.4(7.7-19.4)	10.2(7.4-14.0)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** wash with soap/water, have sex with healthy/clean and reliable partner, take treatment from traditional healer and doctor, remain neat and clean, sexual intercourse only with wife, drink sufficient water, be careful.

**Self-perception of risk**

Not even 3 percent of the transport workers perceived that they were at high risk of contracting HIV. About one-third of the rickshaw pullers in Dhaka and one-fourth in Chittagong perceived themselves to be at medium risk. The larger proportion among the three groups – 43.5 percent of rickshaw pullers in Dhaka and 36.5 percent in Chittagong and 61.4 percent of truckers perceived themselves to be at little or no risk. About one-fifth of the rickshaw pullers in Dhaka and more than one-third in Chittagong and 30.4 percent of the truckers failed to assess their level of risk: “don’t know” was their reply (**Table 7.9**).

**Table 7.9: Self-perception of Risk**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Rickshaw pullers/truckers who perceived themselves to be at high risk % (95% CI)	2.9(1.7-5.2) n=429	2.8(1.4-5.7) n=307	1.5(0.6-3.8)
Rickshaw pullers/truckers who perceived themselves to be at medium risk to % (95% CI)	32.7(27.3-38.5) n=429	25.6(20.4-31.6) n=307	6.7(4.3-10.2)
Rickshaw pullers/truckers who perceived themselves to be at little or no risk % (95% CI)	43.5(38.1-49.0) n=429	36.5(30.6-42.9) n=307	61.4(57.2-65.5)
Rickshaw pullers/truckers who could not assess their risk % (95% CI)	21.0(16.5-26.2) n=429	35.0(29.0-41.6) n=307	30.4(26.1-35.2)

**Note:** Where responses from the total number of respondents were not available, ‘n’ is inserted in the appropriate cell.

The most prominent reason given by the rickshaw pullers in support of their perceived high or medium risk was having frequent sex (75.4 percent in Dhaka and 91.0 percent in Chittagong) followed by inconsistent use of condoms (55.6 percent in Dhaka and 48.5 percent in Chittagong). For truckers, inconsistent use of condoms (71.5 percent) ranked first followed by having frequent sex (43.3 percent). Those who perceived themselves at no or little risk primarily held an erroneous belief that they had sex with clean partners (59.9 percent of rickshaw pullers in Dhaka and 66.6 percent in Chittagong), followed by inconsistent use of condoms (20.9 percent in Dhaka and 34.2 percent in Chittagong). Among the truckers “sometimes used condoms” (56.3 percent) superseded sex with clean partners (37.7 percent) (**Table 7.10**).

**Table 7.10: Rationale for Self-perception of Extent of Risk**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Reasons for self-perception of risk (Denominator is who thought themselves to be at high or medium risk)	n=148	n=91	n=40
Frequent sharing of needles/syringes	0	0	3.6(0.5-22.5)
Sometimes sharing of needles/syringes	4.1(1.3-11.6)	0	3.4(0.4-21.9)
Doing frequent sex	75.4(66.0-82.9)	91.0(82.3-95.7)	43.3(29.2-58.6)
Do not use condoms	14.9(9.6-22.4)	4.2(1.5-11.2)	9.3(3.6-21.9)
Sometimes use condoms	55.6(46.4-64.4)	48.5(36.6-60.5)	71.5(50.6-85.9)
Others*	7.6(3.8-14.7)	2.2(0.5-8.5)	10.2(3.5-25.8)
Reasons for assessing themselves at no or little risk (Denominator who perceived themselves at no or little risk)	n=199	n=110	n=289
Never share needles/syringes	9.9(5.8-16.3)	3.1(1.1-8.1)	3.6(1.6-8.1)
Sometimes share needles/syringes	0	0	0.4(0.1-2.9)
Always use condoms	5.5(3.0-9.7)	1.6(0.4-6.6)	2.5(1.2-5.1)

Sometimes use condoms	20.9(14.7-28.8)	34.2(24.7-45.2)	56.3(49.3-63.1)
Have sex with clean partners	59.9(52.3-67.0)	66.6(56.7-75.3)	37.7(30.5-45.5)
Have sex with healthy partners	14.6(9.9-20.8)	28.2(19.5-39.1)	13.1(9.2-18.4)
Others**	18.9(13.3-26.1)	29.4(20.3-40.6)	30.9(24.1-38.6)

**Note:** Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

\***Others stated:** wash with soap, be careful.

\*\* **Others stated:** did not go to sex worker, be careful, use condom with sex worker, reliable partner, wash genitals with water/soap/urine after sexual intercourse, sexual intercourses with only wife, no drugs, neat and clean, drink sufficient water.

## 7.4 Involvement in Intervention Programs

The rickshaw pullers in Chittagong have not been exposed to any kind of intervention. Only 15 rickshaw pullers and 11 truckers in Dhaka were exposed to either education programs or needle syringe exchange programs or received condoms (Table 7.11).

