

# **HIV/AIDS Behaviour Survey among the General Population in Bhutan, 2006**

## **Technical report**

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## **ACRONYMS AND ABBREVIATIONS**

AIDS	Acquired Immune Deficiency Syndrome
BHU	Basic Health Unit
Dzongkhag	District
Geog	Administrative Block under District
GUP	Village leader
HIV	Human Immunodeficiency Virus
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
IDU	Injecting Dug User
MoH	Ministry of Health
PSU	Primary Sampling Unit
RGoB	Royal Government of Bhutan
STI	Sexually Transmitted Infection
VCT	Voluntary Counselling and Testing

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## 1. INTRODUCTION

Bhutan is recognised as being a low prevalence nation for HIV (1). Although information on HIV/AIDS in Bhutan is limited (2) there is data available from passive case reporting, a few studies and sentinel sero-surveillance conducted through government health care services. All data confirm that HIV prevalence is still low and the estimated numbers of HIV positive people are approximately 100 (1, 3). Information from the passively reported cases suggest that heterosexual contact is a leading cause of HIV transmission (4).

A few studies have been conducted to assess risk behaviours and vulnerability to sexually transmitted infections (STIs) and HIV/AIDS as well as knowledge and attitudes to HIV/STIs in Bhutan (5-7).

In, 2005, 638 university graduates were given a twenty-question survey to assess their awareness and knowledge, attitude, behaviour and practices about HIV/AIDS and their needs for HIV/AIDS programmes (5). All participants had heard of HIV/AIDS and 95.6% knew that a healthy looking person could be HIV infected but only 65.4% correctly responded as to how the disease progressed. 34.3% of respondents claimed to be sexually inexperienced. Of those who had had sex, 68% had more than one sexual partner but of these, only 28.5% always used condoms while 25.11% did not use condoms at all. Although 73.5% of respondents were ready to undergo HIV testing, only 53% said they would disclose a HIV positive status to a health worker.

The study revealed that discriminatory attitudes existed among the respondents towards those infected with HIV with 8.6% recommending imprisonment, 22.6% for public disclosure and segregation for prevention and 30.4% felt uncomfortable worshipping in a home of an HIV infected person. Most of the graduates (93.9%) felt that HIV/AIDS prevention needs urgent attention in the country with every individual and all institutions taking responsibility.

In 2006, an exploratory study on HIV/AIDS among out-of-school youth in Bhutan surveyed 1312 rural/urban Bhutanese male/female youth between 15-24 years (7). Among the respondents, 80% knew about HIV/AIDS. Major preventative methods mentioned were using condoms (76%), being faithful to one single sexual partner (71%) and abstinence (69%). But misconceptions about transmission of HIV were common.

Premarital sex, multiple sex partners and unprotected sex were reported. More than half (58%) of the youth surveyed had had sex and the mean age for sexual initiation was 16 years for males and 18 years for females. The average number of lifetime sex partners for males surveyed was 9.8, with females at 1.5 partners. Some 4% of youth (50 male youth) visited sex workers, 71% of whom used condoms. At first intercourse only 31% males and 13% females used condoms but numbers of both male (64%) and female (49%) using condoms increased since their first sexual encounter.

The study found that illicit drug use was not yet high among this group but alcohol use was common.

The out-of-school youth survey also revealed that there was high awareness on HIV/AIDS. The overall preferred source of health information and messages was from health workers (43%), although rural youth found difficulty in interacting with health workers on reproductive and sexual health problems. The majority of youth (68%) appeared to seek health care at health facilities for STIs but 13% did not do anything.

A survey designed to identify population groups vulnerable to HIV/STIs conducted in six different dzongkhags in 2004 (6) also assessed issues on access to health care. Findings identified access barriers to health services of long waiting times and negative attitudes of health workers, despite a majority preferring to get their health information from health workers rather than media or friends. However, for discussion on sexual matters, friends rather than health workers were preferred. Embarrassment, guilt and lack of privacy at health facilities were stated as possible discouraging factors for accessing appropriate treatment for STIs.

In 2004, recognising the importance of addressing HIV/AIDS early on in the epidemic, the Royal Government of Bhutan (RgoB) embarked on an HIV/AIDS prevention project funded by the World Bank. The project has four components – Prevention of HIV/AIDS and STIs; Institutional Strengthening and Building Capacity; Care, Support and Treatment of STIs; and Strategic information for HIV/AIDS and STI. The International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) is providing support to the Ministry of Health, RgoB for Surveillance, Monitoring and Evaluation, which is part of the fourth component.

A component of Surveillance, Monitoring and Evaluation is a survey on risk behaviours, knowledge and treatment seeking for HIV/AIDS/STIs among the general population of Bhutan. This report presents the findings and conclusions from the general population behaviour survey that was conducted between March and June 2006 among 3235 males and females between 15-49 years from urban and rural Bhutan. The survey was conducted by Rabten Associates, a local firm from Bhutan on behalf of the Ministry of Health, RgoB. Technical assistance for the survey was provided by the ICDDR,B.



## 2. DESIGN AND METHODOLOGY

### 2.1 Methods

The methodology of the general population survey was developed jointly through discussions with the MoH, RgoB, Rabten Associates and ICDDR,B. This included the survey design, selection of population sub groups and geographical areas and development of the survey instrument.

### 2.2 Survey design

A cross-sectional ecologic survey design was applied to a representative sample of urban and rural males and females.

### 2.3 Population subgroups and geographical areas

It was agreed that sampling would be done from urban and rural areas for males and females in two age groups – 15-24 years and 25-49 years as shown in Table 1.

**Table 1: Proposed sampling frame for behaviour survey**

Geographical area	Sex	Age Group	Proposed sample size
Urban	Males	Youth (15-24 years)	400
		Adults (25-49 years)	400
	Females	Youth (15-24 years)	400
		Adults (25-49 years)	400
Rural	Males	Youth (15-24 years)	400
		Adults (25-49 years)	400
	Females	Youth (15-24 years)	400
		Adults (25-49 years)	400
<b>Total</b>			<b>3200</b>

For the urban areas, four major cities, Thimphu, Phuntsholing, Samdarpjongkhar and Punakha were purposefully selected for the survey.

For the rural areas, eight of the twenty Dzongkhags (Districts) were selected using simple random selection. From each of these Dzongkhags, about 30% of the geogs (administrative blocks under Districts) were selected, i.e. 26 geogs, again using simple random selection. The selected rural sites are shown in Table 2.

**Table 2: Sites in rural areas**

<i>Dzongkhag (District)</i>							
Bumthang	Chukha	Lhuntse	Monggar	Punakha	Tsirang	Trongsa	Wangdue
<i>Geog (Administrative block under District)</i>							
Chumey	Bongo	Khoma	Chili	Kabji	Betini	Tangsibji	Dhagchu
	Dala	Menbi	Dramitse	Chubu	Tsirang toe	Lanthel	Phobji
	Logchina		Monggar	Shenga Bjemi	Pataley		Gangtey
	Phuentsholing		Thangrong		Mendrelgang		Gase Tshoyom
			Tsamang				Rubesa

## 2.4 Sample size

As the aim of the survey was primarily descriptive the sample size was calculated assuming a fixed level of desired margin of error, power and level of confidence in the estimates to be reported within each cell and for the specified sub-groups as shown in Table 1. The sample size was calculated as 385 using the following formula and parameters

$$n/\text{group (single proportion)} = \frac{(Z_{\alpha})^2 P(1-P)}{d^2} = 385$$

- level of confidence,  $Z_{\alpha}$ : 95%
- power,  $Z_{\beta}$ , 80%
- margin of error,  $d$ : +/- 5%
- baseline prevalence,  $P$ : this will vary greatly by practice, thus to be set at most conservative level of 50%

As the sample size was calculated for each study area (urban and rural) by population sub groups (male and female) and age structures (15-24 and 25-49), the total sample size was calculated to be 3200 (Table 1).

## 2.5 Development of survey instrument

The behaviour survey questionnaire was developed jointly by ICDDR,B, MoH of RGoB, and Rabten Associates in Bhutan. The questionnaire is attached in Appendix I. It was pre-tested in the field in both urban and rural areas, by the interviewers

before finalisation. The pre-testing was done in the presence of staff from ICDDR,B. A instruction manual for administering the questionnaire was provided to the interviewers.

## **2.6 Training of interviewers**

A two week training was provided on data collection including methodology for sampling and administering the questionnaire to all staff involved in the survey. Training was provided through classroom sessions, role play and observation, field practice with questionnaire followed by discussions between interviewers and trainers.

## **2.7 Data collection**

Three teams each consisting of eight interviewers with an equal mix of males and females and headed by team supervisor collected data over twenty weeks. The areas covered by the three teams were:

- Team A - South-West and Central regions which included Chukha and Tsirang
- Team B - Central regions which included Punakha, Wangduephodrang and Thimphu (teams A and C assisted Team B in Thimphu)
- Team C - Eastern regions which included Bumthang, Mongar and Samdrupjongkhar.

Data collection was carried out simultaneously in the different sites by the three teams. Male and female respondents were interviewed by male and female interviewers respectively. On an average each interview required 35 to 45 minutes.

There were less than 2% refusals which were mainly because the respondents were either busy or in a hurry. Since it was harvesting season in most sites, some of the interviews were conducted early in the mornings or late in the evenings. No major problems were reported by any team.

Information on sites for household figures, number and estimates of ages of respondents were collected from the MoH. After arrival at the site the team leader communicated with the Dzongdhag (Commissioner) in urban areas or the Gup (village head) in rural areas to inform them about the survey and also to collect any further information regarding households and population groups.

Two respondents were not interviewed from the same household for ethical reasons as explained below in section 2.8. If sufficient numbers of respondents in the 15 to 24 years age group were not found in the households, attempts were made to sample them from their schools. However, interviews in schools, were conducted only among those who were between 18 to 24 years, those below 18 years were not interviewed, as this would require consent from parents/guardians who were not present at the school. 231 such interviews were conducted.

The strategy for data collection was different for urban and rural sites. In urban areas, data collection was initiated from a central point of the town and the teams spread out in different directions from that central point. The first household was picked randomly, thereafter, depending on the number of houses in the site and the sample size to be achieved, houses were sampled sequentially, i.e. every third, or every eighth, etc. If no respondent was found in any one of the houses, the next immediate house was visited and after which the sequence was again maintained.

In rural sites the team began the survey from one corner of the village and the first eight houses were sampled. If any interviewer did not find the required respondent, then s/he approached the ninth house. When the required number of respondents were not found in one village, the team moved to the next village.

The final number of respondents who were interviewed are shown in Table 3.

**Table 3: Number of respondents interviewed**

<b>Geographical area</b>	<b>Sex</b>	<b>Age Group</b>	<b>Proposed number for interview</b>
Urban	Males	Youth (15-24 years)	419
		Adults (25-49 years)	368
	Females	Youth (15-24 years)	386
		Adults (25-49 years)	403
Rural	Males	Youth (15-24 years)	397
		Adults (25-49 years)	419
	Females	Youth (15-24 years)	425
		Adults (25-49 years)	418
<b>Total</b>			<b>3235</b>

## 2.8 Ethical issues

Informed verbal consent was obtained from all respondents who were older than 18 years. Respondents were informed that their participation in the survey was voluntary; they were free to choose not to answer any individual question or all of the questions. They were also assured that all information provided would be kept strictly confidential, no identifiers would be used only identification numbers. Two respondents were not interviewed from the same household to overcome any fears of that privacy may be compromised. For respondents in the age group of 15 years to 17 years, consent was obtained from their parents/guardians. In those cases where interviews were conducted in schools, only respondents 18 to 24 years were interviewed as parents/guardians for those below 18 years were not available in the schools.

## 2.9 Data entry and analysis

Data were entered using Epi-Info. The data were cleaned and converted into STATA data file format by using Stat Transfer Version 7. Data were analyzed using STATA inter-cooled Version 8 for Windows. Data were weighted according to urban-rural,

gender (male and female) and age (15-24 years, 25-49 years). Descriptive statistics such as weighted proportions for categorical and weighted means and medians for numerical variables were reported along with 95% confidence intervals (CIs). For comparison of means or proportions between sites (urban vs. rural) and population groups (males vs. females), overlapping confidence intervals were considered as not significant however in case of 0% and 100% proportions CI was not available and comparison was not done.

### 3. RESULTS

Data were collected from the field between March and June 2006. As the survey was designed to assess differences between urban and rural populations and males and females, this report will present data accordingly.

#### 3.1. Demographic characteristics (Tables 4 and 5)

The demographic characteristics of the respondents are shown in Tables 1 and 2. According to the survey design similar proportions of male and female respondents as well as those in the two age groups (15-24 years and 25-49 years) in both urban and rural areas were sampled. Comparisons between urban and rural respondents showed that more urban respondents were in the younger age group and more were unmarried. Most respondents lived with their own families and this was more common in rural areas than in urban areas. However, living with other relatives was more common in the urban areas as was living alone.

Urban respondents had on average more years of schooling and more were literate. Differences were observed in the nature of jobs held by urban and rural respondents which is a reflection of the geographical differences in the two areas. The proportion of people who were unemployed was low and was higher in the urban compared to the rural area. Income was generally higher in the urban area.

**Table 4: Demographic characteristics**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=3235 unless otherwise stated
<b>Gender</b>				
Male	49.3 (47.6-51.1)	50.1 (43.2-56.9)	NS	49.6 (43.1-56.8)
Female	50.7 (48.9-52.5)	50.5 (47.1-56.8)	NS	50.5 (47.8-53.1)
<b>Age groups</b>				
15-24	52.4 (50.9-54.1)	46.0 (43.5-48.4)	<0.05	50.3 (48.52-5.2)
25-49	47.6 (46.0-49.1)	54.0 (51.6-56.5)	<0.05	49.7 (47.4-52.0)
<b>Mean age in years</b>	25.9 (25.7-26.2) M=24	27.7 (27.0-28.4) M=25	<0.05	26.5 (25.9-27.2) M=24
<b>Religion</b>				
Buddhism	92.2 (88.7-94.7)	79.5 (53.4-92.9)	NS	88.0 (76.1-94.4)
Others	7.8 (5.4-11.3)	20.5 (7.1-46.7)	NS	12.0 (5.6-23.9)
<b>Ethic Group</b>				
Ngalop	26.8 (23.0-31.0)	29.8 (14.8-50.9)	NS	27.8 (21.7-34.9)
Scharchop (Tshangla)	36.8 (32.8-41.0)	22.4 (11.7-38.6)	NS	32.0 (26.3-38.4)
Kurtep	7.3 (7.0-7.7)	7.9 (2.7-21.3)	NS	7.5 (5.2-10.8)
Bumthap	5.6 (4.5-7.0)	3.9 (0.7-19.5)	NS	5.0 (3.0-8.3)
Lhotsampa	15.1 (12.6-18.0)	28.6 (11.3-55.7)	NS	19.5 (11.6-30.9)
Khengpa	6.7 (6.1-7.4)	2.0 (1.0-4.0)	<0.05	5.2 (4.0-6.7)
Tibetan	0.9 (0.8-1.1)	0.2 (0.1-0.9)	NS	0.7 (0.4-1.1)
Others	1.7 (1.2-2.4)	5.4 (1.4-18.5)	NS	2.9 (1.3-6.5)

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=3235 unless otherwise stated
<b>Marital Status</b>				
Married	40.1 (34.9-45.6)	59.1 (4.6-63.4)	NS	46.4 (37.2-55.7)
Former married	2.3 (1.7-3.3)	3.2 (2.0-4.9)	NS	2.6 (2.1-3.2)
Never married	57.5 (52.8-62.1)	37.8 (34.1-41.7)	<0.05	51.0 (42.0-60.0)
<b>Respondent lives with</b>	N=1575*	N=1658*		N=3233**
Own family	51.4 (49.4-53.4)	60.9 (54.9-66.6)	<0.05	54.5 (50.0-59.0)
Parents	17.4 (12.8-23.2)	25.9 (21.8-30.4)	NS	20.2 (15.2-26.3)
Relatives	17.6 (13.0-23.3)	3.1 (1.8-5.2)	<0.05	12.8 (6.8-22.7)
Friends	3.3 (3.1-3.4)	2.7 (0.7-5.3)	NS	2.9 (2.2-3.8)
Hostel	2.1 (0.6-7.3)	5.2 (3.4-7.8)	NS	3.1 (1.3-7.4)
Alone	7.3 (6.4-8.2)	2.5 (1.8-3.5)	<0.05	5.7 (3.9-8.2)
Others	1.1 (0.5-2.2)	0.5 (0.2-1.1)	NS	0.9 (0.4-1.9)
<b>Education</b>				
Never attended school	14.6 (10.5-19.8)	46.6 (39.1-54.3)	< 0.05	25.1 (14.5-39.9)
1-5 years	6.0 (5.3-6.7)	13.8 (9.5-19.5)	< 0.05	8.6 (5.8-12.5)
6-10 years	38.0 (32.4-44.0)	34.3 (29.4-39.5)	NS	36.8 (33.5-40.2)
11-19 years	41.4 (31.2-44.0)	5.1 (4.2-6.3)	< 0.05	29.5 (15.0-49.8)
<b>Mean years of schooling</b>	9.0 (8.0-9.9) M=10	3.9 (3.3-4.5) M=2	< 0.05	7.3 (5.2-9.5) M=8
<b>Other education (those who had no schooling)</b>	N=340	N=796		N=1136
Non-Formal education	23.7 (18.4-30.0)	20.4 (15.1-26.9)	NS	21.7 (17.4-26.6)
Monastic institution	7.0 (1.2-2.8)	6.1 (3.4-10.9)	<0.05	6.5 (4.5-9.3)
None	67.5 (61.4-73.0)	72.3 (63.7-79.5)	NS	70.4 (64.1-76.0)
Others	1.8 (1.2-2.8)	1.3 (0.3-4.5)	NS	1.5 (0.7-3.0)
<b>Can read any language</b>	90.4 (84.6-94.1)	64.3 (55.7-72.0)	<0.05	81.8 (68.0-90.5)
<b>Occupation</b>	N=1573***			
Student	23.9 (18.8-29.9)	20.2 (17.4-23.4)	NS	22.7 (19.8-25.9)
Housewife	11.7 (8.4-16.1)	11.3 (6.9-17.9)	NS	11.7 (9.1-15.1)
Civil service (Officer)	9.5 (6.5- 13.8)	0.2 (0.1-0.6)	<0.05	6.4 (2.8-13.9)
Civil service (Clark)	17.4 (15.8-19.1)	5.9 (4.2-8.2)	<0.05	13.6 (10.6-17.1)
Business <sup>ϕ</sup>	12.3 (10.6-14.3)	7.5 (5.9-9.4)	<0.05	10.7 (8.3-13.7)
Farmer	0.5 (0.2-1.5)	40.8 (31.0-51.5)	<0.05	13.8 (5.0-32.8)
Skilled labourer	3.8 (3.2-4.4)	4.6 (2.8-7.6)	NS	4.0 (3.3-4.9)
Low skilled labourer <sup>Ω</sup>	8.7 (7.7-9.8)	5.2 (3.7-7.2)	NS	7.5 (6.4-8.8)
Unemployed	6.0 (5.0-7.3)	2.2 (1.2-4.2)	<0.05	4.7 (3.1-7.1)
Others	6.1 (3.2-11.3)	2.0 (0.5-7.3)	NS	4.8 (2.1-10.3)
<b>Working status (among those who were employed)</b>	N=1531	N=1640		N=3171
Full time	93.4 (90.4-95.5)	96.2 (93.0-98.0)	NS	94.3 (91.1-96.5)
Part time	2.4 (1.7-3.4)	1.5 (0.8-2.9)	NS	2.1 (1.4-3.2)
Occasionally	4.2 (2.8-6.3)	2.3 (1.1-4.6)	NS	3.5 (2.2-5.8)
<b>Monthly family income of the respondent</b>		N=1658*		N=3234*
Nu 0-1999	3.0 (2.1-4.3)	28.0 (21.4-35.7)	<0.05	11.2 (5.1-22.9)
Nu 2000-4999	11.9 (8.1-17.4)	24.8 (21.0-29.0)	<0.05	16.2 (10.3-24.4)

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=3235 unless otherwise stated
Nu 5000-9999	31.3 (25.8-37.3)	20.9 (15.4-27.7)	NS	27.9 (24.2-31.8)
Nu 10000+	42.8 (32.9-53.3)	13.4 (10.0-17.6)	<0.05	33.1 (19.6-50.1)
No answer, do not know	11.0 (9.3-12.8)	13.0 (9.9-16.9)	NS	11.6 (9.8-13.7)

Note: M refers to median

<sup>Φ</sup> Business, small trading

<sup>Ω</sup> Artisan, domestic help, day labour, bus /truck driver, restaurant worker, lay monk

\* 1 observation is missing

\*\* 2 observations are missing

\*\*\* 3 observations are missing

Comparison of males and females in urban and rural areas showed that irrespective of area more males than females were never married. In urban areas more females than males were currently married and in rural areas more were previously married. In urban areas more males were living on their own but there were no differences in the proportions of males and females living on their own in rural areas. Females were on the whole less educated than males in both areas but there were no differences in the working status of those males and females who were employed.