**Table 7.11: Exposure to Interventions**

Indicators % (95% CI)	Rickshaw Pullers		Truckers
	Dhaka (n=431)	Chittagong (n=315)	Dhaka (n=473)
Exposure to interventions last year	2.8(1.4-5.3)	0	2.6(1.4-4.8)
Percent under needle/syringe exchange program in last year	1.3(0.4-4.1)	0	0.5(0.1-2.1)
Type of interventions exposed to in the last year (Denominator is those who participated in an HIV intervention in last year)	n=15	0	n=11
Needle/syringe exchange program	46.0(15.0-80.4)	0	20.0(3.6-62.7)
Educational program	58.1(20.3-88.3)	0	89.4(40.4-99.1)
Obtained condom	28.3(8.5-62.6)	0	37.2(12.4-71.1)
Received STI treatment	0	0	0
Attended IHC	0	0	0
Attended DIC	41.9(11.7-79.7)	0	0
Attended VCT	0	0	0
Others	0	0	0
Mean number of years involved with interventions (Denominator is those who participated in an HIV intervention in last year)	1.1(0.4-1.8) M=0.3 n=15	0	0.2(0.1-0.3) M=0.1 n=11
Mean number of times participated in interventions in last month (Denominator is those who participated in an HIV intervention in last year)	6.0(0.6-11.4) M=1 n=15	0	0.2(-0.1-0.5) M=0 n=11
Benefits from interventions :	n=15		n=11
Helped you changed your behavior	4.0(0.4-30.4)	0	56.2(24.3-83.7)
Gave useful information but did not affect behavior	55.1(21.4-84.7)	0	26.6(7.3-52.5)
Learnt about HIV/AIDS/STI, safe sex and correct use of condoms	82.8(48.1-96.2)	0	55.6(23.5-83.6)
Information was not easily understandable	0	0	9.4(0.8-56.5)
Was not relevant to our needs	0	0	0
Others	0	0	0

**Note:** M refers to median. Where responses from the total number of respondents were not available, 'n' is inserted in the appropriate cell.

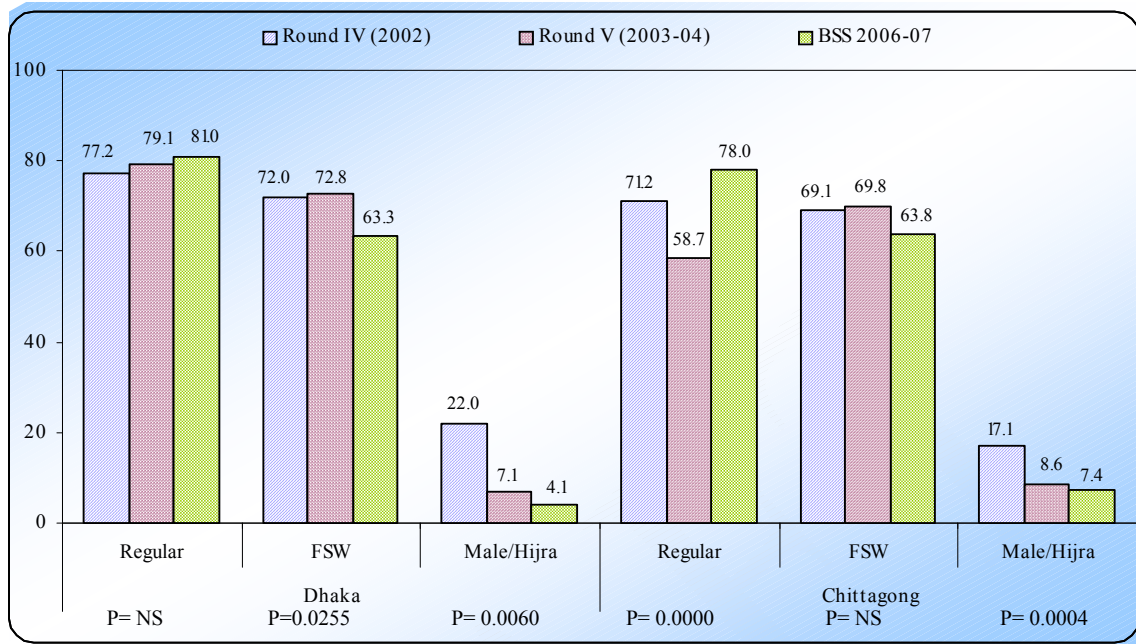
## 7.5 Change in Risk Behavior Over the Rounds

### Sex partners

The percentage of rickshaw pullers reporting sex with regular sex partners during the last year in Dhaka and Chittagong increased in BSS 2006-07 compared with Round V. In contrast, percentage of rickshaw pullers reporting sex with commercial female sex workers in

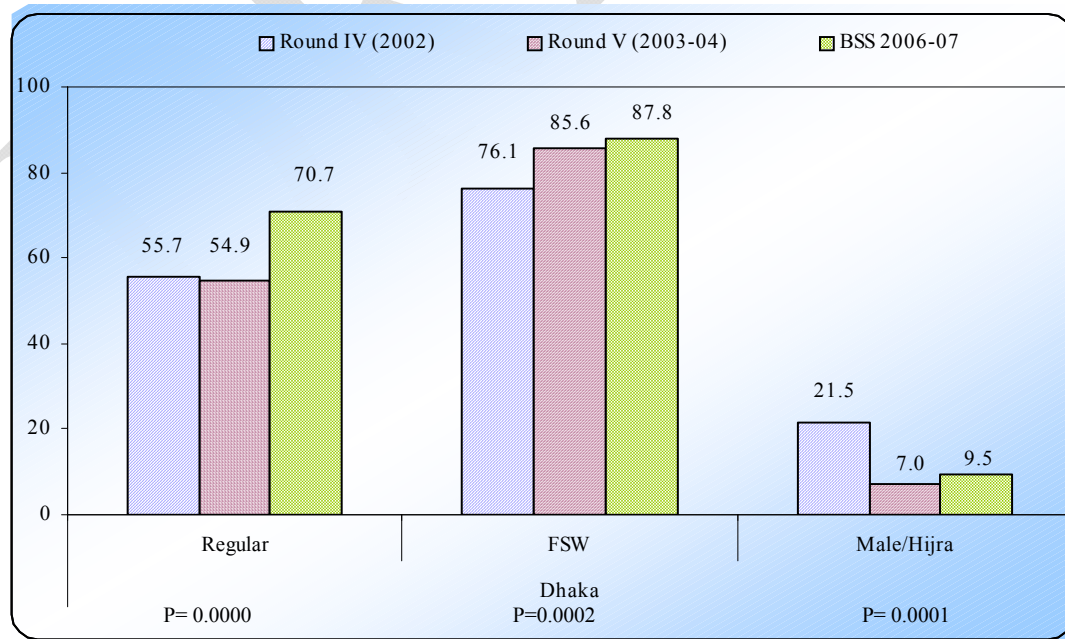
both areas decreased during BSS 2006-07 and Round V. Sex with *Hijras* or male sex workers also declined steadily over the rounds of BSS in Dhaka and in Chittagong (Figure 7.3).

**Figure 7.3: Percentage of Rickshaw Pullers Reporting Different Sex Partners in Last Year**



The percentage of truckers reporting sex with regular sex partners in the last year increased in BSS 2006-07 compared with the previous rounds. Sex with commercial female sex workers among the truckers was higher compared with their regular sex partners and showed steady increase over the rounds of BSS (Figure 7.4).

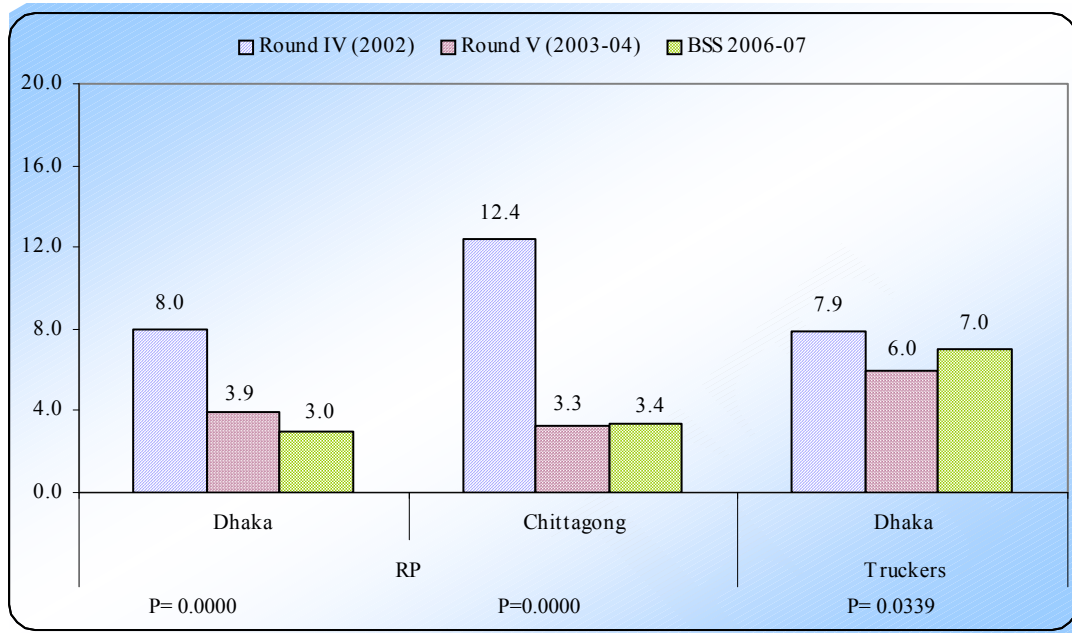
**Figure 7.4: Percentage of Truckers Reporting Different Sex Partners in Last Year**



The average number of female commercial sex partners of rickshaw pullers in Dhaka decreased significantly in BSS 2006-07 compared with the previous rounds. However, the

mean number of female commercial sex partners of the truckers remained roughly the same with 8 partners in Round IV and in BSS 2006-07 (Figure 7.5).

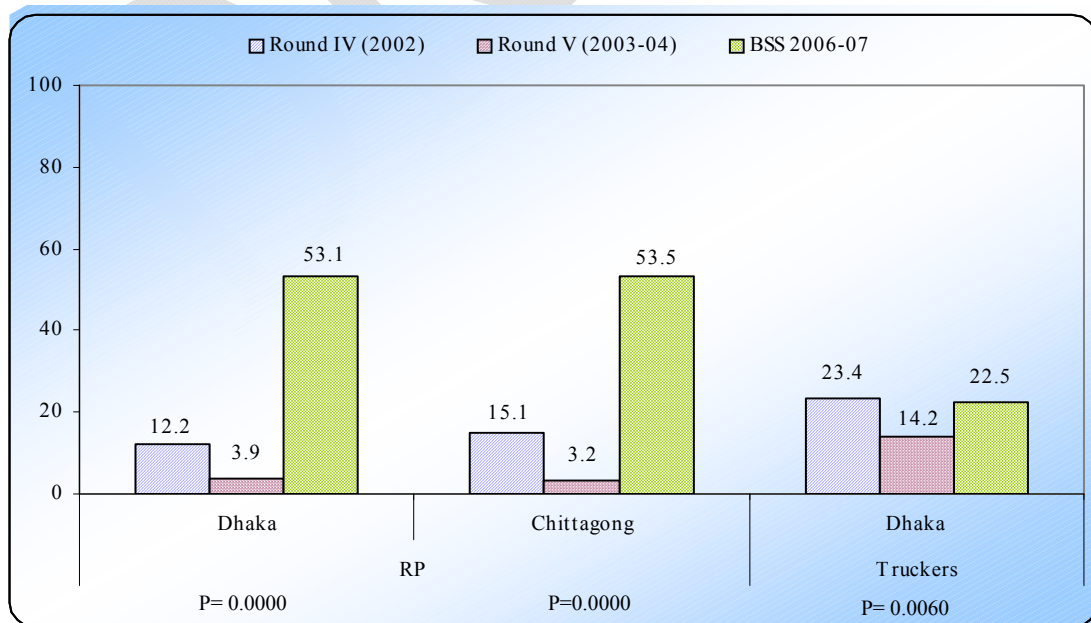
**Figure 7.5: Mean Number of Commercial Female Sex Workers**