**Table 5: Demographic characteristics among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between males and females (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between males and females (p-value)
<b>Age</b>						
15-24	52.1 (48.2-56.0)	52.7 (49.4-56.1)	NS	48.5 (44.4-52.6)	43.4 (41.7-45.2)	NS
25-49	47.9 (44.0-51.8)	47.3 (43.9-50.6)	NS	51.5 (47.4-55.6)	56.6 (54.9-58.3)	NS
<b>Mean age in years</b>	25.8 (25.3-26.4) M=24	26.0 (25.7-26.4) M=24	NS	27.7 (26.6-28.9) M=25	27.6 (27.1-28.2) M=26	NS
<b>Religion</b>						
Buddhism	93.9 (88.2- 97.0)	90.5 (88.3-92.3)	NS	73.9 (44.1-91.0)	85.1 (64.6-94.7)	NS
Others	6.1 (3.0-11.9)	9.5 (7.7-11.7)	NS	26.1 (9.0-56.0)	14.9 (5.3-35.4)	NS
<b>Ethic Group</b>						
Ngalop	28.0 (24.3-32.0)	25.7 (21.6-30.3)	NS	31.0 (13.6-56.3)	28.6 (15.5-46.7)	NS
Scharchop (Tshangla)	34.4 (30.6-38.5)	39.0 (34.8-43.5)	NS	17.3 (8.1-33.3)	27.4 (15.3-44.1)	NS
Kurtep	8.3 (7.8-8.9)	6.3 (5.8-6.9)	<0.05	7.3 (2.5-19.7)	27.4 (15.3- 44.1)	NS
Bumthep	7.0 (5.3-9.1)	4.2 (3.6-4.9)	<0.05	4.2 (3.6-4.9)	8.6 (2.8-23.4)	NS
Lhotsampa	12.7 (10.0-16.0)	17.4 (14.8-20.2)	NS	33.6 (12.7-63.8)	3.7 (0.6-20.1)	NS
Khengpa	7.5 (6.8-8.2)	6.0 (5.0-7.1)	NS	2.2 (0.9-5.5)	1.8 (1.0-3.2)	NS
Others	2.2 (1.6-2.9)	1.3 (0.9-2.1)	NS	4.4 (1.0-17.5)	6.4 (1.8-20.2)	NS



Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between males and females (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between males and females (p-value)
<b>Marital Status</b>						
Married	30.8 (23.8-38.8)	49.2 (45.3-53.0)	<0.05	54.6 (48.3-60.7)	63.6 (58.3-68.6)	NS
Former married	1.5 (1.2-2.0)	3.2 (1.9-5.3)	NS	1.1 (0.5-2.5)	5.2 (3.3-8.3)	<0.05
Never married	67.7 (59.6-74.9)	47.6 (45.0-50.2)	<0.05	44.3 (38.4-50.5)	31.2 (27.3-35.4)	<0.05
<b>Respondent lives with</b>	N=786*				N=842*	
Own family	44.6 (43.1-46.0)	58.0 (55.3-60.7)	<0.05	57.1 (48.0-65.8)	64.7 (59.0-70.0)	NS
Parents	19.9 (14.7-26.4)	14.9 (11.0-19.9)	NS	27.6 (22.5-33.5)	24.0 (19.1-29.7)	NS
Relatives	19.6 (13.8-27.0)	15.6 (12.1-19.9)	NS	2.8 (1.4-5.7)	3.3 (2.1-5.2)	NS
Friends	3.5 (3.2-3.9)	3.0 (2.5-3.6)	NS	3.6 (1.2-10.6)	0.5 (0.2-1.6)	NS
Hostel	1.8 (0.3-9.4)	2.4 (0.9-6.6)	NS	6.0 (3.3-9.8)	3.1 (2.8-7.6)	NS
Alone	10.7 (9.3-12.2)	4.0 (3.4-4.5)	<0.05	2.7 (1.5-4.9)	2.2 (1.4-3.6)	NS
Others	2.1 (1.1-4.2)	0.5 (0.1-1.6)	NS	0.6 (0.1-1.6)	0.5 (0.2-1.3)	NS
<b>Education</b>						
Never attended school	6.1 (3.4-10.9)	22.7 (17.1-29.5)	<0.05	33.5 (26-42.0)	59.7 (53.2-65.9)	<0.05
1-5 years	7.3 (6.2-8.7)	4.7 (4.1-5.3)	<0.05	18.0 (12.0-26.3)	9.5 (6.0-13.4)	NS
6-10 years	34.4 (25.3-44.8)	41.6 (39.2-44.0)	NS	39.3 (34.7-44.2)	29.2 (24.0-35.0)	NS
11-19 years	52.1 (38.1-65.8)	31.1 (23.6-39.6)	NS	8.7 (6.7-11.3)	1.6 (0.9-2.8)	<0.05
<b>Mean year of schooling</b>	10.1 (9.0-11.3) M=11	7.8 (7.0-8.7) M=10	<0.05	4.9 (4.2-5.5) M=5	3.0 (2.4-3.5) M=0	<0.05
<b>Other education (those who had no schooling)</b>	N=77	N=263		N=317	N=480	
Non-Formal education	0	30 (24.4-36.2)	-	10.0 (5.4-17.8)	26.2 (20.1-33.5)	<0.05
Monastic institution	32.4 (16.7-53.5)	0.3 (0.0-3.6)	<0.05	16.6 (7.9-31.7)	0.2 (0.0-1.3)	<0.05
None	61.7 (33.8-83.6)	69.0 (64.0-73.6)	NS	69.9 (54.6-81.8)	73.6 (66.3-79.8)	NS
Others	5.9 (1.4-21.1)	0.8 (0.1-8.6)	NS	3.4 (1.0-11.4)	0	-
<b>Can read any language</b>	97.1 (88.4-99.3)	83.9 (77.4-88.7)	NS	77.6 (65.0-86.6)	51.0 (44.7-57.2)	<0.05
<b>Occupation</b>	N=784**					
Student	29.4 (24.7-34.4)	18.7 (13.4-25.4)	NS	26.3 (22.8-30.0)	14.2 (11.4-17.5)	<0.05
Housewife	0	23.1 (15.9-32.2)	-	0	22.6 (14.6-33.4)	-
Civil service (Officer) and professional	16.2 (10.4-24.2)	3.2 (2.4-4.1)	<0.05	0.3 (0.1-1.0)	0	-
Civil service (Clerk)	13.3 (5.9-27.2)	21.4 (14.6-30.2)	NS	8.8 (6.3-12.1)	2.9 (1.8-4.8)	<0.05

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between males and females (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between males and females (p-value)
Business <sup>Φ</sup>	11.3 (9.2-13.8)	13.3 (11.9-14.8)	NS	5.2 (3.9-7.0)	9.8 (7.1-13.1)	<0.05
Farmer	1.0 (0.3-2.7)	0.1 (0.0-0.6)	NS	38.6 (29.7-48.3)	43.1 (31.7-55.3)	NS
Skilled labourer	4.9 (3.8-6.3)	2.7 (2.5-2.9)	<0.05	7.4 (4.1-13.2)	1.8 (0.6-2.9)	<0.05
Low skilled labourer <sup>Ω</sup>	11.2 (10.1-12.3)	6.3 (5.4-7.4)	<0.05	7.1 (4.8-10.4)	3.2 (1.9-5.4)	NS
Unemployed	6.0 (5.1-7.1)	6.0 (4.9-7.4)	NS	3.1 (1.7-5.6)	1.3 (0.5-2.9)	NS
Others	6.9 (3.5-13.0)	5.4 (2.9-9.4)	NS	3.1 (0.8-10.8)	1.2 (0.4-3.9)	NS
<b>Working status (among those who were employed)</b>	N=763	N=768		N=804	N=836	
Full time	90.6 (87.0-93.4)	96.1 (93.2-97.7)	NS	96.1 (90.8-98.4)	96.3 (92.3-98.2)	NS
Part time	3.1 (2.2-4.4)	1.7 (1.2-2.6)	NS	0.7 (0.2-1.8)	2.4 (1.2-4.6)	NS
Occasionally	6.2 (4.4-8.7)	2.2 (1.1-4.3)	<0.05	3.2 (1.3-7.8)	1.4 (0.4-4.9)	NS
<b>Monthly family income</b>					N=842*	
Nu 0-1999	4.0 (2.9-5.3)	2.1 (1.3-3.4)	NS	27.2 (19.7-36.3)	28.8 (21.0-38.1)	NS
Nu 2000-4999	9.9 (5.1-18.2)	13.9 (11.2-17.2)	NS	27.1 (22.8-31.8)	22.5 (17.9-27.9)	NS
Nu 5000-9999	32.5 (27.4-38.1)	30.1 (23.8-37.3)	NS	20.6 (14.4-28.5)	21.1 (15.3-28.5)	NS
Nu 10000+	42.7 (33.0-53.0)	42.9 (32.8-53.6)	NS	12.4 (9.9-15.5)	14.3 (8.9-22.1)	NS
No answer, do not know	10.9 (9.6-12.4)	11.0 (9.0-13.4)	NS	12.7 (10.2-15.9)	13.3 (9.2-18.2)	NS

Note: M refers to median

\* 1 observation is missing

\*\* 3 observations are missing

### 3.2. Exposure to mass media (Tables 6 and 7)

Most respondents read the newspaper once or more than once a week and not surprisingly newspapers were more frequently read in urban areas where newspapers are available and the literacy rate is higher. Listening to the radio was more common in rural areas while watching television was more common in urban areas.

**Table 6: Exposure to mass media**

Indicators % (95 % CI)	Urban N =1576	Rural N =1659	Comparison between urban and rural (p-value)	Total N=3235
<b>Reading newspaper</b>				
Everyday	13.7 (10.2-18.3)	2.0 (1.3-3.2)	<0.05	9.9 (5.2-18.0)
Once/more than once a week	45.3 (41.0-49.7)	23.0 (18.5-28.3)	<0.05	37.9 (28.8-48.1)
Less than once a week	22.5 (20.8-24.4)	27.8 (23.9-32.2)	NS	24.3 (21.4-27.5)
Do not read	18.5 (12.0-27.4)	47.1 (38.7-55.7)	<0.05	27.9 (16.4-43.3)
<b>Listening to the radio</b>				
Everyday	12.6 (11.9-13.3)	40.9 (33.9-48.4)	<0.05	21.9 (13.9-32.7)
Once/more than once a week	21.5 (18.6-24.7)	24.7 (21.3-28.4)	NS	37.9 (28.8-48.1)
Less than once a week	25.4 (20.5-31.1)	17.9 (14.5-21.9)	NS	22.9 (17.7-29.2)
Do not listen	40.5 (32.0-49.7)	16.5 (12.4-21.8)	<0.05	32.6 (27.2-38.5)
<b>Watching television</b>				
Everyday	77.2 (71.3-82.2)	19.2 (11.5-30.3)	<0.05	58.1 (36.2-77.2)
Once/more than once a week	14.5 (11.5-18.0)	15.3 (12.0-19.4)	NS	14.8 (12.2-17.7)
Less than once a week	5.8 (4.6-7.3)	13.0 (9.6-17.4)	<0.05	8.2 (5.4-12.4)
Do not watch	2.6 (1.4-4.6)	52.5 (40.2-64.4)	<0.05	19.0 (7.4-40.9)

As more males than females were educated it is not surprising that more males said that they read the newspaper than females or that the frequency of reading newspapers was higher in males. Similar proportions of males and females watched television or listened to the radio in both areas (Table 7).

**Table 7: Exposure to mass media among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787	Female N=789	Comparison between males and females (p-value)	Male N=816	Female N=843	Comparison between males and females (p- value)
<b>Reading newspaper</b>						
Everyday	18.0 (11.9-26.2)	9.6 (8.3-11.1)	<0.05	2.7 (1.6-4.6)	1.3 (0.6-3.2)	NS
Once/more than once a week	50.6 (45.7-55.5)	40.1 (36.1-44.3)	<0.05	27.5 (20.9-35.3)	18.5 (15.2-22.4)	NS
Less than once a week	20.4 (16.5-24.9)	24.6 (23.3-25.9)	NS	36.4 (31.8-41.1)	19.3 (15.0-24.5)	<0.05
Do not read	11.0 (4.5-24.5)	25.7 (19.6-33.1)	NS	33.5 (24.1-44.4)	60.8 (52.8-68.3)	<0.05
<b>Listening to the radio</b>						
Everyday	12.8 (12.6-13.1)	12.3 (11.1-13.6)	NS	47.4 (38.0-56.9)	34.4 (29.9-39.3)	NS
Once/more than once a week	23.7 (18.6-29.8)	19.4 (18.2-20.5)	NS	21.7 (18.5-25.3)	27.7 (23.0-32.6)	NS

Indicators % (95 % CI)	Urban			Rural		
	Male N=787	Female N=789	Comparison between males and females (p-value)	Male N=816	Female N=843	Comparison between males and females (p- value)
Less than once a week	25.1 (22.2-28.2)	25.7 (18.8-34.1)	NS	16.9 (12.1-23.2)	18.6 (15.6-22.6)	NS
Do not listen	38.3 (30.0-47.4)	42.7 (33.7-52.2)	NS	14.1 (9.7-19.8)	19.1 (14.2-25.1)	NS
<b>Watching television</b>						
Everyday	77.0 (67.4-84.4)	77.4 (74.3-80.1)	NS	17.5 (11.3-26.1)	20.9 (11.6-34.5)	NS
Once/more than once a week	15.4 (10.7-21.7)	13.6 (12.2-15.0)	NS	18.5 (14.2-23.8)	12.2 (8.5-17.1)	NS
Less than once a week	5.7 (4.0-8.1)	5.8 (5.0-6.9)	NS	17.3 (12.0-24.4)	8.7 (6.3-12.0)	NS
Do not watch	1.9 (0.7-5.0)	3.2 (2.2-4.8)	NS	46.7 (35.2-58.5)	58.2 (43.5-71.6)	NS

### 3.3. SEXUAL BEHAVIOURS

#### 3.3.1. Sexual practices among married respondents (Tables 8 and 9)

Questions were asked on extramarital sex in the last year which was defined as having sex with partners who were not their spouse or regular sex partner. Extramarital sex was reported by approximately one fifth of the participants but the proportions reporting this in the last year were higher in urban than in rural areas. The most common sex partner in the urban setting was girlfriend/boyfriend while in rural areas casual acquaintance or neighbour was more common. More respondents in the urban areas bought sex from sex workers than in rural areas and concomitantly more in the urban area said they had paid cash for sex.

The most common location for extramarital sex was either own or a friend's house in both urban and rural settings. Hotels were common in urban areas while the workplace was common in rural areas.

Multiple sex partners were reported by those who had extramarital sex in the last six months and there was no significant difference between the mean number of extramarital sex partners in urban and rural areas.

**Table 8: Extramarital sex among married respondents**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=3235 unless otherwise stated
<b>Sex with partners other than spouse/regular partner in last 1 year (among those who were married)</b>	23.0 (20.4-25.8) N=775	13.9 (10.7-17.9) N=956	<0.05	19.2 (15.3-23.8) N=1731
<b>Type of partners other than spouse/regular partner in last 1 year (among those who had sex in last 1 year)*</b>	N=142	N=123		N=265
Girlfriend/Boyfriend	53.6 (41.7-65.8)	35.1 (23.8-48.5)	NS	48.2 (35.1-61.6)
Sex worker	9.8 (9.2-10.4)	1.0 (0.1-7.4)	<0.05	7.1 (4.6-10.9)
Casual acquaintance/neighbour	32.4 (22.7-43.8)	60.9 (42.9-76.3)	NS	41.1 (26.4-57.5)
Relative	3.7 (1.6-8.4)	1.8 (0.5-6.7)	NS	3.1 (1.3-7.3)
Stranger	18.0 (13.6-23.4)	10.7 (6.6-17.0)	NS	15.8 (11.1-21.9)
Others	3.3 (2.3-4.5)	2.3 (0.6-8.1)	NS	3.0 (2.1-4.3)
<b>Place of sex with partners other than spouse/regular partner in last 1 year (among those who had sex in last 1 year)*</b>	N=142	N=123		N=265
Own house/Partner's house	65.2 (64.0-66.4)	75.2 (66.9-80.4)	NS	67.9 (64.0-66.4)
Some one else's house	10.6 (8.5-13.2)	7.9 (4.0-15.0)	NS	9.7 (7.7-12.3)
Hotel	44.3 (36.0-53.0)	9.2 (4.9-16.7)	<0.05	33.6 (20.3-50.3)
Workplace	1.8 (0.8-4.2)	16.7 (10.3-25.8)	<0.05	6.3 (2.8-13.5)
Shop	0.0 (0.0-0.8)	1.0 (0.1-7.4)	NS	0.3 (0.03-2.8)
Others	2.6 (1.2-5.4)	6.7 (2.0-19.7)	NS	3.8 (1.7-8.6)
<b>Paid/received cash/kind during sex with partner other than spouse/regular partner in last 1 year (among those who had sex in last 1 year)*</b>	N=142	N=123		N=265
Paid cash	23.5 (18.7-29.2)	4.9 (2.3-10.3)	<0.05	17.9 (10.8-28.2)
Paid kind	12.4 (11.8-13.0)	9.7 (4.8-18.6)	NS	11.6 (9.6-13.9)
Received cash	0.7 (0.1-5.2)	4.4 (1.7-11.1)	NS	1.8 (0.5-6.0)
Received kind	0.1 (0.1-2.2)	1.9 (0.5-7.0)	NS	0.7 (0.1-0.3)
Not paid	64.7 (55.6-72.9)	81.2 (74.3-86.7)	<0.05	69.7 (58.8-78.8)
<b>Mean number of sex partners other than spouse/regular partner in last 6 months (among those who had sex in last 6 months)</b>	2.7 (2.1-3.3) M=2 N=66	3.0 (2.5-3.5) M=2 N=47	NS	2.7 (2.3-3.2) M=2 N=113
<b>Had sex with partner of same sex in last 1 year (among those who were married)</b>	1.7 (0.8-3.9)	0.7 (0.1-3.1)	NS	1.3 (0.5-3.2)

Note: M refers to median

\* Multiple responses

Not surprisingly males more commonly than females reported extramarital sex in both urban and rural areas (Table 9). However, although buying sex from sex workers was only reported by males, a small proportion of females in both areas said they had paid cash for sex. There were significant differences between males and females in urban areas in the proportions who reported different types of extramarital sex partners and in the locations they chose for extramarital sex. For partners, more females reported

extramarital sex with boyfriends compared to males with girlfriends and none of the females reported sex with strangers. For locations, more females than males reported having extramarital sex in partner's or own home while more males than females reported someone else's house, hotels, shops and other venues.

In the last six months, both males and females reported more than one extramarital sex partner although males had significantly more partners than females in both areas.

**Table 9: Extramarital sex among married males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between males and females (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between males and females (p-value)
<b>Sex with partners other than spouse /regular partner in last 1 year (among those who were married)</b>	43.6 (34.8-52.8) N=310	10.6 (9.4-11.9) N=465	<0.05	23.0 (17.1-30.4) N=437	6.5 (4.0-10.4) N=519	<0.05
<b>Type of partners other than spouse/regular partner in last 1 year (among those who had sex in last 1 year)*</b>	N=103	N=39		N=87	N=36	
Girlfriend/Boyfriend	45.2 (34.1-56.8)	75.5 (60.2-86.3)	<0.05	29.8 (18.3-44.6)	50.4 (32.3-68.4)	NS
Sex worker	13.8 (12.8-14.8)	0	-	1.4 (0.2-10.4)	0	-
Casual acquaintance or neighbour	43.1 (33.8-52.9)	6.0 (0.6-38.5)	NS	69.0 (47.0-84.8)	37.7 (16.9-64.2)	NS
Relatives	2.6 (1.1-6.0)	6.4 (2.8-14.0)	NS	1.8 (0.4-8.6)	2.1 (0.2-15.2)	NS
Stranger	25.2 (18.7-33.2)	0	-	12.8 (8.2-19.3)	4.8 (1.4-15.4)	NS
Others	0	11.4 (7.9-16.1)	-	0	9.0 (1.8-34.1)	-
<b>Place of sex with partners other than spouse/partner in last 1 year (among those who had sex in last 1 year)*</b>	N=103	N=39		N=87	N=36	
Own house/Partners house	53.7 (53.4-54.1)	93.4 (86.2-97.0)	<0.05	71.3 (65.0-76.8)	82.6 (61.3-93.4)	NS
Some one else house	14.8 (12.0-18.2)	0.1 (0.0-2.4)	<0.05	8.7 (3.7-19.5)	5.3 (1.2-20.8)	NS
Hotel	59.4 (48.1-69.8)	7.1 (3.7-13.3)	<0.05	11.6 (6.0-21.2)	2.3 (0.3-14.3)	NS
Workplace	2.6 (1.1-6.0)	0	-	18.8 (11.7-29.0)	10.5 (3.7-26.4)	NS
Shop	0.1 (0.0-1.0)	0	-	0	3.9 (0.5-23.2)	-
Others	3.6 (1.7-7.6)	0	-	9.0 (2.9-24.9)	0	-
<b>Paid/received cash/kind during sex with partner other</b>	N=103	N=39		N=87	N=36	

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between males and females (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between males and females (p-value)
<b>than spouse/partner in last 1 year (among those who had sex in last 1 year)</b>						
Paid cash	27.4 (24.5-30.6)	13.9 (6.0-29.1)	NS	5.1 (1.9-12.5)	4.5 (1.2-15.4)	NS
Paid kind	17.4 (16.3-18.5)	0	-	13.1 (7.5-21.9)	0	-
Received cash	0	2.2 (0.3-17.0)	-	0	17.0 (7.4-34.5)	-
Received kind	0.2 (0.0-3.0)	0	-	0	7.4 (2.0-24.1)	-
Not paid	62.6 (57.3-67.6)	70.0 (49.6-84.6)	NS	82.9 (76.2-88.0)	76.4 (54.9-89.6)	NS
<b>Mean number of sex partners other than spouse/partner in last 6 months (among those who had sex in last 6 months )</b>	3.0 (2.5-3.6) M=2 N=53	1.2 (1.2-1.2) M=1 N=13	<0.05	3.4 (2.7-4.6) M=3 N=33	1.8 (1.5-2.2) M=2 N=14	<0.05
<b>Had sex with same sex in last 1 year (among those who were married)</b>	2.3 (0.9-5.9) N=310	1.4 (0.6-2.9) N=465	NS	1.5 (0.4-6.0) N=437	0 N=519	-

Note: M refers to median  
\* Multiple responses

### 3.3.2. Sexual practices among unmarried respondents (Tables 10 and 11)

Close to half of the unmarried respondents reported having ever had sex and the mean age at first sex was below 18 years in both urban and rural areas. The majority of the sex acts were non-commercial. In both the areas the most common sex partner was a girlfriend/boyfriend. However, there were significant differences in partner types between urban and rural areas with girlfriends/boyfriends, sex workers and strangers being more common in urban than in rural areas. The location for sex was mostly in own or partner's house in both urban and rural settings but in urban areas, hotels were also very common sites. On average the respondents reported two sex partners in both urban and rural areas.