**Condom use**

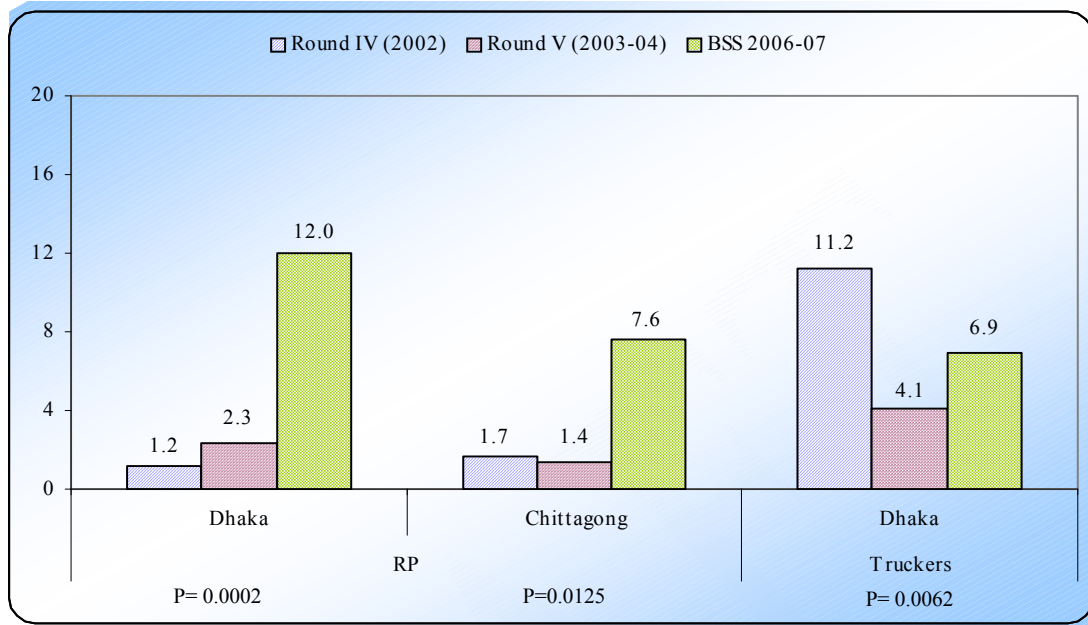
The use of condoms during last sex with commercial female sex workers in the last year increased most remarkably in BSS 2006-07 compared with the previous rounds among the rickshaw pullers in Dhaka and Chittagong. The use of condoms by truckers also increased in BSS 2006-07 compared with the previous rounds (Figure 7.6).

**Figure 7.6: Condom Use with Female Sex Workers during Last Sex in Last Year**



Consistent condom use among rickshaw pullers in both Dhaka and Chittagong increased over the rounds of BSS. For truckers, consistent condom use increased in BSS 2006-07 compared with Round V but was quite low compared with Round IV. Consistent use of condoms by rickshaw pullers and truckers was still quite low (**Figure 7.7**).

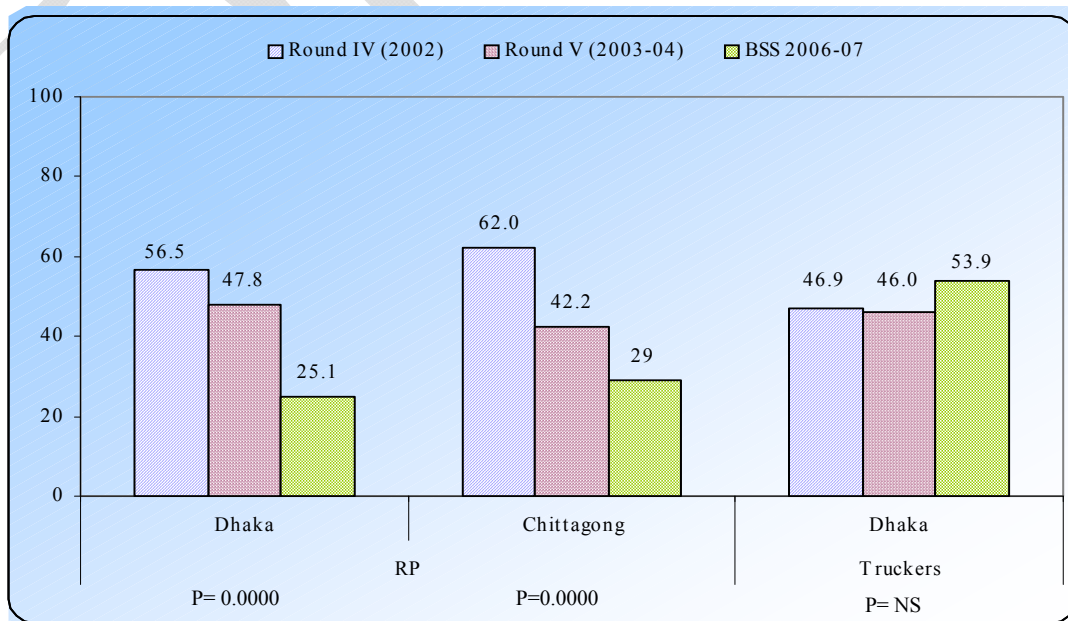
**Figure 7.7: Consistent Use of Condoms with Female Sex Workers**



**STIs and treatment**

The percentage of rickshaw pullers reporting any symptom of STIs during the last year in Dhaka and Chittagong decreased significantly over the rounds of BSS, which was also consistent with the increase of condom use by the group. STIs among the truckers, however, did not change significantly over the rounds (**Figure 7.8**).

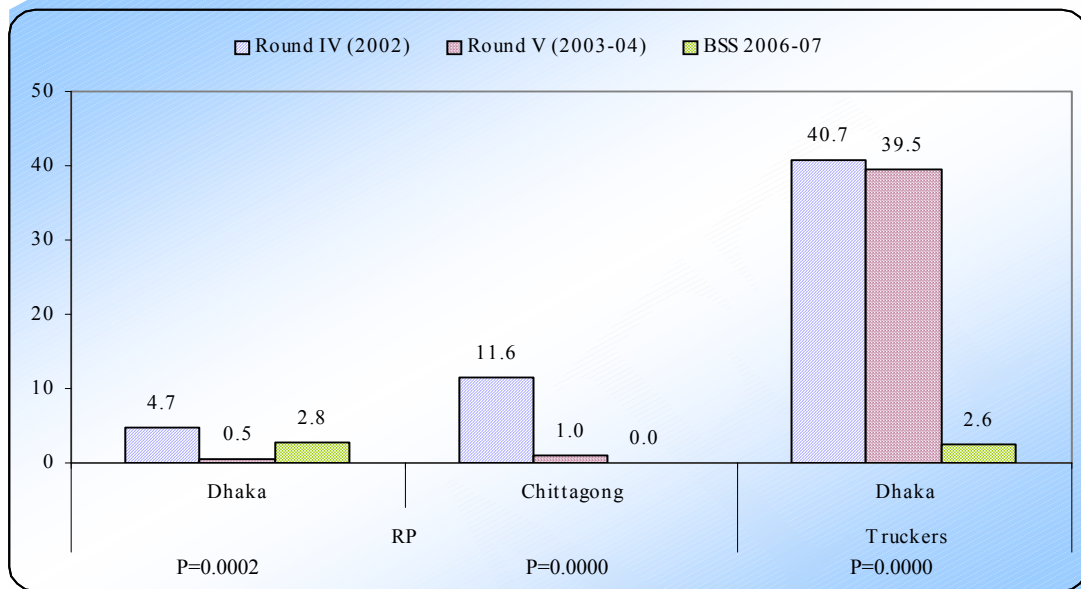
**Figure 7.8: Percentage Reporting STI Symptoms in Last Year**



**Exposure to interventions**

The percentage of rickshaw pullers in Dhaka participating in any HIV/AIDS intervention program was quite low over the rounds of BSS and none of the rickshaw pullers in Chittagong participated in such programs in BSS 2006-07. Moreover, the percentage of truckers participating in such programs drastically decreased to 2.6 percent in BSS 2006-07 compared with 39.5 percent in Round V and 40.7 percent in Round IV (**Figure 7.9**).

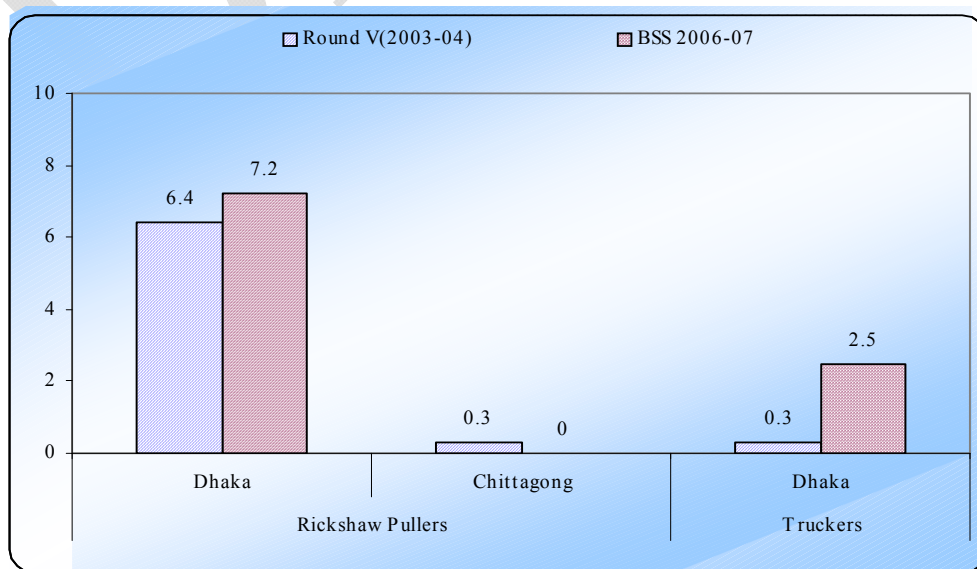
**Figure 7.9: Percentage Exposed to Intervention Programs in Last Year**



**Injecting behavior**

A significant proportion of rickshaw pullers (7.2 percent) in BSS 2006-07 reported injecting drugs in the last year, while the same in Chittagong was nil. Of the truckers, 2.5 percent in BSS 2006-07 also injected drugs in the same period. The percentage of rickshaw pullers in Dhaka injecting drugs in the last year increased to 7.2 percent in BSS 2006-07 compared with 6.4 percent in round V. The practice of injecting drugs also increased among the truckers in BSS 2006-07 (2.5 percent) compared with 0.3 percent in Round V (**Figure 7.10**).