Sex with partners of the same sex was rarely reported from either urban or rural areas.

**Table 10: Sexual practices among unmarried respondents**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=3535 unless otherwise stated
<b>Ever had sex (among those who were unmarried)</b>	50.6 (45.3-55.1) N=801	39.2 (33.1-45.7) N=703	NS	47.5 (41.0-54.1) N=1504
<b>Mean age at first sex (among those who ever had sex and were unmarried)</b>	17.7 (17.3-18.0) M=18 N=359	16.3 (16.0-16.7) M=16 N=239	<0.05	17.4 (16.8-18.0) M=17 N=598
<b>Paid/received cash/kind during sex (among those who ever had sex and were unmarried)</b>	N=359	N=239		N=598
Paid cash	9.5 (5.7-15.4)	9.9 (4.7-19.8)	NS	9.6 (6.2-14.6)
Paid kind	1.7 (0.4-6.3)	2.9 (1.3-6.4)	NS	1.9 (0.6-5.7)
Received cash	2.9 (1.9-4.2)	2.0 (0.8-5.2)	NS	2.7 (1.7-4.2)
Received kind	1.8 (1.5-2.0)	1.5 (0.4-4.7)	NS	1.7 (1.4-2.2)
Not paid	85.9 (84.3-87.4)	85.6 (77.2-91.3)	NS	85.9 (83.8-87.7)
<b>Type of sex partners in last year (among those who had sex in last 1 year)*</b>	N=296	N=171		N=467
Girlfriend/Boyfriend	78.7 (77.1-80.2)	65.6 (55.7-74.3)	<0.05	76.6 (72.1-80.6)
Sex worker	13.0 (6.9-23.3)	2.7 (0.9-7.7)	NS	11.4 (6.9-18.3)
Casual acquaintance/neighbour	31.6 (28.3-35.1)	34.5 (26.3-43.6)	NS	32.0 (28.5-35.8)
Relative	3.0 (1.8-4.9)	5.9 (2.2-14.9)	NS	3.5 (2.4-5.0)
Stranger	12.5 (11.3-13.9)	6.1 (2.4-14.4)	NS	11.5 (10.2-12.9)
Others	0.2 (0.0-3.3)	0.7 (0.2-3.2)	NS	0.3 (0.0-2.2)
<b>Place of sex in last 1 year (among those who had sex in last 1 year)*</b>	N=296	N=171		N=467
Own house/Partner's house	68.2 (66.7-69.6)	64.4 (51.9-75.1)	NS	67.6 (64.9-70.2)
Some one else's house	18.3 (12.8-25.6)	14.9 (7.1-28.4)	NS	17.8 (13.1-23.7)
Hotel	31.8 (23.5-41.4)	12.1 (6.6-21.1)	<0.05	28.7 (23.2-34.8)
Workplace	4.5 (3.0-6.8)	2.6 (1.2-5.6)	NS	4.2 (2.6-6.6)
Shop	0.0 (0.0-0.9)	0.4 (0.1-3.3)	NS	0.1 (0.0-1.0)
Others	7.1 (4.9-10.1)	14.2 (8.8-22.7)	NS	8.3 (6.3-10.8)
<b>Mean number of sex partners in last 6 months (among those who had sex in last 6 months)</b>	2.3 (2.0-2.5) M=18 N=212	2.0 (1.6-2.5) M=16 N=92	NS	2.2 (2.0-2.4) M=17 N=304
<b>Had sex with partner of same sex in last 1 year (among those who ever had sex and were unmarried)</b>	0.1 (0.0-1.6) N=359	0.6 (0.1-4.4) N=239	NS	0.2 (0.0-1.5) N=598

Note: M refers to median

\* Multiple responses

The proportion of females reporting premarital sex was significantly lower than males in both urban and rural areas. The average age at first sex was higher for females than males especially in urban areas. None of the females paid cash for premarital sex but some in the rural area paid in kind. Concomitantly, none reported having sex with a sex worker. In both areas, more females than males reported receiving cash or kind in exchange for sex. In the rural area there were no gender differences in the types of partners for premarital sex. However, there were significant differences between males and females in urban areas in their premarital sex partners; females more than



males reported boyfriends and casual acquaintances or neighbours while males more than females reported sex with strangers. Both males and females who had premarital sex had multiple sex partners and the mean number was significantly higher for males than females in urban areas.

**Table 11: Sexual practices among unmarried males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (p-value)
Ever had sex (among those who were unmarried)	74.0 (69.8- 77.7) N=477	17.2 (12.1- 23.9) N=324	<0.05	61.5 (54.5- 68.0) N=379	7.6 (3.3-16.4) N=324	<0.05
Age at 1 <sup>st</sup> sex (among those who ever had sex and were unmarried)	17.3 (17.0- 17.6) M=17 N=329	19.8 (19.8- 19.9) M=20 N=30	<0.05	16.2 (15.9- 16.4) M=16 N=216	18.2 (15.9-20.6) M=18 N=23	NS
Paid/received cash/kind during having sex with partners in last one year (among those who ever had sex and were unmarried)	N=329	N=30		N=216	N=23	
Paid cash	11.1 (6.9-17.4)	0	-	10.8 (5.2-20.9)	0	-
Paid kind	2.0 (0.5-7.1)	0	-	2.6 (1.0-6.5)	6.4 (1.4-24.1)	NS
Received cash	1.4 (0.8-2.7)	11.4 (11.1- 11.7)	<0.05	1.0 (0.2-4.3)	14.0 (8.2-22.9)	<0.05
Received kind	1.2 (0.7-2.2)	5.1 (3.5-7.3)	<0.05	0.6 (0.1-2.6)	11.7 (3.8-30.8)	<0.05
Not paid	86.3 (83.9- 88.4)	83.5 (81.5- 85.3)	NS	86.6 (77.1- 92.5)	74.2 (56.8-86.3)	NS
Type of partners with whom had sex in last one year* (among those who ever had sex and were unmarried)	N=266	N=30		N=150	N=21	
Girlfriend/Boyfrien d	76.9 (75.6- 78.3)	88.2 (87.3- 89.1)	<0.05	63.6 (52.4- 73.5)	81.6 (53.6-94.5)	NS
Sex worker	15.5 (8.4-26.8)	0	-	3.1 (1.1-8.6)	0	-
Casual acquaintance or neighbour	34.4 (30.9- 38.1)	16.9 (15.4- 18.4)	<0.05	38.2 (28.3- 49.3)	4.1 (0.6-23.4)	<0.05
Relative	2.6 (1.6-4.3)	5.1 (3.5-7.3)	NS	6.1 (2.1-16.8)	4.2 (0.5-27.3)	NS
Stranger	13.7 (12.8- 14.7)	6.3 (4.7-8.5)	<0.05	5.7 (1.9-15.8)	9.1 (1.9-33.5)	NS
Others	0.2 (0.0-3.8)	0	-	0.4 (0.0-3.3)	3.1 (0.3-25.0)	NS
Place of sex with partners in last one year (among those who had sex in last 1 year)*	N=266	N=30		N=150	N=21	
Own house/partners	67.4 (65.7-	72.8 (71.0-	<0.05	60.4 (48.7-	96.6 (73.4-99.7)	<0.05

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (p-value)
house	69.0)	74.5)		71.5)		
Someone else house	19.9 (13.1- 29.0)	10.2 (7.0-14.5)	NS	16.7 (8.2-31.1)	16.7 (8.2-31.1)	NS
Hotel	33.6 (14.2- 44.5)	22.1 (21.5- 22.8)	NS	13.1 (7.1-22.9)	3.4 (0.3-26.6)	NS
Workplace	4.4 (2.9-6.7)	5.1 (3.5-7.3)	NS	3.0 (1.3-6.6)	0	-
Shop	0.1 (0.0-1.1)	0	-	0.5 (0.1-4.1)	0	-
Others	7.5 (5.1-10.8)	5.1 (3.5-7.3)	NS	16.2 (10.0- 25.2)	0	-
<b>Mean number of sex partners in past 6 months (among those who had sex in last 6 months)</b>	2.4 (2.1-2.6) M=2 N=193	1.4 (1.4-1.4) M=1 N=19	<0.05	2.1 (1.6-2.6) M=1 N=83	1.5 (1.3-1.7) M=1 N=9	NS
<b>Had sex with same sex in last year (among those who ever had sex and were unmarried)</b>	0.1 (0.0-1.8) N=329	0 N=30	-	0.6 (0.1-4.8) N=216	0 N=23	-

Note: M refers to median  
\* Multiple responses

### 3.4. CONDOMS

#### 3.4.1. Knowledge about condoms (Tables 12 and 13)

Most of the respondents had heard about condoms and they also knew that condoms are used for contraception as well as for prevention of HIV; fewer knew that STIs could also be prevented by condoms. Most of the respondents had learnt about condoms from health workers. In rural areas, friends/peers, radio and health workers played a significant role in providing information on condoms while in urban areas TV, schools, general awareness programs and spouses played a prominent role.

Among those who had heard about condoms, very few did not know where condoms could be obtained and this was more common in rural than in urban areas. There were significant differences between rural and urban areas regarding where condoms were available which reflects the type of services available in the geographical areas. Irrespective of area, most said that condoms were easily accessible and knew the nearby source for condoms. About reuse of condoms, although most respondents knew that condoms can be used only once, more in the rural area did not know the number of times a condom can be used and believed that condoms can be used more than once.

More respondents in rural versus urban areas were taught by someone else how to use condoms and many felt that it was important that correct condom use be taught.

**Table 12: Knowledge about condoms**

<b>Indicators % (95 % CI)</b>	<b>Urban N=1576 unless otherwise stated</b>	<b>Rural N=1659 unless otherwise stated</b>	<b>Comparison between urban and rural (p-value)</b>	<b>Total N=3235 unless otherwise stated</b>
<b>Heard about condoms</b>	99.1 (98.5-99.5)	98.9 (98.0-99.4)	NS	99.0 (98.7-99.3)
<b>Knew why condom is used (among those who had heard about condoms)*</b>	N=1570	N=1637		N=3207
For contraception	89.3 (84.6-92.7)	80.3 (74.4-85.1)	NS	86.3 (79.8-91.3)
Prevent HIV	91.3 (90.2-92.3)	86.0 (80.4-90.3)	NS	89.6 (86.9-91.8)
Prevent STI	36.6 (32.5-41.0)	30.9 (26.5-35.5)	NS	34.7 (31.1-38.5)
Others	0.0 (0.0-0.19)	0.8 (0.0-0.4)	NS	0.0 (0.0-0.2)
Do not know	0.9 (0.6-1.3)	2.1 (1.1-4.4)	NS	1.3 (0.7-2.3)
<b>Sources of learning about condoms (among those who had heard about condoms)*</b>	N=1570	N=1637		N=3207
Friend/peers	52.6 (49.3-55.9)	35.2 (31.4-39.1)	<0.05	46.9 (41.1-52.7)
Radio	22.8 (22.4-23.3)	47.7 (41.4-54.0)	<0.05	31.0 (24.0-39.0)
TV	66.5 (62.6-70.2)	22.0 (14.9-31.3)	<0.05	51.9 (36.0-67.3)
School teacher/curriculum	35.0 (31.3-38.9)	22.5 (19.0-26.5)	<0.05	30.9 (27.5-34.5)
Health workers	64.3 (60.2-68.1)	80.8 (77.3-83.9)	<0.05	69.7 (61.5-76.8)
Husband/Wife	6.2 (5.1-7.4)	2.3 (1.6-3.8)	<0.05	5.0 (3.8-6.4)
Family/relatives	3.6 (2.4-5.1)	1.2 (0.7-2.2)	<0.05	2.8 (2.0-3.8)
Awareness program	33.0 (29.7-36.6)	27.0 (22.9-31.5)	NS	31.0 (28.7-33.5)
Others	3.6 (1.3-9.6)	8.7 (6.6-11.3)	NS	5.3 (2.5-10.8)
<b>Knew where condoms are available (among those who had heard about condoms)*</b>	N=1570	N=1637		N=3207
Hospital	94.1(93.3-94.8)	49.7 (39.0-60.5)	<0.05	79.5 (62.3-90.1)
ORC/BHU	15.0 (13.1-17.2)	63.2 (52.9-72.5)	<0.05	30.9 (18.9-46.1)
Pharmacy	44.8 (39.1-50.7)	7.2 (3.5-14.3)	<0.05	32.5 (19.2-49.2)
Shop	30.9 (29.2-32.6)	10.4 (6.5-16.2)	<0.05	24.1 (17.3-32.6)
Village Health Worker	4.3 (3.6-5.1)	13.2 (9.1-19.1)	<0.05	7.3 (4.9-10.7)
Condom/Daechong Box	29.1 (27.1-31.3)	18.7 (11.5-29.1)	NS	25.7 (21.2-30.9)
Others	4.5 (2.9-6.9)	3.2 (2.1-4.8)	NS	4.0 (2.7-6.1)
Do not know	0.4 (0.2-0.7)	2.3 (1.1-4.7)	<0.05	1.0 (0.4-2.6)
<b>Knew how many times condoms can be used (among those who had heard about condoms)</b>	N=1570	N=1637		N=3207
Once	86.0 (81.8-88.7)	75.4 (71.8-78.6)	<0.05	82.2 (76.4-86.9)
More than once	0.4 (0.2-1.3)	2.4 (1.6-3.6)	<0.05	1.1 (0.5-2.6)
Do not know	14.0 (11.1-17.4)	22.2 (18.8-26.1)	<0.05	16.7 (12.7-21.6)
<b>Ever been taught how to use condoms by anybody (among those who had extramarital sex in last 1 year)</b>	44.6 (37.3-52.2) N=142	71.2 (59.7-80.4) N=123	<0.05	52.7 (43.8-61.4) N=265
<b>Felt that teaching correct condom use is needed (among those who had extramarital sex in last 1 year)</b>	58.7 (42.1-73.5) N=142	63.5 (43.1-80.0) N=123	NS	60.1 (47.7-71.4) N=265
<b>Ever been taught how to use condoms by anybody (among those who were unmarried and ever had sex)</b>	35.8 (27.8-44.7) N=359	23.5 (16.6-32.1) N=239	NS	33.3 (24.4-43.6) N=598
<b>Felt that teaching correct condom</b>	52.5 (37.8-66.8)	63.5 (54.9-71.4)	NS	54.8 (44.1-65.8)

Indicators % (95 % CI)	Urban N =1576 unless otherwise stated	Rural N =1659 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=3235 unless otherwise stated
use is needed (among those who were unmarried and ever had sex)	N=359	N=239		N=598

\* Multiple responses

In rural areas the only difference between males and females on knowledge about the uses of condoms was that more females than males knew that condoms could prevent STI transmission. In contrast, in urban areas more males knew this. Although the proportions were small, more females in the urban areas did not know why condoms were used. In urban areas, more females than males learnt about condoms from their spouses, while more males than females learnt from other family members. Also, males were more likely to learn from awareness programs than females. In rural areas, the only difference between males and females was that more males learnt about condoms from friends and peers. Irrespective of area, more males than females knew that condoms can be used only once while more females did not know how many times a condom can be used.

**Table 13: Knowledge about condoms among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compari son between male and female (p-value)
Heard about condom	99.9 (98.7-100.0)	98.4 (96.7-99.2)	NS	99.9 (99.4-100.0)	97.7 (96.2-98.8)	NS
Knew why condom is used (among those who had heard about condom)*	N=785	N=785		N=814	N=823	
For contraception	85.0 (79.8-89.0)	93.6 (89.4-96.2)	<0.05	74.9 (68.2-80.6)	85.8 (80.0-90.1)	NS
Prevent HIV	93.8 (92.1-95.1)	88.9 (85.6-91.5)	<0.05	89.8 (85-93.2)	82.2 (69.7-90.3)	NS
Prevent STI	44.6 (49.2-50.8)	28.8 (24.1-34.0)	<0.05	39.8 (33.3-46.7)	21.7 (16.5-27.9)	<0.05
Others	0	0.0 (0.0-0.4)	NS	0.2 (0.0-0.9)	0.1 (0.0-0.9)	NS
Do not know	0.5 (0.4-0.6)	1.3 (0.8-2.1)	<0.05	0.4 (0.1-1.1)	1.3 (0.7-2.3)	NS
Sources of learning about condoms (among those who heard about condoms)*	N=785	N=785		N=814	N=823	
Friends/peers	57.7 (56.2-59.3)	52.5 (47.5-57.5)	<0.05	28.7 (24.5-33.2)	46.9 (41.1-52.7)	<0.05
Radio	22.8 (21.5-24.2)	22.9 (20.8-25.1)	NS	45.6 (38.4-	49.8 (42.5-	NS

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compari son between male and female (p-value)
				52.9)	57.2)	
TV	62.8 (61.3-64.2)	70.2 (63.6-76.1)	NS	22.5 (15.8-31.0)	21.5 (13.1-33.1)	NS
School teacher/curriculum	35.8 (31.6-40.2)	34.3 (31.1-37.6)	NS	23.9 (19.9-28.5)	21.1 (16.6-26.4)	NS
Health workers	64.2 (56.9-70.8)	64.4 (60.6-68.0)	NS	84.1 (78.0-88.8)	77.4 (72.6-81.6)	NS
Husband/Wife	2.2 (0.9-5.2)	10.1 (9.2-11.1)	<0.05	1.3 (0.6-2.7)	3.7 (2.6-5.3)	NS
Awareness program	41.2 (37.4-45.1)	25.1 (20.6-30.1)	<0.05	25.4 (20.5-31.0)	31.1 (28.7-33.5)	NS
Family/relatives	1.7 (1.3-2.2)	5.3 (3.5-8.3)	<0.05	0.6 (0.2-1.7)	1.4 (0.8-2.4)	NS
Others	2.4 (1.3-4.5)	6.2 (1.8-18.9)	NS	6.8 (4.9-9.4)	13.5 (9.2-19.3)	NS
<b>Knew where condoms are available (among those who had heard about condoms)*</b>	N=785	N=785		N=814	N=823	
Hospital	91.7 (91.2 -92.1)	96.4 (95.1-97.4)	<0.05	47.9 (38.7-57.3)	51.6 (37.4-65.5)	NS
ORC/BHU	18.3 (15.3-21.9)	11.8 (10.8-12.8)	<0.05	72.5 (63.2-80.2)	53.7 (39.4-67.5)	NS
Pharmacy	50.2 (43.5-56.9)	39.5 (27.0-53.3)	NS	12.7 (5.7-25.7)	1.7 (0.8-3.5)	NS
Shop	33.2 (27.8-39.0)	28.6 (24.5 -33.1)	NS	9.0 (4.3-17.8)	11.9 (8.2-17.1)	<0.05
Village Health Worker	4.9 (3.4-7.0)	3.7 (3.4-4.0)	NS	13.8 (8.9- 20.6)	12.9 (8.6-18.9)	NS
Condom / Daechong Box	38.6 (35.9-41.3)	19.8 (17.8-22.0)	<0.05	20.7 (12.7-31.8)	16.7 (9.1-28.8)	<0.05
Others	5.5 (3.5-8.4)	3.5 (2.2-5.5)	NS	4.4 (3.0-6.5)	1.9 (1.0-3.7)	<0.05
Do not know	0.1 (0.0-1.1)	0.6 (0.4-0.9)	NS	1.4 (0.7-2.8)	3.2 (1.4-7.4)	NS
<b>Knew how many times a condom can be used (among those who had heard about condom)</b>	N=785	N=785		N=814	N=823	
Once	95.1 (90.7-97.5)	76.2 (71.7-80.2)	<0.05	85.5 (80.2-89.5)	65.0 (59.5-70.2)	<0.05
More than once	0.9 (0.3-2.4)	0.0 (0.0-0.4)	NS	2.9 (1.8-4.5)	1.9 (1.1-3.3)	NS
Do not know	4.0 (2.1-7.6)	23.8 (19.8-28.2)	<0.05	11.7 (7.8-17.0)	33.0 (27.7-38.9)	<0.05
<b>Ever been taught how to use condoms by anybody (among those who had extramarital sex in last 1 year)</b>	43.1 (32.6-54.3) N=103	48.3 (44.0-52.7) N=39	NS	74.5 (61.7-84.0) N=87	61.7 (38.3-80.7) N=36	NS
<b>Felt that teaching correct condom use is needed (among those who had</b>	56.7 (37.1-74.4) N=103	63.5 (54.9-71.3) N=39	NS	56.9 (32.6-78.2) N=87	82.5 (65.1-92.2) N=36	NS

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compari son between male and female (p-value)
extramarital sex in last 1 year)						
Ever been taught how to use condoms by anybody (among those who are unmarried and ever had sex)	46.7 (40.2-57.2) N=329	19.1 (12.2-29.0) N=30	<0.05	62.9 (50.7- 73.6) N=216	53.6 (34.2- 71.8) N=23	NS
Felt that teaching correct condom use is needed (among those who were unmarried and ever had sex)	52.4 (36.6-67.7) N=329	53.5 (45.0-61.7) N=30	NS	62.7 (53.8- 70.6) N=216	73.5 (54.8- 86.5) N=23	NS

\*Multiple responses

### 3.4.2. Access to condoms and barriers to access (Tables 14 and 15)

Most said they had easy access to condoms but this was less common for females than males. A substantial proportion, particularly in rural areas, felt shy to buy a condom which was also more often reported by females. Many worried about a negative community reaction towards unmarried people buying condoms and this again was a more common feeling among females compared to males.

**Table 14: Access to condoms and barriers to access**

Indicators % (95 % CI)	Urban N =1576 unless otherwise stated	Rural N =1659 unless otherwise stated	Comparison between urban and rural (P- value)	Total N=3235 unless otherwise stated
Had easy access to condoms (among those who had heard about condoms)	76.0 (72.4-79.2) N=1570	74.2 (67.9-79.7) N=1637	NS	75.4 (72.0-78.5) N=3207
Felt shy to get condoms	31.9 (30.4- 33.5)	43.5 (40.3- 46.8)	<0.05	35.7 (31.1-40.6)
Worried that people will think badly if an unmarried person buys condoms	46.4 (45.0-47.8)	53.7 (50.8-56.6)	<0.05	48.8 (45.9-51.7)

**Table 15: Access to condoms and barriers to access among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated N=785	Comparison between male and female (p-value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated N=823	Compariso n between male and female (p-value)
Had easy access to condoms (among those who had heard about condoms)	83.3 (82.1-84.3) N=785	68.8 (62.0-74.9) N=785	<0.05	83.3 (77.7-87.7) N=814	65.0 (54.9-73.9) N=823	<0.05
Felt shy to get condoms	24.0 (21.6-26.5)	39.7 (36.1-42.6)	<0.05	30.9 (25.3-37.1)	56.1 (51.7-60.4)	<0.05
Worried that people will think badly if an unmarried person buys condoms	33.3 (29.9-36.8)	59.1 (53.5-64.5)	<0.05	38.1 (32.1-44.6)	69.3 (65.8-72.5)	<0.05

### 3.4.3. Condom use in extramarital sex (Tables 16 and 17)

As described before (in section 3.3.1.) extramarital sex was defined as sex with partners other than spouses or regular sex partners. Of the married respondents, 113 reported having extramarital sex in the last six months (Table 5) of whom 18% never used condoms. Among those who used condoms, consistent use was more commonly reported by urban respondents. Although the most common reason cited for using condoms was for contraception, a substantial proportion said they used condoms for protection against HIV and STIs and interestingly this was more commonly stated in rural areas compared to urban areas.

Sometimes it is possible that a person considers or thinks of using condoms during sex but for different reason does not do so. Therefore, those respondents who had not used condoms were asked if they had considered using one and if so, why they had not used it. Only about 10% said that they had thought of using condoms and among these, more than half (54.7%) did not do so because a condom was not handy at that time.

**Table 16: Condom use in extramarital sex**

Indicators % (95 % CI)	Urban N=775 unless otherwise stated	Rural N=956 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=1731 unless otherwise stated
<b>Condom use in last extramarital sex in last 6 months (among those who had extramarital sex in last 6 months)</b>	76.2 (71.6-80.2) N=66	63.6 (46.7-77.7) N=47	NS	79.7 (66.5-80.0) N=113
<b>Frequency of using condoms in last 6 months in extramarital sex (among those who had extramarital sex in last 6 months)</b>	N=66	N=47		N=113
Always	59.9 (57.0-62.7)	30.1 (12.3-25.4)	<0.05	59.4 (55.7-63.0)
Sometimes	25.3 (24.0-26.7)	12.2 (5.2-25.9)	NS	22.6 (18.0-28.1)
Never	14.8 (11.8-18.5)	30.2 (11.4-47.0)	NS	18.0 (12.3-25.4)
<b>Reasons for using condoms during extramarital sex in last 6 months (among those who had extramarital sex and used condoms in last 6 months)</b>	N=57	N=35		N=92
Contraception / prevent pregnancy	92.0 (85.4-95.8)	87.2 (68.9-95.4)	NS	91.1 (86.4-94.3)
Prevent HIV	65.4 (63.8-67.0)	98.6 (88.5-99.8)	<0.05	71.2 (61.5-79.3)
Prevent STI	30.8 (25.7-36.5)	60.2 (44.6-74.1)	<0.05	36.0 (26.4-46.8)
<b>Reasons for not using condoms in extramarital sex in last 6 months (among those who had extramarital sex and did not use condoms in last 6 months)*</b>	N=9	N=12		N=21
I do not like	34.3 (25.6-44.2)	35.0 (6.2-81.4)	NS	34.5 (19.5-53.5)
Partner does not like	6.7 (0.3-59.8)	0	-	4.4 (0.3-4.9)
Bad experience	0	12.0 (2.2-44.9)	-	4.1 (0.7-2.1)
Was not available at that time	13.7 (0.6-80.9)	46.9 (14.6-82.0)	NS	25.1 (4.8-69.0)
No reason	1.5 (0.0-32.3)	13.8 (2.1-53.8)	NS	5.7 (0.9-3.3)
Others	50.5 (12.3-88.1)	0	-	33.1 (6.0-79.4)
<b>Thought of using condoms but did not use (among those who were married and who had extramarital sex in last 6 months)</b>	17.9 (16.5-19.3) N=65 <sup>ϕ</sup>	23.0 (14.6-34.2) N=47	NS	19.0 (16.5-21.7) N=112 <sup>ϕ</sup>
<b>Reasons for not using condoms (among those who had extramarital sex and thought of using condoms but did not use in last 6 months)</b>	N=9	N=11		N=20
Partner did not like	14.6 (0.5-85.5)	17.8 (3.5-56.2)	NS	15.4 (1.3-71.4)
Was not available at that time	65.3 (34.3-87.1)	82.3 (43.8-96.5)	NS	69.6 (47.1-85.5)
Others	20.2 (9.0-39.3)	0	NS	15.0 (4.8-38.4)

\*Multiple responses

<sup>ϕ</sup> 1 observation is missing

In rural areas, the number of females having extramarital sex and using condoms during this sex were very few (n=13). The reasons cited for using condoms were similar for males and females in rural areas; in urban areas none of the female mentioned prevention of STI as a reason for using condoms. More males than



females said they always used condoms during extramarital sex in last six months in urban areas.

**Table 17: Condom use in extramarital sex among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788 unless otherwise stated	Comparison between male and female (P- value)	Male N=815 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>Condom use in last extramarital sex in last 6 months (among those who had extramarital sex in last 6 months)</b>	84.4 (83.9-85.0) N= 53	44.0 (35.2-53.1) N=13	<0.05	74.6 (59.8-85.3) N=33	35.9 (12.4-68.9) N=14	NS
<b>Frequency of using condoms in last 6 months in extramarital sex (among those who had extramarital sex in last 6 months)</b>	N= 53	N=13		N=33	N=14	
Always	69.1 (67.3-70.8)	23.6 (22.8-24.5)	<0.05	72.3 (57.6-83.4)	20.8 (4.6-58.5)	NS
Sometimes	26.6 (24.7-28.7)	20.3 (13.1-30.1)	NS	11.0 (3.2-31.6)	15.2 (2.7-53.5)	NS
Never	4.3 (2.4-7.5)	56.0 (46.9-64.8)	<0.05	16.7 (6.5-36.6)	64.1 (31.1-87.6)	NS
<b>Reasons for using condoms during extramarital sex in last 6 months (among those who had extramarital sex and used condom in last 6 months)</b>	N=52	N=5		N=30	N=5	
For contraception / prevent pregnancy	91.1 (84.0-95.2)	100.0	-	89.0 (69.5-96.6)	76.5 (30.5-96.0)	NS
Prevent HIV	67.7 (65.3-70.0)	46.2 (36.5-56.2)	<0.05	98.3 (86.8-99.8)	100.0	-
Prevent STI	34.4 (29.1-40.2)	0	-	63.8 (47.4-77.5)	39.7 (4.9-89.3)	NS
<b>Reasons for not using condoms in extramarital sex in last 6</b>	N=1	N=8		N=3	N=9	

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788 unless otherwise stated	Comparison between male and female (P- value)	Male N=815 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>months (among those who had extramarital sex and did not use condom in last 6 months)*</b>						
I do not like	100.0	14.6 (0.05-98.3)	-	88.1 (0.8-100.0)	0	-
Partner does not like	0	8.7 (0.6-60.5)	-	0	0	-
Bad experience	0	0	-	0	19.9 (4.2-58.5)	-
Was not available at that time	0	17.8 (1.0-82.7)	-	19.2 (1.1-83.6)	65.1 (26.5-90.6)	NS
No reason	0	2.0 (0.1-36.8)	-	11.9 (0.7-72.9)	15.0 (1.4-69.4)	NS
Others	0	65.6 (4.5-98.7)	-	0	0	-
<b>Thought of using a condom but did not use (among those who were married and had extramarital sex in last 6 months)</b>	17.3 (14.3-20.5) N=52	20.1 (13.1-30.1) N=13	NS	20.6 (18.8-41.0) N=33	8.8 (1.9-33.0) N=14	NS
<b>Reasons for not using condoms (among those who were married and thought of using condoms but did not use in last 6 months)</b>	N=27	N=34		N=24	N=36	
Partner did not like	4.3 (0.2-46.0)	52.8 (50.3-55.3)	<0.05	22.5 (10.5-41.8)	33.4 (18.6-52.3)	NS
Was not available at that time	64.5 (61.1-67.7)	45.9 (44.2-47.6)	<0.05	56.7 (25.8-83.1)	58.4 (47.6-68.6)	NS
Others	31.3 (19.0-46.9)	1.2 (0.0-23.3)	NS	20.8 (8.6-42.4)	8.2 (2.0-28.0)	NS

\* Multiple responses

### 3.4.4. Condom use among unmarried respondents (Tables 18 and 19)

Among 304 respondents who had premarital sex in the last six months, 212 were in urban areas and 92 in rural areas (Table 10). Although reported condom use during premarital sex was high, a substantial proportion used condoms some of the times. The most common reasons for using condoms were for contraception and for protection from HIV and STIs.

Approximately one third of respondents thought of using a condom during sex but did not use it. The most common reason for not using condoms despite thinking of it was the lack of availability of condoms at the time. Additionally, more than one quarter of the respondents in the urban area said that a reason for not using a condom was that their partner did not like condoms; this response was significantly lower in the rural areas.

**Table 18: Condom use among unmarried respondents**

Indicators % (95 % CI)	Urban N=801 unless otherwise stated	Rural N=703 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=1504 unless otherwise stated
Used condom in last sex during last 6 months (among those who had sex in last 6 months)	73.5 (63.7-81.4) N=212	73.3 (61.9-82.2) N=92	NS	73.5 (64.7-80.7) N=304
Frequency of using condoms in last 6 months (among those who had sex in last 6 months)	N=212	N=92		N=304
Always	49.0 (41.1-56.9)	55.7 (46.8-64.3)	NS	49.7 (41.8-57.6)
Sometimes	38.5 (34.4-42.8)	27.1 (18.1-38.4)	NS	37.3 (32.2-42.8)
Never	12.5 (9.2-16.7)	17.2 (9.9-28.3)	NS	13.0 (10.3-16.3)
Reasons for using condoms during sex in last 6 months (among those who had sex in last 6 months and used condoms)*	N=190	N=74		N=264
For contraception	89.9 (85.5-93.0)	89.5 (73.9-96.3)	NS	89.8 (85.8-92.8)
Prevent HIV	60.3 (55.7-64.7)	71.6 (54.5-84.1)	NS	61.4 (55.5-67.0)
Prevent STI	34.0 (31.8-36.3)	46.2 (33.0-60.0)	NS	35.2 (31.6-39.0)
Others	0.1 (0.6-1.4)	0	-	0.1 (0.0-1.1)
Do not know	1.0 (0.6-1.9)	0	-	0.9 (0.5-1.9)
Reasons for not using condom during sex in last 6 months (among those who had sex in last 6 months and never used condoms)*	N=22	N=18		N=40
I do not like	18.9 (11.0-30.6)	35.8 (13.5-66.6)	NS	21.3 (11.5-36.0)
Partner does not like	30.6 (23.3-39.1)	0		26.3 (15.1-41.8)
Bad experience with condom	0.7 (0.0-16.1)	5.5 (0.7-34.0)	NS	1.4 (0.1-14.1)
Was not available at that time	27.5 (20.5-35.8)	32.3 (10.7-35.8)	NS	28.2 (20.5-37.5)
Expensive	0.3 (0.0-8.6)	0		0.3 (0.0-6.2)
Using other family planning methods	7.3 (5.6-9.4)	10.9 (1.6-48.1)	NS	7.8 (5.4-11.2)

Indicators % (95 % CI)	Urban N=801 unless otherwise stated	Rural N=703 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=1504 unless otherwise stated
No reason	9.1 (7.5-10.9)	0		7.8 (5.3-11.4)
Others	7.7 (6.4-9.3)	10.2 (2.0-39.0)	NS	8.1 (5.9-10.9)
<b>Thought of using condoms but did not use (among those who were unmarried and ever had sex)</b>	35.8 (27.8-44.7) N=359	23.5 (16.6-32.1) N=239	NS	33.3 (24.4-43.6) N=598
<b>Reasons for not using condoms (among those who were unmarried and thought of using condoms but did not use)</b>	N=95	N=42		N=137
Partner did not like	28.8 (24.8-33.2)	7.7 (3.0-18.6)	<0.05	25.8 (18.4-35.0)
Was not available at that time	57.2 (48.3-65.6)	79.9 (66.6-88.7)	NS	60.4 (47.9-71.7)
Others	14.0 (10.0-19.3)	12.4 (3.8-33.9)	NS	13.8 (9.8-19.2)

\* Multiple responses

In the rural area, only nine females had premarital sex in the last six months of whom 39.3% never used condoms during extramarital sex. Of the five women who ever used condoms all did so as prevention for HIV. In urban areas, condom use was more commonly reported by males than females. More males than females said this was for HIV or STI prevention while more females than males used for contraception.

**Table 19: Condom use among unmarried males and females**

Indicators % (95% CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788 unless otherwise stated	Comparison between male and female (P- value)	Male N=815 unless otherwise stated	Female N=843 unless otherwise stated	Comparis on between male and female (P- value)
<b>Used condom in last sex during last 6 months (among those who had sex in last 6 months)</b>	77.9 (70.9-83.6) N=193	44.7 (25.4-65.8) N=19	<0.05	74.5 (62.7-83.6) N=83	60.8 (43.0- 76.1) N=9	NS
<b>Frequency of using condoms in last 6 months (among those who had sex in last 6 months)</b>	N=193	N=19		N=83	N=9	
Always	50.5 (42.4-58.7)	38.7 (34.0-43.7)	NS	55.2 (45.6-64.5)	60.8 (43.0- 76.1)	NS
Sometimes	40.9 (34.2-48.0)	22.8 (13.6-35.5)	NS	29.8 (20.8-40.5)	0	-
Never	8.6 (7.3-10.0)	38.5 (24.6-54.7)	<0.05	15.1 (7.9-26.9)	39.2 (23.9- 57.0)	NS
<b>Reasons for using condoms during sex in last 6 months</b>	N=176	N=14		N=69	N=5	

Indicators % (95% CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788 unless otherwise stated	Comparison between male and female (P- value)	Male N=815 unless otherwise stated	Female N=843 unless otherwise stated	Comparis on between male and female (P- value)
<b>(among those who had sex in last 6 months and used condoms)*</b>						
For contraception	88.9 (84.1-92.4)	99.3 (86.1-100.0)	NS	90.0 (73.3-96.7)	82.4 (28.8-98.2)	NS
Prevent HIV	61.9 (55.1-68.4)	44.1 (29.0-60.4)	<0.05	69.6 (52.7-82.4)	100.0	-
Prevent STI	35.7 (33.4-38.0)	17.5 (15.4-19.9)	<0.05	45.3 (32.0-59.4)	59.1 (9.5-95.2)	NS
Others	0	0.7 (0.0-13.9)	-	0	0	-
Do not know	1.1 (0.6-2.0)	0	-	0	0	-
<b>Reasons for not using condoms during sex in last 6 months (among those who had sex in last 6 months and never used condoms)*</b>	N=17	N=5		N=14	N=4	
I do not like	31.8 (21.8-43.9)	0	-	45.0 (17.5-75.8)	0	-
Partner does not like	12.2 (7.8 -18.6)	57.6 (57.6-57.6)	<0.05	0	0	-
Bad experience with condom	1.2 (0.0-22.9)	0	-	0	27.2 (5.0-72.6)	-
Was not available at that time	31.8 (21.8 - 43.9)	21.2 (21.2-21.2)	NS	33.7 (8.9-72.3)	27.0 (5.0-72.3)	NS
Expensive	0.6 (0.0-12.7)	0	-	0	0	-
Using other family planning methods	12.3 (7.8-18.7)	0	-	2.0 (0.2-16.1)	45.8 (3.6-95.0)	NS
No reason	0.8 (0.0-16.7)	21.2 (21.2-21.2)	<0.05	0	0	-
Others	13.0 (9.4-17.8)	0	-	12.8 (2.4-46.3)	0	-
<b>Thought of using condoms but did not use (among those who were unmarried and ever had sex)</b>	35.8 (27.8-44.6) N=329	36.1 (27.6-45.6) N=30	NS	23.9 (17.0-32.6) N=216	18 (5.3-46.2) N=23	NS
<b>Reasons for not using condoms (among those who were unmarried and thought of using a condom but did not use)</b>	N=87	N=8		N=38	N=4	
Partner did not like	23.9 (19.8-28.5)	57.8 (52.8-62.6)	<0.05	4.2 (1.1-14.3)	62.7 (15.8-93.8)	<0.05
Was not available at that time	59.7 (49.1-69.5)	42.2 (37.4-47.2)	NS	82.6 (64.5-92.5)	37.3 (6.2-84.2)	NS
Others	16.4 (11.2-23.4)	0	-	13.2 (4.2-34.7)	0	-

\* Multiple responses

### 3.5. Experience of forced sex among unmarried respondents (Tables 20 and 21)

Only unmarried respondents were asked questions on forced sex. Forced sex was reported by approximately six percent of unmarried respondents from both urban and rural areas (Table 20) and it was more commonly reported by females (Table 21). The most common perpetrators of forced sex were girlfriend/boyfriend, casual acquaintance/neighbour and strangers. Few males in urban areas said that sex workers forced them for sex (Table 21).

**Table 20: Experience of forced sex among unmarried respondents**

Indicators % (95 % CI)	Urban N=801 unless otherwise stated	Rural N=703 unless otherwise stated	Comparison between urban and rural (p-value)	Total N=1504 unless otherwise stated
Ever experienced forced sex (among those who ever had sex)	6.3 (6.0-6.7) N=359	6.3 (2.8-13.6) N=239	NS	6.3 (5.4-7.5) N=598
Perpetrators of forced sex (among those who experienced forced sex)	N=18	N=17		N=35
Girlfriend/Boyfriend	41.2 (32.9-50.0)	42.8 (19.2-70.3)	NS	41.5 (32.7-51.0)
Casual acquaintance/neighbour	38.7 (33.6-44.0)	50.1 (24.7-75.5)	NS	41.0 (33.2-49.2)
Relative	0	3.1 (0.3-26.5)	-	0.6 (0.0-7.6)
Stranger	16.2 (7.1-32.9)	7.1 (1.1-34.1)	NS	14.4 (7.5-25.6)
Sex worker	9.8 (5.0-18.3)	0	-	7.8 (2.9-19.3)

**Table 21: Experience of forced sex among unmarried males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788 unless otherwise stated	Comparison between male and female (P- value)	Male N=815 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
Ever experienced forced sex (among those who ever had sex)	5.5 (5.2-5.8) N=329	11.4 (11.1- 11.3) N=30	<0.05	5.2 (1.9-13.3) N=216	19.4 (7.3- 42.4) N=23	NS
Perpetrators of forced sex (among those who experienced forced sex)	N=15	N=3		N=13	N=4	
Girlfriend/Boyfriend	40.0 (23.8- 58.8)	44.5 (27.4- 63.0)	NS	33.8 (15.7- 58.3)	71 (19.3-96.2)	NS
Casual acquaintance/neighbour	36.6 (24.6- 50.6)	44.5 (27.4- 63.0)	NS	66.2 (41.7- 84.3)	0	-
Relative	0	0	-	4.0 (0.4-33.3)	0	-

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788 unless otherwise stated	Comparison between male and female (P- value)	Male N=815 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
Stranger	18.0 (14.7-21.8)	11.0 (0.3-21.8)	NS	0	29.0 (3.9-80.7)	-
Sex worker	13.2 (6.1-26.3)	0	-	0	0	-

### 3.6. Confidence in ones own ability to ensure protective behaviours (Tables 22 and 23)

Several questions were asked to determine how confident the respondent felt that s/he could take action that would protect herself/himself from unwanted situations and infections. The questions were on saying no to sex when not desired, confidence in buying condoms and seeking STI services. The majority of the respondents in both areas expressed confidence in being able to handle difficult situations and to be able to protect themselves.