**Figure 7.10: Percent Reported Injecting Drugs in Last Year**





## 7.6 Summary of Findings

The rickshaw pullers in Dhaka and Chittagong and the truckers in Dhaka were also young and a few of them were permanent residents of the city in which they were interviewed. Around three-quarters of the rickshaw pullers in both locations and 60 percent of the truckers were currently married. Around four-fifths of the rickshaw pullers in Dhaka (80.5 percent) and Chittagong (76.7 percent) and more than two-thirds (68.4 percent) of the truckers reported living either with their wives or regular sex partners. The mean age at sexual debut ranged from 17 years to 18 years for these groups.

Nearly two-thirds of the rickshaw pullers in both locations had sex with female sex workers in the preceding year. It was also noteworthy that 87.8 percent of the truckers had sex with similar partners in the same period. The mean number of female sex workers was 5 for rickshaw pullers and 8 for truckers. Less than one-tenth of the three groups had sex with commercial male/*Hijra* partners in the preceding year. More than one-quarter of the three groups of respondents experienced group sex in the previous year.

Use of condoms with regular, non-commercial sex partners significantly increased over the years. Use of condoms by those who had sex with commercial sex partners in the preceding year was reported by 53 percent of the rickshaw pullers and 23 percent of the truckers. The frequency of condom use in the preceding year showed that only about 7 percent to 12 percent consistently used condoms. Those who reported group sex in the preceding year, 44 percent of the rickshaw pullers in Dhaka and 48 percent in Chittagong and 21 percent of the truckers used condoms during the last episode of group sex.

Although 18.6 percent of the rickshaw pullers in Dhaka and 23.4 percent in Chittagong had experienced genital ulcers/sores in the year preceding the survey, a much higher proportion (38.5 percent) of truckers had the same experience. A similar trend was observed as 25 percent to 29 percent of the rickshaw pullers reported at least one STI symptom during the preceding year; the same was reported by a much higher proportion of truckers (53.9 percent).

Rickshaw pullers and truckers were almost universally aware of HIV and AIDS. However, slightly less than two-thirds of the rickshaw pullers and a much lower proportion (19.0 percent) of truckers knew that one could reduce the risk of HIV transmission by avoiding anal sex. Not even 3 percent of the transport workers perceived that they were at high risk of HIV transmission. The rickshaw pullers in Chittagong had not been exposed to any kind of intervention. Only 15 rickshaw pullers and 11 truckers in Dhaka were exposed to either education programs, needle/syringe exchange programs or received condoms.

## Section 8: Discussions and Conclusions

BSS 2006-07 documents the HIV risk behaviors of the selected groups of most-at-risk populations (MARPs). It also focuses on the situation analysis of the MARP risk behaviors over the rounds of surveillance. Issues that are relevant from the perspective of policy implications are discussed below:

### *Injecting Drug Users*

More than one-half of IDUs in all four study locations reported sharing used needles/syringes during the last injection within the two-month period preceding the survey. Although a significant decrease in needle/syringe sharing in Dhaka may be attributed to the program interventions, the same has not happened in the other two locations, Rajshahi and Chapainawabganj, but reversed showing an increase and worsening of the sharing behaviour. Temporary cessation of needle/syringe exchange programs during the period of data collection might have influenced sharing behavior in Rajshahi. Moreover, dismantling of many of the injecting/shooting spots by law enforcing agencies had a negative bearing on the program coverage. It is extremely important to remember that the HIV epidemic has nearly doubled from 4 percent in 2002 to 7 percent in 2006 among the IDU population as evidenced by the last several serological surveillance surveys. This clearly indicates that the concentration of the epidemic is in this high risk group. Data also suggests that harm reduction interventions should remain a priority, together with the strengthening of detoxification and rehabilitation efforts and reintegration plans.

Although 76-99 percent of the IDUs in all the survey locations reported their involvement in HIV/AIDS intervention programs in the preceding year, probably because of the sudden disruption in fund flow during the second half of 2006, and repeated raids in several known locations by the law enforcing agencies, the coverage decreased in Dhaka, Rajshahi and Chapainawabganj as compared to Round V, indicating an autonomous that could lead to the increase of the IDU's risk behavior. The intervention program significantly affect the sharing behavior of the IDUs as an IDU with no exposure to intervention program is 2.5 times more likely to share. It is important to continue uninterrupted program support. In case of uncertainty or delay of funds from one source for running the program activities, there should be a national level coordinating body to make alternative arrangements for continuation of the program without disruption. Effective interventions will also require the members of the law enforcing agencies to become more sensitive to the IDUs. This calls for strengthening strategies and policies for sensitizing the law enforcing agencies about the program. Updating national policies for inter-ministerial cooperation and coordination is essential in this regard.

Significant increases in consistent condom use in all locations may be related to the strong program support during the last few years. This suggests that condom distribution, if continued, is likely to further contribute to consistent condom use. Field observations and informations from different NGO sources, however, reported inadequate and interrupted supply of condom. To avoid any future disruption of supply a national level projection might be necessary to estimate future commodity requirement for the next 3-5 years. It is also important to have a national level coordination of GoB and NGO service providers working on HIV/AIDS to track who is doing what and to monitor stock and supply conditions available through various program channels, to sustain availability of condoms for increased condom use.

Almost universal level of awareness of HIV/AIDS among the IDUs is mixed with erroneous beliefs and misconceptions regarding the various modes of HIV transmission. This calls for the need of strengthening or reinforcing BCC campaigns at all levels aimed at eliminating the prevailing misconceptions. BCC will also be important to disseminate the seriousness of susceptibility, as IDUs do not consider themselves susceptible to HIV infection and thus are reluctant to take any measures to protect themselves either from STIs or HIV.