**Table 22: Confidence in ones own ability to ensure protective behaviours**

Indicators % (95 % CI)	Urban N =1576 unless otherwise stated	Rural N =1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Confident to refuse when they do not want to have sex</b>	69.1 (62.6-75.0) N=1575*	75.0 (70.7-79.0) N=1658*	NS	71.1 (67.3-74.6) N=3233**
<b>Confident to ask for STI services at a nearby health centre</b>	92.2 (88.6-94.8) N=1575*	93.9 (91.0-95.9) N=1658*	NS	92.8 (90.6-94.5) N=3233**
<b>Confident to buy condoms from nearby shop even if the owner knows respondent's family</b>	52.0 (50.4-53.6) N=1575*	53.1 (48.0-58.2) N=1658*	NS	52.4 (50.5-54.3) N=3233**
<b>Confident to ask spouse/partner to use condoms (among female respondents)</b>	80.1 (73.5-85.5) N=788*	82.7 (77.0-87.2) N=843	NS	81.0 (75.8-85.3) N=1631*
<b>Confident to convince/negotiate with spouse/partner to use condoms (among female respondents)</b>	74.6 (67.5-80.6) N=788*	79.7 (73.4-84.8) N=843	NS	76.2 (70.8-10.1) N=1631*

\* 1 observation is missing

\*\* 2 observations are missing

More females than males felt that they could say no to sex while more males than females were confident that they could buy condoms.

**Table 23: Confidence in ones own ability to ensure protective behaviours among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>Confident to refuse when they do not want to have sex</b>	51.3 (48.1-54.6)	86.4 (76.4-92.6) N=788*	<0.05	66.1 (62.8-69.3) N=815*	83.9 (77.4-88.9)	<0.05
<b>Confident to ask for STI services at a nearby health centre</b>	93.4 (84.9-97.3)	91.1 (90.3-91.8) N=788*	NS	95.2 (88.6-98.1) N=815*	92.5 (89.5-94.7)	NS
<b>Confident to buy condom from nearby shop even if the owner knows respondent's family</b>	61.2 (58.1-64.1)	43.1 (40.9-45.4) N=788*	<0.05	61.7 (54.5-68.4) N=815*	44.5 (37.4-51.9)	<0.05

\* 1 observation is missing

### 3.7. KNOWLEDGE ABOUT HIV/STIs

#### 3.7.1. Knowledge about transmission of HIV and STIs (Tables 24 and 25)

Most of the respondents in both urban and rural areas had heard about HIV/AIDS and STIs and knew that unprotected sex with an infected person can lead to infection with HIV or STIs. In general a greater proportion of urban respondents knew about the routes of HIV and STI transmission compared to rural respondents but the knowledge level for HIV was higher than that for STIs.



**Table: 24: Knowledge on HIV and STI transmission**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Heard about HIV/AIDS</b>	99.4 (99.1-99.6)	97.5 (96.0-98.5)	NS	98.7 (97.6-99.3)
<b>Heard about STIs</b>	81.1 (79.4- 82.7)	72.8 (66.1-78.6)	NS	78.4 (74.3-82.0)
<b>Knowledge on modes of HIV transmission (among those who had heard about HIV/AIDS)<sup>§</sup></b>	N=1567	N=1618		N=3185
Sex with HIV infected person	74.7 (72.1-77.0)	69.3 (62.5-75.3)	NS	72.9 (69.1-76.4)
Receiving HIV infected blood	55.0 (52.5-57.5)	34.5 (25.9-44.3)	<0.05	48.5 (41.9-54.9)
Using non-sterile needles/syringes	54.0 (52.3-55.8)	31.5 (26.2-37.2)	<0.05	46.7 (38.4-55.1)
Through pregnancy/delivery by an HIV infected mother	19.6 (15.8-24.0)	4.2 (2.6-6.5)	<0.05	14.6 (8.6-23.7)
Through breast feeding by an HIV infected mother	5.3 (4.8-5.8)	1.6 (0.7-3.7)	<0.05	4.1 (3.0-5.6)
Not using a condom during sex	47.6 (44.7-50.7)	37.9 (30.6-45.8)	NS	44.5 (40.7-48.3)
Having sex with a sex a worker	20.0 (17.6-22.7)	12.5 (9.0-17.2)	NS	17.6 (13.9-22.0)
Having multiple sex partners	28.4 (22.0-35.9)	24.7 (22.6-26.9)	NS	27.2 (23.2-31.7)
Others	6.5 (4.0-10.2)	9.5 (7.4-12.1)	NS	7.5 (5.3-10.4)
Do not know	2.6 (1.7-3.9)	9.0 (5.7-13.7)	<0.05	4.7 (2.5-8.4)
<b>Knowledge on modes of STI transmission (among all respondents)<sup>§</sup></b>	N=1575*	N=1658*		N=3233**
Unprotected sex with a person who has STI	69.5 (66.3-72.6)	59.1 (50.1-67.5)	NS	66.1 (60.3-71.4)
Receiving blood contaminated with an STI	15.4 (13.3-17.7)	7.0 (4.2-11.6)	<0.05	12.6 (10.0-15.8)
Through pregnancy/delivery when a mother has STI	7.3 (6.3-8.5)	3.4 (2.0-5.9)	<0.05	6.0 (4.9-7.4)
Not using a condom during sex	42.8 (40.8-44.8)	27.6 (19.4-37.7)	<0.05	37.8 (31.4-44.6)
Having sex with a sex worker	15.7 (14.9-16.5)	6.2 (3.9-9.9)	<0.05	12.6 (9.4-16.6)
Having multiple sex partners	26.4 (25.6-27.2)	17.3 (14.2-20.8)	<0.05	23.4 (20.4-26.6)
Others	3.2 (1.5-6.7)	7.2 (4.9-10.4)	NS	4.5 (2.4-8.4)
Do not know	15.6 (11.3- 21.3)	30.2 (22.7-39.0)	<0.05	20.4 (13.9-29.0)

<sup>§</sup> Multiple responses

\* 1 observation is missing

\*\* 2 observations are missing

Generally males provided more correct responses than females to questions on modes of HIV and STI transmission particularly in the urban area.

**Table 25: Knowledge on HIV and STI transmission among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
<b>Heard about HIV/AIDS</b>	99.6 (96.2-99.9)	99.0 (98.6-99.4)	NS	98.2 (97.0-98.9)	96.9 (93.9-98.4)	NS
<b>Heard about STIs</b>	87.3 (83.4-90.4)	75.1 (73.2-76.8)	<0.05	73.9 (65.7-80.6)	71.8 (64.6-78.0)	NS
<b>Knowledge on modes of HIV transmission (among those who had heard about HIV/AIDS)*</b>	N=782	N=785		N=804	N=814	
Sex with HIV infected person	82.0 (81.2-82.9)	67.4 (62.8-71.8)	<0.05	73.2 (67.9-77.9)	65.3 (55.5-73.9)	NS
Receiving HIV infected blood	50.7 (44.1-57.3)	59.2 (54.6-63.6)	NS	31.5 (24.6-39.3)	37.6 (27-49.6)	NS
Using non-sterile needles /syringes	57.0 (53.3-60.6)	51.1 (48.4-53.8)	NS	30.7 (27.1-34.6)	32.2 (23.5-42.4)	NS
Through pregnancy/ delivery by a HIV infected mother	21.1 (19.1-23.2)	18.1 (11.2-28.0)	NS	4.1 (2.6-6.6)	4.2 (2.6-6.8)	NS
Through breast feeding by a HIV infected mother	5.4 (4.8-6.1)	5.2 (4.7-5.6)	NS	1.2 (0.4-3.8)	1.9 (0.7-5.1)	<0.05
Not using a condom during sex	56.2 (46.7-65.2)	39.3 (35.3-43.5)	<0.05	45.5 (36.1-55.3)	30.1 (23.0-38.4)	NS
Having sex with sex workers	29.1 (25.8-32.6)	11.2 (8.6-14.3)	<0.05	18.4 (12.5-26.3)	6.6 (4.3-9.8)	<0.05
Sex with multiple sex partners	23.4 (20.5-26.5)	33.4 (23-45.8)	NS	11.7 (9.0-15.0)	37.9 (33.1-43.0)	<0.05
Others	8.2 (4.5-14.3)	4.8 (3.4-6.7)	NS	12.8 (9.2-17.4)	6.3 (4.9-8.8)	<0.05
Do not know	1.4 (0.6-2.9)	3.8 (2.8-5.1)	NS	8.1 (5.3-12.0)	9.8 (5.6-16.8)	NS
<b>Knowledge on modes of STI transmission (among all respondents)*</b>	N=787	N=788*		N=815*	N=843	
Unprotected sex with STI infected person	81.0 (75.0-85.8)	58.1 (55.5-61.2)	<0.05	62.4 (54.0-70.1)	55.8 (44.4-66.6)	NS
Receiving STI infected blood	17.0 (14.1-20.3)	13.8 (12.6-15.1)	NS	7.8 (4.3-13.7)	6.3 (3.8-10.3)	NS
Through pregnancy/delivery when a mother has STI	8.1 (7.4-8.9)	6.5 (4.6-9.2)	NS	1.2 (0.5-2.7)	5.0 (2.9-8.4)	NS
Not using a condom during sex	55.2 (5.8-56.5)	30.8 (25.9-36.1)	NS	31.1 (21.9-42.1)	24.0 (15.7-35.0)	NS
Having sex with sex workers	23.6 (21.0-26.4)	8.0 (6.6-9.7)	<0.05	9.0 (4.9-15.9)	3.5 (2.0-5.9)	NS
Sex with multiple	22.9 (21.9-23.9)	29.7 (28.2-	<0.05	12.5 (7.8-19.4)	22.0 (17.3-27.7)	NS

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
partners		31.2)				
Others	3.1 (1.4-6.9)	3.2 (1.5-6.7)	NS	8.6 (5.2 -14.0)	65.7 (3.5-9.1)	NS
Do not know	8.0 (3-19.6)	23.1 (19.8- 26.7)	NS	28.4 (20.1- 38.5)	32.1 (22.7-43.1)	NS

\*1 observation is missing

### 3.7.2. Knowledge about prevention of HIV and STIs (Tables 26 and 27)

The knowledge on HIV prevention was higher among urban respondents compared to rural respondents and the difference is significant. More rural respondents said that they did not know how to prevent infection with HIV or STIs. This was also true for more females than males (Table 26).

**Table 26: Knowledge on prevention of HIV and STIs**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Knowledge on modes of HIV prevention (among those who had heard about HIV/AIDS)*</b>	N=1567	N=1618		N=3185
Limit sex within marriage	13.3 (12.3-14.4)	9.1 (6.0-13.7)	NS	11.9 (9.8-14.4)
Use condoms during sex	90.4 (89.4-91.2)	81.5 (70.6-89.0)	NS	87.5 (82.4-91.3)
Avoid unscreened blood transfusion	31.9 (29.1-34.9)	14.7 (11.3-18.8)	<0.05	26.3 (19.6-34.3)
Use sterile syringes/needles	34.0 (32.4-35.8)	16.6 (13.5-20.3)	<0.05	28.4 (22.4-35.2)
HIV infected women should consult doctors before becoming pregnant	3.8 (3.1-4.8)	0.6 (0.3-1.1)	<0.05	2.8 (1.6-4.8)
Have faithful partner	21.7 (18.8-24.8)	9.2 (7.0-11.9)	<0.05	17.6 (12.6-24.1)
Avoid sex with HIV infected person	25.6 (24.3-26.9)	15.8 (13.6-18.3)	<0.05	22.4 (18.9-26.4)
Avoid sex with sex workers	18.3 (15.8-21.0)	10.6 (7.0-15.8)	NS	15.8 (12.1-20.4)
Avoid sex with multiple partners	22.6 (19.5-25.9)	19.9 (16.8-23.4)	NS	21.7 (19.6-24.0)
Others	5.6 (3.6-8.6)	5.7 (3.6-8.8)	NS	5.6 (4.0-7.8)
Do not know	3.7 (3.1-4.4)	8.6 (5.4-13.3)	<0.05	5.3 (3.4-8.0)
<b>Knowledge on modes of STI prevention (among all respondents)*</b>	N=1575 <sup>db</sup>	N=1658 <sup>db</sup>		N=3233 <sup>**</sup>
Limit sex within marriage	9.3 (8.5-10.2)	7.9 (5.3-11.8)	NS	8.9 (7.5-10.4)
Use condoms during sex	79.7 (73.9-84.5)	60.9 (48.9-71.7)	NS	73.5 (63.1-81.8)
Have a faithful partner	25.0 (21.6-28.7)	11.7 (9.2-14.7)	<0.05	20.6 (14.9-27.9)
Use new/ sterile syringes/needles	7.6 (6.5-8.8)	3.3 (2.1-5.3)	<0.05	6.2 (4.7-8.1)
Avoid HIV infected / unscreened blood transfusion	10.3 (9.2-11.7)	3.7 (2.0-6.9)	<0.05	8.2 (6.5-10.2)

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
Avoid sex with sex workers	17.0 (14.5-19.8)	6.4 (3.7-10.9)	<0.05	13.5 (9.1-19.6)
Avoid sex with multiple partners	25.4 (24.4-26.4)	13.9 (10.7-17.8)	<0.05	21.6 (17.6-26.3)
Others	4.2 (2.9-6.0)	9.5 (5.5-16.0)	NS	6.0 (3.5-9.9)
Do not know	14.5 (10.1- 20.3)	29.0 (21.2-38.3)	<0.05	19.3 (12.7-28.1)

\* Multiple responses

Φ 1 observation is missing

\*\* 2 observations are missing

**Table 27: Knowledge on prevention of HIV and STIs among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Compariso n between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>Knowledge on modes of HIV prevention (among those who had heard about HIV/AIDS)*</b>	N=782	N=785		N=804	N=814	
Limit sex within marriage	10.2 (6.4-16.9)	16.3 (11.4-22.7)	NS	10.0 (4.4-21.4)	8.1 (5.3-12.3)	NS
Use condoms during sex	94.3 (93.7-94.6)	86.7 (85.0-88.2)	NS	84.1 (72.6-91.4)	78.9 (67.1-87.2)	NS
Avoid HIV infected/ unscreened blood transfusion	30.9 (27.3-34.8)	32.9 (26.1-40.5)	NS	12.5 (10.0-15.7)	16.8 (11.2-24.4)	NS
Use sterile syringes/needle	33.8 (29.1-38.8)	34.3 (30.4-38.5)	NS	18.7 (15.0-23.1)	14.5 (10.2-20.2)	NS
HIV infected women should consult doctors before getting pregnant	1.6 (0.6-4.1)	6.1 (3.7-9.7)	NS	0.1 (0.0-0.4)	1.2 (0.6-2.3)	<0.05
Have faithful partner	21.0 (18.2-24.1)	22.4 (19.5-25.5)	NS	9.4 (6.3-13.8)	9.0 (6.8-11.9)	NS
Avoid sex with HIV infected person	30.1 (26.1-34.4)	21.2 (17.2-26)	NS	16.3 (13.1-20.2)	15.2 (11.3-20.3)	NS
Avoid sex with sex workers	28.3 (23.4-33.8)	8.5 (7.6-9.5)	<0.05	16.8 (10.1-26.6)	4.4 (2.2-8.3)	<0.05
Avoid sex with multiple partners	21.7 (18.3-25.5)	23.5 (20.6-26.6)	NS	14.7 (10.0-21.2)	25.2 (21.5-29.3)	NS
Others	8.3 (4.8-14.1)	2.9 (2.3-3.7)	<0.05	7.1 (4.0-12.3)	4.3 (2.9-6.4)	NS
Do not know	1.3 (0.7-2.5)	6.0 (5.3-6.8)	<0.05	7.2 (4.0-12.7)	10.0 (6.5-15.6)	NS
<b>Knowledge on modes of STI</b>	N=787	N=788 <sup>Φ</sup>		N=815 <sup>Φ</sup>	N=843	

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>prevention (among all respondents)*</b>						
Limit sex within marriage	10.8 (9.8-11.9)	7.8 (6.8-9.1)	NS	8.3 (4.1-16.2)	7.6 (5.2-11.0)	NS
Use condoms during sex	88.9 (79.9- 94.2)	70.7 (66.0-75.0)	<0.05	63.6 (50.4- 75.1)	58.1(44.9- 70.3)	NS
Have faithful partner	23.2 (21.1-25.4)	26.8 (22.0-32.1)	NS	12.5 (9.2-16.6)	10.9 (7.6-15.4)	NS
Use new/ sterile syringes/needles	9.5 (7.1-12.6)	5.6 (4.6-6.9)	<0.05	2.7 (1.5-4.7)	4 (2.2-7.0)	NS
Avoid HIV infected/ unscreened blood transfusion	12.1 (10.5-13.9)	8.7 (7.9-9.5)	NS	3.7 (1.8-7.6)	3.7 (2.0-6.8)	NS
Avoid sex with sex workers	28.4 (22.9-34.6)	6 (5.1-6.9)	<0.05	7.8 (4.1-14.5)	5.0 (2.6-9.3)	NS
Avoid sex with multiple partners	25.7 (23.5-28.0)	25.2 (24.5-25.8)	NS	11.2 (8.1-15.2)	16.6 (12.1- 22.4)	NS
Others	3.9 (2.0-7.7)	4.4 (3.6-5.4)	NS	10.7 (5.1-21.2)	8.2 (5.7-11.7)	NS
Do not know	7.1 (2.3-20.3)	21.6 (18.5-25.1)	NS	28.6 (19.4- 40.1)	29.4 (21.2- 39.2)	NS

<sup>Φ</sup> 1 observation is missing

\* Multiple responses

### 3.7.3. Misconceptions about HIV transmission, prevention and treatment (Tables 28-33)

On the whole, misconceptions were more common among rural respondents. Most respondents in both rural and urban areas believed that babies born from HIV positive mothers would all be infected with HIV. Respondents in rural areas were more likely to believe that kissing can spread HIV compared to those in urban areas. However, more in rural areas knew that HIV could be transmitted by oral sex.

**Table 28: Misconceptions about HIV transmission**

% (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Coughing/ sneezing spreads HIV</b>		N=1658*		N=3234*
True	13.2 (9.2-18.6)	40.2 (36.3-44.2)	<0.05	22.1 (12.9-35.1)
Do not know	4.8 (3.2-7.3)	12.6 (9.5-16.6)	<0.05	7.4 (4.4-12.1)
<b>Sharing food/water with HIV infected person can spread HIV</b>		N=1658*		N=3234*
True	13.8 (11.4-16.6)	36.7 (31.6-42.2)	<0.05	21.3 (13.8-31.5)
Do not know	3.1 (2.0-4.8)	7.8 (6.7-9.2)	<0.05	4.7 (2.8-7.6)
<b>People are likely to get AIDS quickly and show serious signs of being infected</b>		N=1658*		N=3234*

% (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
True	19.1 (15.5-23.3)	28.9 (24.8-33.3)	<0.05	22.3 (17.4-28.1)
Do not know	14.2 (12.2-16.6)	19.4 (14.3-25.8)	NS	16.0 (12.9-19.6)
<b>A healthy looking person may be HIV positive</b>		N=1658*		N=3234*
True	72.1 (70.9-73.3)	67.6 (62.4-72.4)	NS	70.6 (68.6-72.5)
Do not know	13.5 (12.6-14.4)	16.7 (13.1-21.2)	NS	14.5 (13.1-16.1)
<b>A person can get HIV by bathing in the same pool /tub with an HIV infected person</b>		N=1658*		N=3234*
True	15.1 (13.2-17.1)	38.8 (33.2-44.6)	<0.05	22.9 (15.2-33.0)
Do not know	7.1 (6.9-7.3)	8.3 (7.1-9.6)	NS	7.5 (7.0-8.0)
<b>Injecting drugs can be a source of HIV</b>		N=1658*		N=3234*
True	81.8 (80.2-83.3)	71.6 (68.5-74.4)	<0.05	78.4 (74.7-81.8)
Do not know	11.0 (9.9-12.2)	21.0 (17.6-24.9)	<0.05	14.3 (11.6-17.5)
<b>Having sex with more than one partner can increase a person's chance of becoming infected</b>		N=1658*		N=3234*
True	94.4 (93.6-95.0)	94.8 (93.6-95.7)	NS	94.5 (93.9-95.1)
Do not know	2.8 (2.3-3.4)	2.6 (1.8-3.6)	NS	2.7 (2.3-3.2)
<b>Unscreened blood can increase risk of HIV transmission</b>		N=1658*		N=3234*
True	91.4 (89.3-93.1)	90.7 (87.5-93.2)	NS	91.2 (89.4-92.7)
Do not know	5.9 (4.5-7.6)	7.7 (5.6-10.7)	NS	6.5 (5.0-8.3)
<b>All pregnant women infected with HIV will have babies born with HIV</b>		N=1658*		N=3234*
True	86.1 (83.2-88.5)	88.1 (85.6-90.2)	NS	86.7 (84.7-88.5)
Do not know	5.5 (3.9-7.8)	6.6 (4.6-9.3)	NS	5.9 (4.5-7.8)
<b>Kissing will spread HIV if the partner is HIV infected</b>		N=1658*		N=3234*
True	31.1 (29.8-32.4)	46.9 (42.5-51.4)	<0.05	36.3 (30.7-42.4)
Do not know	8.2 (8.0-8.3)	9.5 (7.9-11.4)	NS	8.6 (7.9-9.3)
<b>A person can get HIV from oral sex</b>		N=1658*		N=3234*
True	34.3 (29.2-39.7)	43.0 (40.4-45.6)	<0.05	37.2 (31.4-43.3)
Do not know	30.9 (27.6-34.3)	35.9 (32.1-39.8)	NS	32.5 (28.9-36.4)
<b>A woman can get HIV if she has anal sex with a HIV infected man</b>		N=1658*		N=3234*
True	61.4 (59.6-63.1)	57.9 (53.0-62.7)	NS	60.2 (58.1-62.3)
Do not know	26.1 (24.1-28.1)	30.1 (25.8-34.9)	NS	27.4 (24.9-30.0)

\*1 observation is missing

Gender differences in misconceptions were more marked in urban areas and females were likely to have more misconceptions and they were more likely to respond by saying that they did not know than males.

**Table 29: Misconceptions about HIV transmission among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>Coughing/ sneezing spreads HIV spread HIV/AIDS</b>				N=815*		
True	11 (6.0-19.3)	15.3 (12.2-19.0)	NS	37.5 (32.5-42.8)	42.8 (38.6-47.2)	NS
Do not know	3.2 (1.3-8.0)	6.4 (5.3-7.7)	NS	10.5 (6.7-16.1)	14.7 (11.3-19.0)	NS
<b>Sharing food/water with HIV infected person can spread HIV</b>				N=815*		
True	12.2 (8.0-18.2)	15.2 (13.7-16.9)	NS	36.2 (31.5-41.2)	37.3 (30.6-44.5)	NS
Do not know	2.5 (1.5-4.2)	3.7 (2.4-5.7)	NS	6.2 (4.3-8.9)	9.4 (7.2-12.2)	NS
<b>People are likely to get AIDS quickly and show serious signs of being infected</b>				N=815*		
True	18.9 (13.0- 26.7)	19.2 (17.1-21.6)	NS	32.9 (28.5-37.5)	24.9 (19.8-30.9)	NS
Do not know	13.3 (10.3- 17.0)	15.1 (14.1-16.3)	NS	20.2 (13.2-29.5)	18.7 (14.9-23.1)	NS
<b>A healthy looking person may be HIV positive</b>				N=815*		
True	76.7 (74.6- 78.8)	67.5 (63.3-71.5)	NS	73.2 (66.5-79.1)	61.9 (56.8-66.7)	NS
Do not know	11.9 (10.2- 13.8)	15.0 (13.8-16.3)	NS	16.7 (11.0- 24.50)	16.7 (14.1-19.8)	NS
<b>A person can get HIV by bathing in the same pool /tub with an HIV infected person</b>				N=815*		
True	11.5 (7.8-16.6)	18.6 (17.4-19.7)	<0.05	39.0 (33.3-45.1)	38.5 (32.5-37.0)	NS
Do not know	3.0 (2.0-4.5)	11.1 (10.0-12.4)	<0.05	7.1 (5.2-9.8)	9.4 (7.4-11.8)	NS
<b>Injecting drugs can be a source of HIV</b>				N=815*		
True	85.5 (81.0- 89.1)	78.2 (75.3-81.0)	<0.05	71.0 (66.1-75.4)	72.2 (66.9-76.8)	NS
Do not know	8.2 (7.1-9.5)	13.7 (11.6-16.1)	<0.05	22.1 (17.4-27.7)	19.9 (15.5-25.2)	NS
<b>Having sex with more than one partner can increase a</b>				N=815*		

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>person's chance of becoming infected</b>						
True	96.2 (95.0-97.1)	92.6 (91.8-93.3)	NS	94.9 (92.4-96.6)	94.6 (92.4-96.2)	NS
Do not know	1.6 (1.2-2.1)	3.9 (3.3-4.7)	<0.05	2.3 (1.5-3.4)	2.8 (1.8-4.5)	NS
<b>Unscreened blood can increase risk of HIV transmission</b>				N=815*		
True	91.8 (90.5-92.9)	91.1 (87.7-93.6)	NS	90.7 (87.5-93.2)	90.8 (85.8-94.1)	NS
Do not know	6.1 (5.2-7.1)	5.7 (3.3-9.5)	NS	7.5 (5.0-11.0)	8.0 (5.0-12.7)	NS
<b>All pregnant women infected with HIV will have babies born with HIV</b>				N=815*		
True	81.3 (78.9-83.5)	90.7 (87.1-93.5)	<0.05	89.2 (86.4-91.5)	87.0 (83.0-90.1)	NS
Do not know	6.4 (5.4-7.5)	4.7 (2.5-8.8)	NS	6.4 (3.9-10.3)	6.2 (3.9-9.8)	NS
<b>Kissing will spread HIV if the partner is HIV infected</b>				N=815*		
True	32.6 (30.0-31.4)	29.6 (28.3-31.0)	NS	46.6 (43.3-50)	47.2 (40.4-54.2)	NS
Do not know	6.5 (5.6-7.5)	9.7 (8.8-10.8)	<0.05	8.6 (5.6-13.0)	10.3 (8.3-12.7)	NS
<b>A person can get HIV from oral sex</b>				N=815*		
True	65.3 (62.4-68.1)	57.6 (56.8-58.3)	<0.05	60.5 (51.0-69.2)	55.4 (50.3-60.4)	NS
Do not know	19.9 (17.2-22.9)	32.1 (30.3-33.9)	<0.05	27.3 (19.6-36.7)	32.9 (28.6-37.5)	NS
<b>A woman can get HIV if she has anal sex with a HIV infected man</b>				N=815*		
True	34.0 (26.7-42.1)	34.6 (31.4-37.9)	NS	47.1 (43.0-51.3)	38.8 (35.2-42.6)	<0.05
Do not know	24.8 (20.4-29.8)	36.8 (33.1-40.6)	<0.05	26.8 (20.1-34.7)	44.9 (41.3-48.6)	<0.05

As shown in Table 24, knowledge regarding condom use as a means of HIV prevention was high. However, misconceptions on HIV prevention were also prevalent and this was more common in rural than in urban areas with more rural



respondents believing that sex during menstruation, washing genitals after sex and the use of lubricants all prevent HIV transmission.

**Table 30: Misconceptions about HIV prevention**

% (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Risk of HIV transmission can be reduced by using condoms</b>		N=1658*		N=3234*
True	95.8 (95.4-96.2)	92.2 (87.8-95.1)	NS	94.6 (92.6-96.1)
Do not know	2.5 (2.0-3.2)	4.9 (3.3-7.3)	NS	3.3 (2.3-4.8)
<b>Transmission of HIV can be reduced by limiting sex to one faithful partner</b>		N=1658*		N=3234*
True	89.6 (87.1-91.6)	91.0 (89.3-92.5)	NS	90.0 (88.5-91.4)
Do not know	4.3 (3.6- 5.1)	4.6 (3.2-6.6)	NS	4.4 (3.7-5.2)
<b>A woman cannot get HIV if she has sex while menstruating</b>		N=1658*		N=3234*
True	10.0 (7.8-12.6)	17.2 (13.2-22.1)	<0.05	12.4 (9.0-16.7)
Do not know	32.9 (31.0-34.8)	30.1 (24.7-36.1)	NS	31.9 (29.3-34.7)
<b>Showering, or washing one's genitals/private parts after sex prevents HIV infection</b>		N=1658*		N=3234*
True	11.0 (10.0-12.0)	20.1 (14.5-27.1)	<0.05	14.0 (11.0-17.6)
Do not know	18.2 (16.5-20.0)	19.5 (15.5-24.3)	NS	18.6 (16.8-20.6)
<b>Using oil or a lubricant lowers the chance of getting HIV</b>		N=1658*		N=3234*
True	5.0 (3.9-6.2)	10.9 (7.8-15.0)	<0.05	6.9 (4.7-10.2)
Do not know	41.2 (37.4-45.1)	47.4 (40.3-54.6)	NS	43.2 (38.7-47.9)

\*1 observation is missing

Misconceptions were more common in female than in male respondents especially in urban areas.

**Table 31: Misconceptions about HIV prevention among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
<b>Risk of HIV transmission can be reduced by using condoms</b>				N=815*		
True	97.1 (96.9-97.4)	94.6 (93.8-95.3)	<0.05	93.1 (87.5-96.3)	91.2 (86.6-94.3)	NS
Do not know	1.0 (0.8-1.3)	4.0 (3.1-5.1)	<0.05	2.8 (1.3-5.9)	7.1 (4.5-11.1)	NS
<b>Transmission of HIV can be reduced by limiting sex to one</b>				N=815*		

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
<b>faithful partner</b>						
True	93.9 (90.1-96.3)	85.3 (83.4-87.1)	<0.05	94.3 (92.9-95.4)	87.8 (84.1-90.6)	<0.05
Do not know	1.9 (1.0-3.8)	6.6 (5.8-7.5)	<0.05	3.9 (2.5-6.1)	5.3 (3.3-8.4)	NS
<b>A woman cannot get HIV if she has sex while menstruating</b>				N=815*		
True	9.5 (6.9-12.9)	10.4 (8.7-12.5)	NS	19.1 (14.0-25.6)	15.3 (11.8-19.6)	NS
Do not know	27.5 (24.8-30.3)	38.1 (36.1-40.1)	<0.05	28.3 (20.9-37.0)	31.9 (27.1-37.1)	NS
<b>Showering, or washing one's genitals parts after sex prevents HIV infection</b>				N=815*		
True	11.5 (10.0-13.3)	10.4 (7.7-14)	NS	23.7 (17.7-30.9)	16.4 (11.6-22.8)	NS
Do not know	12.7 (10.1-15.9)	23.5 (21.4-25.7)	<0.05	16.9 (11.3-24.4)	22.2 (18.0-26.9)	NS
<b>Using oil or a lubricant lowers the chance of getting HIV</b>				N=815*		
True	5.5 (4.2-7.3)	4.4 (3.7-5.3)	NS	10 (7.0-14.0)	11.9 (8.2-16.9)	NS
Do not know	28.1 (23.9-32.8)	53.9 (49.3-58.4)	<0.05	38.8 (29.5-49.0)	55.9 (49.7-61.9)	<0.05

Although very few respondents in both rural and urban areas had misconceptions about the treatments available for HIV, amongst those who did there were more in rural than in urban areas.

**Table 32: Misconceptions about AIDS treatment**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Taking a test for HIV within 1 week after having sex will tell a person if s/he has HIV</b>		N=1658*		N=3234*
True	20.0 (16.5-24.0)	34.1 (30.9-37.4)	<0.05	24.6 (18.5-31.9)
Do not know	21.4 (17.9-25.3)	18.8 (15.6-22.4)	NS	20.5 (18.1-23.2)
<b>A vaccine that can prevent adults from getting HIV</b>		N=1658*		N=3234*
True	17.9 (15.9- 20.1)	32.7 (29.1-36.5)	<0.05	22.8 (17.3- 29.3)
Do not know	17.2 (13.5-21.8)	20.6 (16.9-24.9)	NS	18.4 (14.9-22.4)
<b>A person will not get HIV if s/he is taking antibiotics</b>		N=1658*		N=3234*

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
True	14.0 (13.4-14.5)	28.6 (25.4-32.1)	<0.05	18.8 (14.2-24.4)
Do not know	18.8 (13.9-25.1)	24.2 (19.2-30.1)	NS	20.6 (15.8-26.3)
<b>AIDS is a curable disease</b>		N=1658*		N=3234*
True	8.2 (7.3-9.2)	16.0 (11.4-21.9)	<0.05	10.8 (7.9-14.6)
Do not know	3.7 (2.6-5.3)	8.0 (5.3-11.9)	NS	5.1 (3.3-8.0)

\*1 observation is missing

More females in urban areas believed that there is a vaccine against HIV while in the rural areas they believed that antibiotics were effective against HIV.

**Table 33: Misconceptions about AIDS treatment among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
<b>Taking a test for HIV within 1 week after having sex will tell a person if s/he has HIV</b>				N=815*		
True	22.9 (18.6-27.8)	17.1 (14.4-20.2)	NS	38.7 (35.0-42.5)	29.5 (23.3-36.5)	NS
Do not know	16.2 (10.0-25.3)	26.4 (24.4-28.6)	NS	19.4 (15.4-24.2)	18.1 (15.1-21.7)	NS
<b>A vaccine that can prevent adults from getting HIV</b>				N=815*		
True	13.8 (10.9-17.3)	21.9 (19.3-24.8)	<0.05	30.6 (26-35.7)	34.7 (27.4-42.9)	NS
Do not know	14.3 (10.0-20.0)	20.1 (16.7-24)	NS	19.0 (14.7-24.4)	22.2 (18.1-26.9)	NS
<b>A person will not get HIV if s/he is taking antibiotics</b>				N=815*		
True	9.6 (8.2-11.3)	18.1 (17.9-18.4)	NS	23.9 (21.0-27.1)	33.3 (28.0-39.1)	<0.05
Do not know	14.6 (7.3-27.0)	23.0 (20.8-25.3)	NS	25.9 (19.0-34.3)	22.5 (18.5-27.1)	NS
<b>AIDS is a curable disease</b>				N=815*		
True	8.8 (8.1-9.6)	7.7 (6.5-9.1)	NS	15 (10.8-20.3)	16.9 (11.5-24.4)	NS
Do not know	2.5 (2.1-3.0)	4.9 (3.0-7.7)	<0.05	5.6 (3.6-8.7)	10.3 (6.4-16.1)	NS

\*1 observation is missing

### 3.7.4. Perceived risk of acquiring STIs and HIV (Tables 34 and 35)

Similar proportions of respondents felt that they were either likely or unlikely to get an STI or to become infected with HIV in the future (Table 34). The proportions who could not gauge their risk for STI or HIV were higher in urban than in rural areas and higher in females than males (Table 35). Females in general considered themselves to be less likely to become infected with either HIV or STIs (Table 35).

**Table 34: Perceived risk about STIs and HIV transmission**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Likely to get an STI</b>	N=1575*	N=1658*		N=3233**
Likely	46.7 (45.3-48.1)	48.0 (45.6-51.4)	NS	47.2 (45.6-48.9)
Unlikely	37.2 (35.6-38.9)	40.3 (36.4-44.4)	NS	38.3 (36.3-40.2)
Do not know	16.1 (15.3-16.9)	11.4 (9.5-13.6)	<0.05	14.5 (12.7-16.6)
<b>Likely to become infected with HIV in future</b>	N=1575*	N=1658*		N=3233**
Likely	41.5 (38.5-44.5)	40.7 (35.3-46.2)	NS	41.2 (38.6-43.8)
Unlikely	40.2 (37.9-42.6)	47.9 (41.6-54.3)	NS	42.8 (39.5-46.1)
Do not know	18.3 (17.1-19.6)	11.4 (9.7-13.4)	<0.05	16.1 (13.3-19.3)

\* 1 observation is missing

\*\* 2 observations are missing

**Table 35: Perceived risk about STIs and HIV transmission among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>Likely to get an STI</b>		N=788*		N=815*		
Likely	52.1 (50.2-54.1)	41.4 (39.3-43.5)	<0.05	51.5 (46.5-56.4)	45.1 (39.7- 50.6)	NS
Unlikely	37.4 (34.5-40.4)	37.1 (33.7-40.6)	NS	39.5 (34.8-44.5)	41.2 (35.1- 47.5)	NS
Do not know	10.5 (9.4-11.7)	21.5 (19.6-23.6)	<0.05	9.0 (6.8-11.9)	13.8 (11.3- 16.7)	NS
<b>Likely to become infected with HIV in future</b>		N=788*		N=815*		
Likely	44.7 (37.3-52.4)	38.3 (33.5-43.2)	NS	45.6 (39.0-52.3)	35.7 (30.3- 41.6)	NS
Unlikely	41.9 (33.8-50.5)	38.6 (31.8-45.9)	NS	47.4 (40.2-54.6)	48.5 (42.5- 54.6)	NS
Do not know	13.4 (12.4-14.4)	23.2 (20.2-26.4)	<0.05	7.1 (4.9-10.2)	15.7 (12.8- 19.2)	<0.05

\* 1 observation is missing

### 3.7.5. Knowledge and experience of voluntary counselling and testing for HIV (Tables 36-41)

Knowing about Voluntary Counselling and Testing (VCT) services is not only a reflection on knowledge about HIV but also about the services available. That urban respondents were more likely to have heard about VCT services and to have been tested for HIV is likely due to the fact that more services are available in urban areas.

**Table 36: Knowledge and experience of voluntary counselling and testing for HIV**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
Heard of VCT for HIV	46.9 (37.9-56.2)	18.4 (13.9-23.9) N=1658*	<0.05	37.5 (24.3-52.9) N=3234*
Ever tested for HIV	26.8 (21.5--33.0)	10.4 (7.9-13.5) N=1658*	<0.05	21.4 (13.9-31.4) N=3234*

\*1 observation is missing

Males more than females in rural areas had heard of VCT and in urban areas more males had been tested for HIV than females.

**Table 37: Knowledge and experience of voluntary counselling and testing for HIV among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Compariso n between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
Heard of VCT for HIV	55.2 (42.4-67.3)	39.0 (32.6-45.7)	NS	26.9 (19.6-35.6) N=815*	9.9 (6.6-14.7)	<0.05
Ever tested for HIV	36.7 (30.1-43.9)	17.2 (12.4-23.3)	<0.05	12.7 (9.2-17.2) N=815*	8.1 (4.9-12.9)	NS

\*1 observation is missing

### 3.7.6. Sources of knowledge regarding HIV/AIDS (Tables 38-41)

Respondents were asked where or from whom they had learnt about HIV/AIDS, which sources they found helpful and of those which were the most helpful. Respondents were also asked what their preferred source of information for HIV/AIDS would be for the future.

With regards to where or from whom they had learnt about HIV/AIDS, the most common source stated by both urban and rural respondents was hospital/clinic/BHU followed by health workers. There were differences in sources of information

between urban and rural areas which probably reflect differences in the services available and social settings of urban and rural areas.

**Table 38: Source of knowledge on HIV/AIDS**

% (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Sources of learning about HIV/AIDS (among those who had heard about HIV/AIDS)*</b>	N=1567	N=1618		N=3185
Peer group/youth	47.8 (43.6-51.9)	33.4 (28.7-38.5)	<0.05	43.1 (38.7 (47.7)
Radio	32.2 (30.1-34.3)	63.1 (57.6-68.3)	<0.05	42.2 (33.7-51.3)
TV	81.3 (77.5-84.6)	31.4 (22.7-41.7)	<0.05	65.1 (46.3-80.1)
Booklet	22.5 (19.8-25.4)	10.2 (6.7-15.3)	<0.05	18.5 (13.5-24.9)
School teacher/curriculum	34.9 (28.9-41.4)	24.6 (21.6-27.9)	<0.05	31.6 (28.3-34.9)
Book/newspaper/magazine/leaflet	35.6 (32.0-39.4)	14.0 (10.3-18.8)	<0.05	28.6 (20.4-38.4)
Poster	6.2 (4.9-7.8)	1.6 (0.9-2.9)	<0.05	4.7 (2.8-7.8)
Bill Board/Sign Board	6.3 (5.9-6.6)	2.8 (1.5-5.1)		
Health workers	45.0 (42.0-48.0)	52.1 (46.2-57.9)	NS	47.3 (43.0-51.7)
Hospital/clinic/BHU	47.5 (36.9-58.3)	57.8 (53.1-62.4)	NS	50.9 (41.0-60.7)
Father	3.6 (2.5-5.1)	0.9 (0.4-1.6)	<0.05	2.7 (2.0-3.7)
Mother	3.8 (2.7 (5.4)	1.6 (1.2-2.2)	NS	3.1 (2.4-4.0)
Husband/Wife	3.5 (3.1-3.8)	2.0 (1.4-3.0)	NS	3.0 (2.4-3.7)
Relatives	5.2 (4.0-6.8)	2.4 (1.5-3.7)	NS	4.3 (3.4-5.4)
Neighbour	4.1 (3.4-5.0)	2.6 (1.8-3.6)	NS	3.6 (2.7-4.8)
Community events (tshechus etc)	3.5 (3.4-3.7)	4.0 (3.0-5.5)	NS	3.7 (3.3-4.1)
Awareness Campaigns	34.0 (29.3-38.9)	30.5 (25.4-36.2)	NS	32.9 (29.9-36.1)
Others	2.0 (1.7-2.4)	2.1 (1.1-3.8)	NS	2.0 (1.6-2.6)

\* Multiple responses

In both urban and rural areas a similar gender difference in sources through which knowledge on HIV/AIDS was acquired was observed; more males reported printed materials including newspapers/books/magazines than females. However, in urban areas, in addition to newspapers, TV, billboards, community events and awareness programs were reported more by males than females. On the other hand, more females than males said that they learnt from spouses and neighbours.