### ***Heroin Smokers***

More than one-fifth of heroin smokers had ever injected drugs. Almost all past research on IDUs and HS evidenced that most IDUs have switched from smoking heroin to injecting drugs exposing themselves to greater vulnerability. Unfortunately, relative attention and resources have not been given to this risk group. Although the risk behavior of HS related to the transmission of HIV such as use of injecting drugs and sex with commercial sex partners, has declined significantly in BSS 2006-07 as compared to the previous round, consistent use of condoms by the HS was remarkably lower and about one-half of them had never used condoms. Despite some of the positive indications, more than a half of the HS are still not captured by the intervention programs indicating a potential risk that a large proportion of this population might switch over to injecting drugs. Future programs should, as such, include HS in their interventions and allocate appropriate resources for them. It is noteworthy that HS were only surveyed in Dhaka city, whereas this risk group remains scattered in other cities, many small towns and municipalities. As most of the HS tend to switch over to injecting drugs, it is important to cover HS outside the metropolis and in other cities and municipalities through intervention programs for early detection and detoxification.

Over a half (51.1 percent) of the HS were physically abused during the past year and 62 percent of the HS reported that they were harassed by local people. Abuse by the law enforcing agency members was also reported by 56.5 percent of the HS. The frequent harassment, violence and spot eviction stigmatized and marginalized this group. This again is an issue of human rights about which not only the general population but more specifically the law enforcing agencies need to be sensitized. Any type of violence and harassment of high risk groups are again in contrast with the defined goal of HAPP program “to control the spread of HIV infection within high-risk groups and to limit its spread to the general population, without discriminating and stigmatizing the high risk groups”. Unfortunately, neither HAPP nor GFATM has focused attention on HS. Like the IDUs, the HS also had universal knowledge about HIV/AIDS, but were not free from erroneous beliefs and misconceptions about the transmission of HIV. This can be minimized by accessing the population through direct program interventions, including BCC.

### ***Female Sex Workers***

Compared to other categories, the hotel-based sex workers had a much wider clientele base in all three locations in the last week. A hotel-based sex worker, on average, reported having approximately 42 clients in Dhaka, 61 in Chittagong and 19 in Sylhet during the last week. The large number of hotel-based clients from diverse occupational groups suggests the necessity of targeting clients for program interventions. Intensification of awareness programs inside the hotel premises could be one way of accessing the clients. Students form a significant proportion of the clients of different female sex workers. Future awareness programs could specifically focus on college and universities for capturing this potential risk group. It is suggested and expected that GFTAM Project of “Prevention of HIV among

Youths and Adolescents” will commit more funds to target school and college students and educate them about the vulnerability of unsafe sex.

The hotel-based sex workers in all locations and street-based sex workers, except in Chittagong, seem reluctant to request their clients to use condoms. Consistent use of condoms during vaginal/anal sex with new clients is low among the hotel-based sex workers in Dhaka (7.4 percent) and almost absent in Chittagong (less than 1 percent). Consistent condom use during sex with regular clients is even lower among female sex workers. It is striking that an overwhelming majority of the street-based sex workers in Chittagong reported using condoms during last sex with new clients. This has been supported by the significant decline of STI prevalence when compared with two previous rounds and also by the higher rate of participation in intervention programs. Moreover, NGOs are reported as an important source of condom supply for street-based sex workers in Chittagong. Similar NGO support targeting the street based sex workers in other cities will be essential for increased condom use.

Except for some street-based sex workers in Khulna and hotel-based sex workers in Dhaka, knowledge about HIV and AIDS is almost universal among the sex workers surveyed in all locations. Despite their awareness, a considerable number of them had misconceptions about the modes of HIV transmission. Besides, only a negligible number of them perceived themselves to be at high risk of contracting HIV. Participation in NGO intervention programs for all female sex workers in the selected locations, except for the street-based sex workers in Chittagong, declined in BSS 2006-07 compared with Round V. The above situation demonstrates that the female sex workers are at risk of contracting HIV because of their unsafe sexual practices. Other socio-economic vulnerabilities and lack of access to resources such as condoms, legal protection and STD management might put these risk-practicing women into the forefront of a silent HIV epidemic. NGOs working with sex workers specially with GFATM support need to intensify their intervention in concentrated geographical locations.

### ***Male Sex Workers and Hijras***

A large proportion of *Hijras* had more than 20 clients. Moreover, a *Hijra*, on average, had nearly 30 clients in the last week. MSW in Dhaka, on average, had approximately 10 clients (new or regular) in the last week, while the same for the MSW in Chittagong was only 4. Less than one-half of the MSWs and nearly two-thirds of the *Hijras* used condoms with the new clients during sex in the last week. The use of condoms during last anal sex act with both the new and regular clients slightly declined among the MSWs in Dhaka during BSS 2006-07 compared with Round V. Field observation and different NGOs reported that MSWs did not get the requested supply of condoms.

More than one-third of the MSWs and *Hijras* reported at least one STI symptom in the preceding year. Among them, nearly one-half did not seek any formal medical treatment. Nearly one-half of the MSWs and 37.3 percent of the *Hijras* participated in HIV/AIDS intervention programs in the preceding year. The percentage of MSW participating in intervention programs during the last year declined in BSS 2006-07 compared with the previous round in both Dhaka and Chittagong. The percentage of *Hijras* exposed to intervention programs is still quite low. It is important for the program to note that there are more new entrants in injecting drugs from the MSW group in Chittagong in the last one year. Considering the risk behavior of MSW and *Hijras*, further strengthening of the intervention needs to be ensured to capture larger proportions of MSW and *Hijras*.