**Table 39: Source of knowledge on HIV/AIDS among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
<b>Source of learning about HIV/AIDS (among those who had heard about HIV/AIDS)*</b>	N=782	N=785		N=804	N=814	
Peer group/youth	51.0 (49.5- 52.4)	44.7 (36.7- 53.0)	NS	36.3 (30.6- 42.5)	30.4 (25.3- 36.1)	NS
Radio	33.1 (31.0-	31.2 (28.9-	NS	61.3 (55.2-	64.9 (57.9-	NS

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
	35.4)	33.7)		67.2)	71.3)	
TV	77.3 (75.9-78.6)	85.2 (78.6-90.1)	NS	33.2 (24.0-43.8)	29.6 (19.6-42.2)	NS
Booklet	25.1 (22.7-27.7)	19.9 (16.7-23.5)	NS	10.4 (6.4-16.4)	10.1 (6.5-15.2)	NS
School teacher/curriculum	32.1 (22.5-43.5)	37.6 (35.2-40.0)	NS	26.5 (23.6-29.6)	22.7 (19.0-26.9)	NS
Book/newspaper/magazine/leaflet	43.6 (38.6-48.7)	27.8 (25.1-30.6)	<0.05	18.8 (12.8-26.8)	9.1 (6.7-12.3)	<0.05
Poster	6.0 (5.2-7.0)	6.4 (4.7-8.8)	NS	2.0 (0.9-4.4)	1.2 (0.7-2.3)	NS
Bill Board/Sign Board	8.5 (7.2-10.0)	4.2 (3.1-5.5)	<0.05	4.2 (1.9-9.0)	1.4 (0.6-3.1)	NS
Health workers	46.7 (42.1-51.4)	43.3 (38.7-48.0)	NS	52.8 (43.9-61.5)	51.4 (45.3-57.5)	NS
Hospital/clinic/BHU	45.4 (34.7-56.5)	49.6 (39.0-60.3)	NS	55.0 (48.4-61.5)	60.7 (51.1-69.5)	NS
Father	6.1 (5.1-7.2)	1.2 (0.3-4.1)	<0.05	1.7 (1.0-3.0)	0	-
Mother	3.1 (2.3-4.0)	4.5 (2.2-9.1)	NS	1.0 (0.4-2.8)	2.3 (1.4-3.8)	NS
Husband/Wife	1.6 (0.9-2.7)	5.3 (4.3-6.6)	<0.05	1.0 (0.3-3.4)	3.1 (1.8-5.4)	NS
Relatives	6.3 (4.9-7.9)	4.1 (1.5-10.6)	NS	2.7 (1.5-4.7)	2.1 (1.1-3.9)	NS
Neighbour	2.9 (2.6-3.3)	5.3 (4.0-7.1)	<0.05	2.3 (1.4-3.5)	2.9 (1.7-4.7)	NS
Community events (Tshechus etc)	5.0 (4.5-5.6)	2.1 (1.7-2.5)	<0.05	2.7 (1.0-7.1)	5.3 (3.7-7.8)	NS
Awareness Campaigns	42.5 (38.9-46.3)	25.8 (20.4-31.9)	<0.05	33.4 (28.8-38.4)	27.6 (20.5-36.1)	NS
Others	2.7 (2.1-3.5)	1.3 (1.0-1.7)	NS	2.3 (1.3-4.1)	3.5 (1.9-6.5)	NS

Of all these sources listed above, the helpful sources for urban and rural participants were similar except for TV and radio. In urban areas TV and in rural areas radio was found to be the commonly stated helpful sources.

Urban participants said that TV, hospital /clinic/BHU and awareness campaigns were the most helpful sources while for rural respondents said hospital/clinic/BHU, health workers and radio were the most useful sources for HIV information. These differences reflect the difference in services available in the two areas.

**Table 40: Helpful and most helpful source of learning about HIV/AIDS**

% (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (P- value)	Total N=3235 unless otherwise stated
<b>Helpful sources of information about HIV/AIDS (among those who had heard about HIV/AIDS)*</b>	N=1567	N=1618		N=3185
Peer group/youth	18.4 (14.3-23.3)	16.1 (12.0-21.2)	NS	17.7 (14.8-20.9)
Radio	25.2 (20.6-30.4)	52.0 (46.0-58.0)	<0.05	33.9 (27.6-40.9)
TV	67.7 (63.4-71.8)	25.6 (18.2-34.9)	<0.05	54.1 (38.6-68.8)
Booklet	22.5 (19.8-25.4)	10.2 (6.7-15.3)	<0.05	18.5 (13.5-24.9)
School teacher/curriculum	21.2 (15.5-28.4)	18.3 (15.1-22.0)	NS	20.3 (16.6-24.5)
Health workers	35.8 (32.5-39.3)	43.0 (36.8-49.5)	ns	38.2 (34.3-42.2)
Hospital/clinic/BHU	41.0 (35.6-46.5)	49.5 (44.8-54.1)	Ns	43.7 (37.8-49.8)
Father	1.8 (1.0-3.2)	0.7 (0.3-1.6)	NS	1.5 (1.0-2.2)
Mother	1.7 (0.9-3.3)	1.4 (0.9-2.2)	NS	1.6 (1.0-2.5)
Husband/wife	1.7 (1.5-1.9)	0.8 (0.4-1.9)	NS	1.4 (1.0-1.9)
Community events (Tshechus)	2.9 (2.1-4.0)	2.4 (1.6-3.8)	NS	2.8 (2.0-3.7)
Awareness Campaigns	34.2 (30.8-37.8)	25.6 (20.8-31.4)	NS	31.4 (27.9-35.1)
Others	5.2 (4.4-6.0)	4.7 (2.8-7.9)	NS	5.0 (4.1-6.1)
<b>Most helpful source of information about HIV/AIDS (among those who had heard about HIV/AIDS)</b>	N=1567	N=1618		N=3185
Peer group/youth	3.2 (2.5-4.0)	1.8 (1.0-3.2)	NS	2.7 (2.2-3.5)
Radio	4.7 (3.1-7.0)	18.6 (15.4-22.5)	<0.5	9.2 (6.2-13.6)
TV	26.2 (22.8-30.0)	7.9 (4.9-12.4)	<0.5	20.2 (13.4-29.4)
Booklet	5.4 (2.8-11.3)	6.4 (4.5-8.9)	NS	5.9 (3.6-9.6)
Schoolteacher/curriculum	5.6 (4.3-6.8)	6.3 (4.5-8.9)	NS	5.9 (3.6-9.6)
Health workers	15.0 (12.8-17.4)	23.5 (18.3-29.6)	<0.5	17.7 (13.9-22.2)
Hospital/clinic/BHU	20.0 (18.3-22.1)	27.1 (21.4-33.8)	NS	22.3 (18.6-26.6)
Father	0.6 (0.3-1.1)	0.1 ((0.0-0.6)	NS	0.4 (0.3-0.7)
Mother	0.2 (0.0-2.0)	0.5 (0.2-1.5)	NS	0.3 (0.1-1.3)
Husband/wife	0.5 (0.4-0.8)	0.7 (0.3-1.6)	NS	0.6 (0.4-0.9)
Community events (tshechus etc)	0.6 (0.5-0.8)	0.7 (0.3-1.6)	NS	0.6 (0.4-0.9)
Awareness Campaigns	16.1 (15.3-17.0)	8.5 (5.8-12.6)	<0.5	13.7 (11.2-16.9)
Others	1.9 (1.0 -3.3)	0.9 (0.4-1.9)	NS	1.5 (0.9-2.9)

\* Multiple responses

There were no differences between males and females in the rural areas in response to identifying the most helpful source of information on HIV/AIDS. However, in urban areas, more males than females mentioned awareness programs, booklets and peer groups/youth.



**Table 41: Helpful and most helpful source of learning about HIV/AIDS among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Compariso n between male and female (P- value)	Male N=816 unless otherwise stated	Female N= 843 unless otherwise stated	Compari son between male and female (P- value)
<b>Helpful sources of information about HIV/AIDS (among those who had heard about HIV/AIDS)*</b>	N=782	N=785		N=804	N=814	
Peer group/youth	23.5 (20.6-26.7)	13.4 (7.4-23.2)	NS	17.8 (10.9-27.7)	14.3 (10.7-19.0)	NS
Radio	26.4 (22.3-36.0)	24.0 (18.1-31.0)	NS	47.5 (43.0-52.1)	56.6 (46.1-66.5)	NS
TV	64.4 (60.7-68.0)	71.0 (62.5-78.3)	NS	27.8 (18.3-39.8)	23.4 (15.6-33.6)	NS
Booklet	20.1 (18.3-22.1)	15.5 (11.6-20.6)	NS	11.6 (7.0-18.8)	9.3 (6.2-13.7)	NS
Schoolteacher/curriculum	20.0 (10.6-34.5)	22.4 (21.1-23.7)	NS			
Health workers	37.6 (34.4-41.0)	34.1 (26.7-42.3)	NS	43.9 (34.0-54.3)	42.2 (34.6-50.1)	NS
Hospital/clinic/BHU	39.3 (32.1-45.0)	42.6 (38.7-47.0)	NS	45.2 (33.6-57.5)	42.3 (34.6-54.3)	NS
Father	3.3 (2.4-4.7)	0.4 (0.0-3.9)	NS	1.4 (0.7-2.9)	0	-
Mother	1.4 (1.2-1.7)	1.9 (0.6-2.9)	NS	1.0 (0.3-2.9)	1.6 (1.1-3.2)	NS
Husband/Wife	0.8 (0.5-1.2)	2.5 (2.3-2.8)	<0.05			
Community events (Tshechus)	2.1 (1.7-2.7)	3.6 (1.9-6.7)	NS	1.8 (0.8-4.1)	3.1 (1.7-5.6)	NS
Awareness Campaigns	43.2 (41.4-45.0)	25.4 (20.1-31.7)	<0.05	28.7 (24.4-33.4)	22.5 (15.6-31.4)	NS
Others	4.4 (3.2-5.9)	6.0 (5.3-6.7)	NS	6.3 (3.4-11.47)	3.1 (1.8-5.3)	NS
<b>Most helpful source of information about HIV/AIDS (among those who had heard about HIV/AIDS)</b>						
Peer group/youth	4.0 (3.6-4.4)	2.5 (1.6-3.9)	<0.05	2.0 (1.0-4.2)	1.6 (0.9-2.9)	NS
Radio	2.2 (1.6-3.0)	7.1 (4.6-10.8)	<0.05	17.3 (14.4-20.6)	20.1 (15.3-25.9)	NS
TV	21.5 (19.7-23.4)	30.9 (25.9-36.3)	<0.05	7.2 (4.2-12.1)	8.6 (4.5-15.8)	NS
Booklet	8.5 (6.6-10.9)	2.4 (2.0-3.0)	<0.05	4.1 (2.5-6.7)	2.5 (1.4-15.8)	NS
Schoolteacher/curriculum	6.7 (3.4-13.0)	4.6 (2.2-9.6)	NS	7.7 (5.7-10.4)	5.0 (3.1-7.9)	NS
Health workers	13.9 (10.2-18.7)	16 (12.4-20.3)	NS	23.6 (15.4-34.4)	23.4 (18.8-28.8)	NS
Hospital/clinic/BHU	16.6 (14.9-18.4)	23.3 (18.0-29.6)	NS	23.8 (14.8-36)	30.6 (26.6-34.9)	NS
Father	1.2 (0.7-2.1)	0	-	0.3 (0.0-1.4)	0	-
Mother	0	0.3 (0.0-4.0)	-	0.6 (0.1-3.5)	0.5 (0.1-1.5)	NS
Husband/Wife	0.8	(0.5-1.3)	-	0.2 (0.0-2.4)	0	-

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Compariso n between male and female (P- value)	Male N=816 unless otherwise stated	Female N= 843 unless otherwise stated	Compari son between male and female (P- value)
Community events (tshechus etc)	0.8 (0.3-1.7)	0.4 (0.2-0.8)	NS	0.8 (0.3-2.0)	0.6 (0.2-1.9)	NS
Awareness Campaigns	21.8 (19.6-24.3)	10.3 (9.7-11.0)	<0.05	10.7 (6.2-17.6)	6.2 (4.3-9.0)	NS
Others	2.0 (1.2-3.4)	1.9 (1.3-2.9)	NS	1.1 (0.4-2.6)	1.0 (0.4-2.2)	NS

\* Multiple responses

### 3.7.7. Preferred sources of learning about HIV/AIDS (Table 42 and 43)

Television and radio were the preferred sources of information for urban and rural respondents respectively. Other than these, both urban and rural respondents said that they would like to obtain their information through awareness programs, health workers, hospitals /clinics/BHU. Peers were however, not very popular.

**Table 42: Preferred sources of learning about HIV/AIDS**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (P- value)	Total N=3235 unless otherwise stated
<b>Preferred sources of information about HIV/AIDS (among those who had heard about HIV/AIDS) *</b>	<b>N=1567</b>	<b>N=1618</b>		<b>N=3185</b>
Peer group/youth	3.6 (2.1-6.0)	5.5 (4.2-7.3)	NS	4.2 (2.7-6.6)
Radio	21.5 (19.7-23.4)	41.0 (36.3-45.7)	<0.05	27.8 (22.9-33.3)
TV	63.9 (61.2-66.5)	29.6 (23.2-36.9)	<0.05	52.7 (40.5-64.7)
Booklet	81.5 (14.6-23.3)	8.4 (6.2-11.3)	<0.05	15.2 (10.2-22.2)
Schoolteacher/curriculum	11.4 (9.3-13.9)	8.7 (7.1-10.7)	NS	10.5 (9.2-12.0)
Health workers	26.3 (22.9- 30.0)	34.3 (29.5-39.5)	NS	28.9 (24.6-33.6)
Hospital/clinic/BHU	29.3 (22.1-37.8)	40.9 (36.0-45.9)	NS	33.1 (25.2-42.1)
Community events (tshechus etc)	1.8 (1.6-2.0)	1.9 (1.2-3.2)	NS	1.8 (1.5-2.2)
Awareness Campaigns	33.9 (31.4-36.6)	21.8 (18.5-25.4)	<0.05	30.0 (27.1-33.1)
Others	3.3 (2.6- 4.1)	4.8 (3.1-7.4)	NS	3.8 (2.8-5.2)

\* Multiple responses

The preferred sources of knowledge on HIV/AIDS identified were similar for males and females in rural areas. However there were gender differences in urban areas; more males than females said they would prefer to get their information from radio, TV, booklets, schools and awareness programs.

**Table 43: Preferred sources of learning about HIV/AIDS among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
Preferred sources of information about HIV/AIDS (among those who had heard about HIV/AIDS)*	N=782	N=785		N=804	N=814	
Peer group/youth	4.7 (3.4-6.4)	2.5 (1.0-6.0)	NS	7.7 (5.8-10.1)	3.4 (1.9-5.9)	NS
Radio	28.6 (26.7- 30.5)	14.5 (11.4- 18.3)	<0.05	43.8 (37.8-50.0)	38.1 (29.7- 47.2)	NS
TV	70.7 (67.6- 73.6)	57.3 (52.6- 61.8)	<0.05	33.8 (26.5-42.1)	25.3 (18.5- 33.5)	NS
Booklet	26.0 (21.3- 31.2)	11.3 (7.4-17.0)	<0.05	10.0 (6.6-14.2)	7.0 (4.8-10.2)	NS
Schoolteacher/curri culum	15.4 (10.6- 22.0)	7.4 (6.1-9.0)	<0.05	10.9 (8.6-13.7)	6.5 (4.8-8.8)	NS
Health workers	26.4 (20.3- 33.3)	26.2 (20.0- 33.4)	NS	36.2 (30.3-42.6)	32.4 (26.4- 38.8)	NS
Hospital/clinic/BH U	22.2 (16.3- 29.4)	36.3 (27.3- 46.4)	NS	31.9 (22.4-43.1)	50.0 (42.0- 58.1)	NS
Community events (tshechus etc)	2.3 (1.6-3.3)	1.3 (0.9-2.0)	NS	2.4 (1.3-4.7)	1.4 (0.7-2.7)	NS
Awareness Campaigns	46.6 (42.4- 50.8)	21.4 (18.9- 24.6)	<0.05	31.9 (27.2-37.1)	11.4 (7.6-16.9)	<0.05
Others	4.2 (3.8-4.6)	2.4 (1.5-3.7)	NS	7.3 (4.7-11.2)	2.3 (1.3-4.0)	<0.05

\* Multiple responses

### 3.8. SEXUALLY TRANSMITTED INFECTIONS

#### 3.8.1. Knowledge regarding names of different STIs, symptoms of STIs and available treatment facilities (Tables 44 and 45)

More respondents had heard of gonorrhoea compared to other STIs in both urban and rural areas (Table 44). In general more urban respondents could say the names of STIs than their rural counterparts. A substantial proportion of respondents from both areas did not know the symptoms of STIs in men and women. Almost all felt that medical treatment should be sought and that hospitals or health providers would be the most appropriate to consult.

**Table 44: Knowledge regarding names of different STIs, symptoms of STIs and available treatment facilities**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Could name STIs (responses were unprompted)</b>	N=1575 <sup>Φ</sup>	N=1658 <sup>Φ</sup>		N=3233 <sup>**</sup>
Syphilis	44.1 (40.5-47.7)	23.6 (19.6-28.1)	<0.05	37.3 (28.9-46.6)
Gonorrhoea	60.6 (55.2-65.7)	38.1 (31.8-44.8)	<0.05	53.2 (42.7-63.4)
Chancroid	2.2 (1.9-2.5)	0.9 (0.4-2.3)	NS	1.7 (1.2-2.4)
Genital herpes	5.9 (4.0-8.7)	1.4 (0.6-3.2)	NS	4.4 (3.0-6.4)
<b>Knowledge on STI symptoms in males*</b>	N=1575 <sup>Φ</sup>	N=1658 <sup>Φ</sup>		N=3233 <sup>**</sup>
Urethral discharge	31.4 (26.9-36.3)	25.1 (18.7-33.0)	NS	29.4 (25.1-34.0)
Genital ulcer	34.3 (30.7-38.1)	33.5 (27.8-38.8)	NS	33.9 (30.9-37.3)
Burning sensation during urination	45.7 (36.9-54.8)	28.6 (21.7-36.8)	NS	40.1 (30.2-50.9)
Pain in scrotum	14.1 (11.3-17.4)	9.7 (6.7-13.8)	NS	12.7 (9.7-16.4)
Do not know	41.4 (36.6-45.7)	52.0 (45.4-58.7)	NS	44.8 (39.1-50.5)
Others	7.8 (6.3-9.6)	8.7 (4.5-16.1)	NS	8.1 (6.0-10.7)
<b>Knowledge on STI symptoms in females*</b>	N=1575 <sup>Φ</sup>	N=1658 <sup>Φ</sup>		N=3233 <sup>**</sup>
Genital ulcer	30.2 (26.6-34.1)	25.1 (20.0-31.1)	NS	28.6 (24.9-32.6)
Increase vaginal discharge	21.3 (17.0-26.2)	21.0 (14.4-29.7)	NS	21.2 (17.5-25.4)
Pain during coitus	10.4 (9.0-12.0)	10.9 (6.4-18.1)	NS	10.6 (8.6-12.9)
May not have any symptoms	0.8 (0.5-1.2)	0.3 (0.2-0.7)	NS	0.6 (0.4-0.9)
Others	5.5 (4.3-7.0)	5.6 (3.5-9.0)	NS	5.5 (4.4-7.0)
Do not know	58.6 (54.6-62.5)	66.4 (58.8-73.3)	NS	61.2 (55.9-66.1)
<b>What measures can be taken if worried about STIs</b>	N=1575 <sup>Φ</sup>	N=1658 <sup>Φ</sup>		N=3233 <sup>**</sup>
Consult a health provider/ hospital	97.2 (96.3-97.9)	95.2 (90.2-97.7)	NS	96.5 (94.5-97.8)
Seek advice of husband/wife	7.4 (6.7-8.3)	7.3 (5.9-8.8)	NS	7.4 (6.6-8.2)
Seek advice of parents	7.3 (6.2-8.6)	5.6 (4.0-7.8)	NS	6.8 (5.8-7.9)
Seek advice of peers/friends	17.2 (14.8-19.9)	12.8 (8.5-18.8)	NS	15.7 (13.2-18.7)
Seek advice from key adults	3.8 (2.8-5.1)	1.8 (1.1-3.0)	NS	3.1 (2.0-4.8)
Consult a traditional healer	2.4 (2.0-2.9)	4.5 (2.3-8.5)	NS	3.1 (2.1-4.6)
Consult a pharmacist	10.2 (8.7-11.9)	2.4 (1.0-5.7)	<0.05	7.6 (4.9-11.8)
Others	1.9 (1.6-2.2)	3.9 (1.8-8.0)	NS	2.5 (1.6-4.0)
<b>Feel the need for medical treatment for STI</b>	96.3 (95.5-96.8) N=1575 <sup>Φ</sup>	94.6 (90.5-97.0) N=1658 <sup>Φ</sup>	NS	95.7 (94.1-96.9) N=3233 <sup>**</sup>
<b>Know where to get STI treatment</b>	N=1575 <sup>Φ</sup>	N=1658 <sup>Φ</sup>		N=3233 <sup>**</sup>
District hospital	92.5 (90.9-93.8)	50.3 (39.3-61.2)	<0.05	78.6 (61.9- 89.2)
BHUs	2.8 (2.4-3.2)	43.8 (32.4-55.8)	<0.05	16.3 (7.2-32.9)
ORCs	0.0 (0.0-0.2)	0.6 (0.2-1.7)	NS	0.2 (0.0-0.9)
Others	0.2 (0.1-0.4)	0.0 (0.0-0.2)	NS	0.1 (0.0-0.4)
No / Do not know	4.6 (3.0-6.8)	5.4 (3.4-8.4)	NS	4.8 (3.4-6.7)

\* Multiple responses

<sup>Φ</sup> 1 observation is missing

<sup>\*\*</sup> 2 observations are missing

More females had heard of gonorrhoea than males in urban areas and in both areas more males had heard of genital herpes. In urban areas, more males knew about STI symptoms in males and

more females knew the symptoms in females. However, the proportions of both males and females who did not know the symptoms of STIs in either males or females were substantial.