### ***Males Having Sex with Males***

All the MSM reported to have anal sex with any male last year. On average, an MSM had approximately 5 partners of all types in the preceding month. The mean number of sex partners of MSM in Dhaka decreased to 5 in BSS 2006-07 compared with 10 in Round V. The average number of sex partners per MSM in Sylhet did not change over the rounds of BSS. In general, the use of condoms by MSM is quite low. The use of condoms by the MSM during last sex with all groups of commercial sex workers in both Dhaka and Sylhet declined in BSS 2006-07 compared with Round V. Significantly, only 7 percent of the MSM in Dhaka reported consistently using condoms during sex with commercial male partners and one-half of them did not use condoms at all in the preceding month. Consistent use of condoms with commercial *Hijra* partners was even lower. However, in Sylhet, consistent use of condoms by MSM decreased with *Hijra* and female sex workers in BSS 2006-07 compared with Round V, while it increased with male sex workers over the BSS rounds.

Although all the MSM were aware of HIV and AIDS, most of them were not aware of the risks associated with unprotected anal sex with multiple partners. Like other study groups, the majority of the MSM were also complacent about being susceptible to HIV infection. In the preceding year, only 14.9 percent MSM in Dhaka and 10.6 percent in Sylhet participated in NGO intervention programs. The percentage of MSM exposed to any HIV/AIDS intervention programs decreased significantly in BSS 2006-07 compared with the previous rounds of BSS in Dhaka and Sylhet, indicating a potential risk of increasing HIV infection among the MSM. The coverage of MSM through program interventions still remains poor and the existing program interventions seem to have little effect on the risk behavior of the MSM as indicated by the decline in condom use over the rounds. It is of concern that a large proportion of MSM seem to be slipping out of the intervention programs. NGOs working with MSM need to make further investigation into this matter.

### ***Transport Workers***

The rickshaw pullers in Dhaka and Chittagong and truckers in Dhaka were young and few of them were permanent residents of the city in which they were interviewed. Although nearly two-thirds of the rickshaw pullers in both locations had sex with female sex workers in the preceding year, an alarming 87.8 percent of the truckers had sex with similar partners in the same period. The mean number of female sex workers was 5 for the rickshaw pullers and 8 for the truckers. Use of condoms by those who had sex with commercial sex partners in the preceding year was reported by 53 percent among the rickshaw pullers and 23 percent of the truckers. The frequency of condom use in the preceding year shows that only about 7 to 12 percent consistently used condoms.

However, 25 to 29 percent of the rickshaw pullers reported at least one STI symptom during the preceding year while the same was reported by a much higher proportion of truckers (53.9 percent). Rickshaw pullers and truckers were almost universally aware of HIV and AIDS. Not even 3 percent of the transport workers perceived that they were at high risk of HIV transmission. The rickshaw pullers in Chittagong had not been exposed to any kind of intervention. Only 15 rickshaw pullers and 11 truckers in Dhaka were exposed to NGO intervention programs. A significant portion of rickshaw pullers (7.2 percent) in BSS 2006-07 reported injecting drugs in the last year.

Although a large majority of rickshaw pullers and truckers had sex with commercial female sex workers, few of them consistently used condoms. Moreover, STI prevalence among the

transport workers in both locations was high, particularly among the truckers in Dhaka. Among the truckers, intervention programs drastically declined. Intervention programs need to focus on the transport workers. Considering the practice of injecting drugs among the rickshaw pullers in Dhaka, intervention programs should focus on them to make them aware of the risks of injecting drugs. National programs and policies for clearly targeting the transport workers remain weak and few organizations are tangibly targeting these two high risk groups.

### ***Conclusion***

Improvements have been made in the selected indicators with some specific groups in some areas. But the improvements are inconsistent over the rounds of BSS. Moreover, there has been little internalization of the risk of their behavior.

Group-wise, separate observational assessments of various interventions need to be analyzed through SWOT analysis so that programmatic strengths and weaknesses can be identified for improving program design.

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### **Glossary of words – BSS 2006-07**

**Babu:** Lover of brothel based sex worker who is a steady partner living in and around the brothel.

**Do-Paratha/Double Decker:** Males who are sexually penetrated and also penetrate other males, and whose public behavior may be masculine. They have been given these labels of do-paratha and double decker by kothis, and most of them do not have a label for themselves. Some behave like kothis in public spaces to get together with panthis.

**Gandu:** A person who prefers not to disclose the fact that he is an MSM.

**Gay:** This term is often used to refer to male homosexuals. Sometimes it is also used to refer to both male and female homosexuals.

**Kothi/Zenana:** Feminized males who have sex with men, and may use feminine behaviors in public spaces to attract men for sex. They are usually sexually penetrated, rather than the penetrators. However, many kothis are also married to women and have children to conform to the dominant culture in which they live. They speak the language called *Uti*.

**Panthi/ Girya/ 'Real' Men:** Men who sexually penetrate a woman or another man, called panthis by kothis and *hijras*, and seen as 'real' men. Panthis do not call themselves anything other than men. Panthis have sex with kothis/*hijras* because they like having sex with males, or they like having anal sex, or they want ejaculation at that moment, which is called 'body heat' in the region. Most panthis in Bangladesh are married to women and have children.

**Parik:** An MSM who is a steady partner or lover of one male, to the exclusion of others.

**Rag Pickers:** A person who picks and sells rubbish from the street. They are also known as *tokai*.

**Kuli:** Persons who earn their livelihood by carrying baggage of others in the railway station, bus terminal are known as cooli. They are generally registered by the authority.





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This communication material was made possible through support provided by **USAID/Bangladesh**, U.S. Agency for International Development, under the Cooperative Agreement No. **388-A-00-05-00122-00**. The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development or the views of Family Health International.