**Table 45: Knowledge regarding names of different STIs, symptoms of STIs and available treatment facilities among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
<b>Could name STIs (responses were unprompted)</b>		N=788 <sup>Φ</sup>		N=815 <sup>Φ</sup>		
Syphilis	53.4 (47.0- 59.6)	35.0 (33.3-36.8)	<0.05	26.6 (19.7-34.8)	25.0 (17.4- 24.0)	NS
Gonorrhoea	69.1 (60.5- 76.5)	52.3 (49.1- 55.40)	<0.05	39.0 (30.9-47.9)	37.2 (31.4- 43.4)	NS
Chancroid	1.3 (1.0-1.7)	3.0 (2.4-3.6)	<0.05	1.0 (0.3-3.3)	0.9 (0.4-2.1)	NS
Genital herpes	6.8 (5.2-9.0)	5.0 (2.9-8.6)	NS	1.4 (0.6-3.5)	1.4 (0.6-3.5)	NS
<b>Knowledge on STI symptoms in males*</b>		N=788 <sup>Φ</sup>		N=815 <sup>Φ</sup>		
Urethral discharge	41.2 (35.8- 46.8)	22.0 (15.9-29.5)	<0.05	28.7 (23.7-34.3)	21.7 (12.8- 34.2)	NS
Genital Ulcer	45.7 (39.5- 52.1)	23.2 (17.8-29.7)	<0.05	37.9 (32.2-44.0)	28.2 (21.0- 36.7)	NS
Burning sensation during urination	59.9 (41.9- 75.5)	32.0 (26.4-38.2)	<0.05	30.8 (23.4-39.4)	26.5 (17.4- 38.1)	NS
Pain in scrotum	19.3 (12.5- 28.6)	9.1 (6.9-11.8)	<0.05	8.1 (5.6-11.5)	11.3 (6.4- 19.0)	NS
Do not know	25.3 (15.9- 37.8)	56.5 (51.2-61.7)	<0.05	45.1 (37.7-52.6)	59.1 (49.7- 67.9)	NS
Others	8.3 (6.0-11.4)	7.3 (5.6-9.5)	NS	11.9 (5.8-22.9)	5.6 (3.5-9)	NS
<b>Knowledge on STI symptoms in females*</b>		N=788 <sup>Φ</sup>		N=815 <sup>Φ</sup>		
Genital ulcer	17.8 (15.3- 20.5)	42.4 (37.7-47.4)	<0.05	12.8 (10.7-15.1)	37.6 (29.7- 46.2)	<0.05
Increase vaginal discharge Pain during coitus	8.2 (7.4-9.0)	34.0 (26.8-42)	<0.05	7.0 (5.7-8.7)	35.0 (24-47.9)	<0.05
Pain during coitus	6.3 (5.6-7.1)	14.3 (11.4-17.9)	<0.05	2.8 (1.3-5.6)	19.1 (11.6- 29.8)	<0.05
May not have any symptoms	0.6 (0.4-0.8)	1.0 (0.5-1.8)	NS	0.6 (0.2-1.5)	0.1 (0.0-0.6)	NS
Others	1.2 (0.2-5.8)	9.7 (7.3-12.6)	<0.05	4.3 (1.5-11.8)	7.0 (4.6-10.5)	NS
Do not know	75.4 (73.2- 77.5)	42.2 (37.5-47.0)	<0.05	82.1 (78.5-85.2)	50.8 (40.8- 60.6)	<0.05
<b>What measures can be taken if worried about STIs*</b>		N=788 <sup>Φ</sup>		N=815 <sup>Φ</sup>		
Consult a health provider/ hospital	98.2 (94.6- 99.4)	96.2 (95.8-96.5)	NS	94.3 (84.4-98.0)	96.2 (94.1- 97.6)	NS
Seek advice of	4.9 (3.4-7.1)	9.9 (7.7-12.7)	<0.05	8.1 (5.5-11.9)	6.2 (3.7-10.2)	NS

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=789 unless otherwise stated	Comparison between male and female (P- value)	Male N=816 unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
husband/wife						
Seek advice of parents	5.3 (4.0-7.1)	9.3 (8.3-10.5)	<0.05	5.0 (2.4-10.1)	6.3 (4.3-9.1)	NS
Seek advice of peers/friends	24.4 (21.3-27.8)	10.2 (8.6-12.0)	<0.05	17.1 (11.0-25.6)	8.4 (4.9-14.2)	NS
Seek advice from key adults	3.8 (3.3-4.3)	3.8 (2.2-6.5)	NS	2.7 (1.5-4.8)	0.9 (0.4-2.3)	NS
Consult a traditional healer	0.2 (0.0-2.8)	4.5 (3.7-5.5)	<0.05	0.2 (0.0-0.6)	8.8 (4.7-15.7)	<0.05
Consult a pharmacist	10.2 (7.1-14.5)	10.2 (7.0-14.8)	NS	2.0 (0.8-4.8)	2.8 (1.1-6.9)	NS
Others	2.2 (1.6-3.1)	1.5 (1.5-1.6)	NS	3.3 (0.9-12.8)	4.2 (2.2-7.9)	<0.05
Do not know	0.2 (0.0-2.3)	2.7 (2.1-3.5)	<0.05	2.5 (1.2-5.2)	1.9 (0.9-4.2)	NS
Nothing	0.2 (0.0-2.8)	0.1 (0.0-1.4)	NS	0.1 (0.0-0.1)	0.1 (0.0-0.8)	NS
<b>Feel the need for medical treatment for STI</b>	96.9 (94.3-98.3)	95.6 (95.1-96.1) N=788 <sup>ϕ</sup>	NS	92.7 (84.5-96.8) N=815 <sup>ϕ</sup>	96.5 (93.7-98.1)	NS
<b>Know where to get treatment</b>						
District hospital	94.8 (93.7-95.8)	90.2 (87.9-92.1)	<0.05	49.4 (37.7-61.2)	51.2 (37.6-64.6)	NS
BHUs	3.1 (2.4-4.0)	2.5 (2.3-2.6)	NS	46.2 (33.3-59.6)	41.4 (28.0-56.1)	NS
ORCs	0	0.0 (0.0-0.4)	-	1.1 (0.4-2.9)	0	-
Others	0.4 (0.2-0.8)	0	-	0	0.1 (0.0-0.5)	-
No/ Do not know	1.7 (0.5-5.4)	7.3 (5.6-9.5)	<0.05	3.3 (1.3-7.9)	7.4 (4.6-11.7)	NS

\* Multiple responses

<sup>ϕ</sup> 1 observation is missing

### 3.8.2. Reported symptoms of STI among male and female respondents and treatment sought (Table 46)

Very few (whether male or female) complained of any STI symptoms in the last one year. The most commonly reported complaint in males was burning sensation during urination and in females it was increased vaginal discharge.

Most of the respondents, who complained of an STI, consulted a doctor or went to a hospital. However, a substantial proportion in both urban and rural areas did nothing.

**Table 46: Reported symptoms of STI among male and female respondents and source of treatment**

Indicators % (95 % CI)	Urban N=1576 unless otherwise stated	Rural N=1659 unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3235 unless otherwise stated
<b>Reported STI symptoms in males in the last 1 year* (among those who are male)</b>	N=787	N=815 <sup>Φ</sup>		N=1602 <sup>Φ</sup>
Urethral discharge	5.4 (3.5- 8.2)	4.6 (2.5-8.2)	NS	5.1 (3.5-7.4)
Genital ulcer	6.7 (4.6-9.8)	4.6 (3.3- 6.4)	NS	6.0 (4.1-8.8)
Burning sensation during urination	9.6 (8.1- 11.5)	8.4 (4.2-16.0)	NS	9.2 (7.1-11.8)
Pain in scrotum	3.8 (2.5-5.6)	1.9 (1.0-3.8)	NS	3.1 (1.9-5.2)
Do not know	41.1 (36.8-45.7)	52.1 (45.4-58.7)	NS	44.7 (39.1-50.5)
Others	7.8 (6.3-9.6)	8.7 (4.5-16.1)	NS	8.1 (6.1-10.7)
<b>Where treatment was sought for the last STI symptom in last one year (among those who are male and had at least one STI symptom in last one year)*</b>	N=76	N=70		N=146
Consulted Doctor/Hospital	79.4 (74.3-83.7)	64.0 (47.4-77.7)	NS	75.1 (65.6-82.7)
Went to BHU	3.3 (2.8-3.9)	16.1 (9.0-27.1)	<0.05	6.9 (3.1-14.6)
Went to local /traditional healer	3.2 (2.9-3.6)	7.4 (2.9-16.7)	NS	4.4 (2.1-8.7)
Went to village health worker	0	0.8 (0.1-7.5)	-	0.2 (0.0-2.4)
Shared with a friend	7.8 (4.3-13.8)	2.3 (0.5-10.1)	NS	6.3 (3.7-10.4)
Did nothing	7.9 (4.4-13.7)	17.1 (9.4-29.0)	NS	10.5 (5.7-18.5)
Others	6.1 (5.3-7.1)	7.6 (3.0-17.8)	NS	6.5 (4.6-9.2)
<b>Reported STI symptoms in females in the last 1 year* (among those who are female)</b>	N=788 <sup>Φ</sup>	N=843		N=1631
Genital ulcer	3.5 (3.0-4.1)	5.6 (3.5-9.0)	NS	4.2 (3.3-5.3)
Increase vaginal discharge	7.6 (7.0-8.3)	7.5 (4.9-11.2)	NS	7.6 (6.5-8.7)
Pain during coitus	3.5 (2.5- 4.9)	3.7 (2.2-6.1)	NS	3.6 (2.7-4.7)
May not have any symptoms	0.2 (0.5-1.2)	0.3 (0.2-0.7)	NS	0.6 (0.4-0.9)
Others	5.5 (4.2-3.5)	5.6 (3.5-9.0)	NS	5.5 (4.4-7.0)
Do not know	58.6 (54.6-62.5)	66.4 (58.8-73.3)	NS	61.2 (55.9-66.1)
<b>Where treatment was sought for the last STI symptom in last one year (among those who are female and had at least one STI symptom in last one year)*</b>	N=95	N=109		N=204
Consulted Doctor/Hospital	67.4 (56.4-76.9)	1.2 (0.1-10.5)	<0.05	9.3 (3.4-22.8)
Went to BHU	1.0 (0.1-10.5)	23.3 (16.4-32.1)	<0.05	9.3 (3.4-22.8)
Went to local /traditional healer	3.6 (1.6-7.7)	6.1 (2.2-16.2)	NS	4.5 (2.6-7.9)
Went to village health worker	0	1.6 (0.3-8.5)	-	0.6 (0.0-3.4)
Shared with a friend	9.4 (8.3-10.7)	6.2 (2.6-14.2)	NS	8.3 (6.0-11.3)
Did nothing	13.8 (11.0-17.0)	11.7 (5.4-23.7)	NS	13.0 (9.6-17.5)
Others	4.6 (3.0-7.0)	3.7 (1.1-11.7)	NS	4.3 (2.7-6.8)

\* Multiple responses

<sup>Φ</sup> 1 observation is missing

**3.8.3. Barriers to seeking STI services and ability to overcome those barriers  
(Tables 47 and 48)**

Most respondents felt that the health facilities where STI services were available were nearby and that the working hours were convenient for them. The majority did not feel that services were user friendly and lack of confidentiality was a concern more commonly expressed by rural respondents. Nonetheless, most respondents felt that they could talk about STIs with service providers. Most also felt that they could discuss this with their spouses or sex partners.

**Table 47: Barriers to seeking STI services and confidence in overcoming barriers**

<b>Indicators % (95 % CI)</b>	<b>Urban N=1575* unless otherwise stated</b>	<b>Rural N=1658* unless otherwise stated</b>	<b>Comparison between urban and rural (p- value)</b>	<b>Total N=3233** unless otherwise stated</b>
<b>Said that there was a nearby health facility providing STI services</b>	88.6 (83.3-92.3)	87.0 (81.2-91.2)	NS	88.1 (83.9-91.3)
<b>Working hours of the health facility were convenient (among those who said that there was a nearby STI service)</b>	90.2 (89.0-91.4) N=1428	92.7 (90.6-94.3) N=1483	NS	91.0 (89.8-92.1) N=2911
<b>Felt STI services were user friendly</b>	10.4 (5.2-19.6)	21.6 (18.2-25.5)	NS	14.1 (8.0-23.7)
<b>Felt confidentiality was maintained by service providers</b>	23.3 (21.1- 25.7)	31.5 (28.9-34.3)	<0.05	26.0 (22.4-30.1)
<b>Felt confident to discuss STIs with health workers</b>	90.1 (87.5-92.2)	90.8 (89.3-92.2)	NS	90.3 (88.7-91.7)
<b>Felt confident to discuss STIs with spouse/partner</b>	77.9 (75.6-79.9)	83.4 (79.9-86.3)	NS	79.7 (76.8-82.3)

\* 1 observation is missing

\*\* 2 observations are missing

Fewer males than females in urban areas felt that the working hours of the health facilities were convenient.



**Table 48: Barriers to seeking STI services and confidence in overcoming barriers among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788* unless otherwise stated	Comparison between male and female (P- value)	Male N=815* unless otherwise stated	Female N=843 unless otherwise stated	Comparison between male and female (P- value)
Said that there was a nearby health facility providing STI services	92.2 (90.5-93.5)	85.1 (75.3-91.5)	NS	92.2 (84.8-96.2)	81.8 (73.2-88.1)	NS
Working hours of the health facility were convenient (among those who said that there was a nearby STI service)	88.2 (87.1-89.2) N=746	92.4 (91.2-93.5) N=682	<0.05	90.7 (87.8-92.9) N=780	94.9 (92.0-96.8) N=703	NS
Felt STI services were user friendly	9.7 (6.9- 13.6)	11.0 (4.0-26.8)	NS	20.2 (16.1-25.1)	23.1 (17-30.5)	NS
Felt confidentiality was maintained by service providers	57.6 (46.2-68.2)	53.8 (52.2-55.3)	NS	49.4 (38.3-61.0)	49.4 (44.5-54.3)	NS
Felt confident to discuss STIs with health workers	91.4 (85.7-94.9)	88.9 (88.2-89.5)	NS	93.7 (90.7-95.8)	87.9 (85.2-90.3)	<0.05
Felt confident to discuss STIs with spouse/partner	73.8 (68.9-78.2)	81.8 (72.7-88.3)	NS	78.0 (71.8-83.2)	88.7 (82.5-92.9)	NS

\*1 observation is missing

### **3.9. Reported illicit drug use and needle sharing behaviour (Tables 49 and 50)**

More urban versus rural respondents reported ever using any illicit drug in their lifetime and had a friend who injects drugs. Of those who had used illicit drugs approximately 9% had ever injected drugs and there were only two current injectors who were both in urban areas. Of the two currently injectors, one had been injecting drugs for three years and the other for seven years and one injected once a week while the other once monthly. Of all those who had ever injected drugs, 3% said they had shared their needles at least once.

A substantial proportion of respondents, particularly in the urban areas said they had a friend who injected drugs.

**Table 49: Illicit drug use and needle sharing behaviour**

Indicators % (95 % CI)	Urban N=1575* unless otherwise stated	Rural N=1658* unless otherwise stated	Comparison between urban and rural (p- value)	Total N=3233** unless otherwise stated
Ever used illicit drugs	15.7 (10.6-22.7)	2.3 (1.4-3.8)	<0.05	11.3 (5.5-21.9)
Ever injected drugs (among those who ever used illicit drugs)	8.9 (4.1-18.4) N=151	5.9 (1.5-20.2) N=43	NS	8.7 (4.3-17.0) N=194
Currently injecting drugs (among those who ever injected drugs)	3.9 (0.3-34.0) N=23	0 N=3	-	3.8 (0.3-31.9) N=26
Duration of injecting drug (among those who are currently injecting drugs)	N=2	N=0	-	N=2
3 years	21.5 (0.0-100.0)	-	-	21.5 (0.0-100.0)
7 years	78.5 (0.0-100.0)	-	-	78.5 (0.0-100.0)
Frequency of injecting drugs (among those who are currently injecting drugs)	N=2	N=0		N=2
Once a week	78.5 (0.0-100.0)	-	-	78.5
Once a month	21.5 (0.0-100.0)	-	-	21.5
Shared needles in any occasion (among those who ever injected drugs)	3.1 (0.2-36.5) N=23	0 N=3	-	3.0 (0.2-34.7) N=26
Have a friend/close associate who injects drugs	20.2 (18.4-22.0)	9.6 (7.7-11.9)	<0.05	16.7 (13.2-20.9)

\* 1 observation is missing

\*\* 2 observations are missing

Illicit drug use and injecting drugs was reported more by males than females. In urban areas, more males than females said they had a friend who injects drugs.

**Table 50: Illicit drug use and needle sharing behaviour among males and females**

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788* unless otherwise stated	Comparison between male and female (P- value)	Male N=815* unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
Ever used illicit drugs	27.9 (18.3-40.1)	3.9 (2.3-6.3)	<0.05	4.3 (2.6-7.0)	0.3 (0.1-1.1)	<0.05
Ever injected drugs (among those who ever used drugs)	9.3 (5.3-15.8) N=136	5.9 (0.3-60.9) N=15	NS	6.3 (1.6-22.2) N=40	0 N=3	-

Indicators % (95 % CI)	Urban			Rural		
	Male N=787 unless otherwise stated	Female N=788* unless otherwise stated	Comparison between male and female (P- value)	Male N=815* unless otherwise stated	Female N=843 unless otherwise stated	Compariso n between male and female (P- value)
Currently injecting drugs (among those who ever injected drugs)	4.3 (0.3-42.0) N=20	0 N=3	-	0 N=3	-	-
Duration of injecting drug (among those who are currently injecting drugs)	N=2	N=0	-	N=0	-	-
3 years	21.5 (0.0-100.0)	-	-	-	-	-
7 years	78.5 (0.0-100.0)	-	-	-	-	-
Frequency of injecting drugs (among those who are currently injecting drugs)	N=2	N=0	-	N=0	-	-
Once a week	78.5 (0.0-100.0)	-	-	-	-	-
Once a month	21.5 (0.0-100.0)	-	-	-	-	-
Shared needles in any occasion (among those who ever/currently injecting drugs)	3.4 (0.2-44.7) N=20	0 N=3	-	0 N=3	-	-
Have a friend/close associate who injects drugs	23.0 (20.9-25.2)	17.4 (16.0-18.9)	<0.05	9.6 (6.4-14.1)	9.5 (5.5-16.1)	NS

\*One observation is missing

#### 4. SUMMARY OF FINDINGS AND DISCUSSION

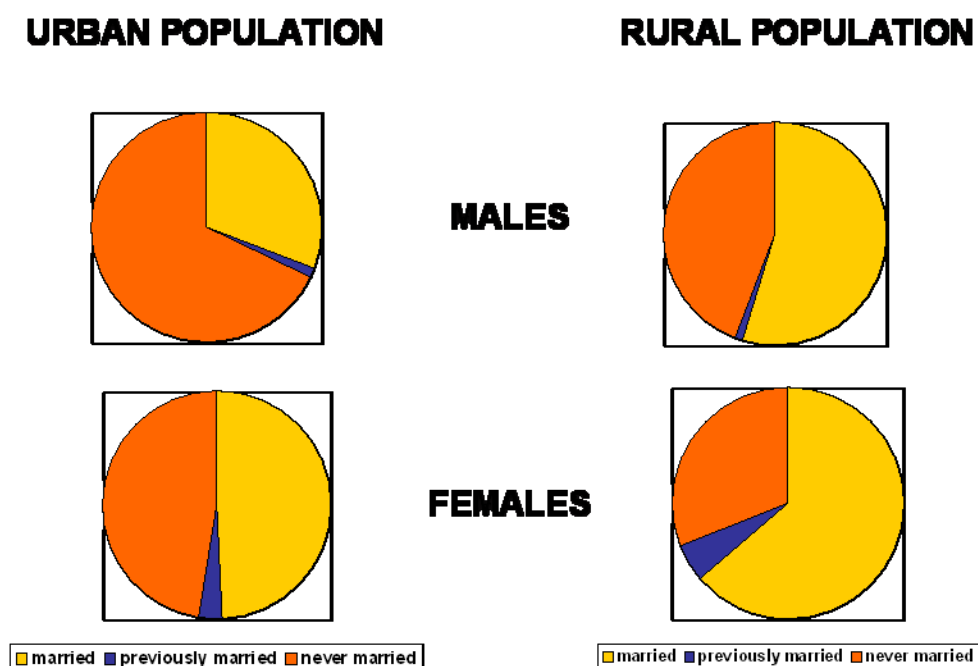
A summary of the findings are presented in this section to facilitate a better understanding of the data.

##### Demographics and exposure to mass media

Some key demographic features which are likely to be relevant to the spread of HIV/STIs and for targeting HIV/STI prevention efforts are highlighted here:

- Education level in rural areas was lower and access to various sources of information in the print medium, public broadcasting system, and awareness raising campaigns were also less prevalent in rural areas.
- More urban males were unmarried compared to other groups (Fig. 1) and unmarried urban males were more likely to be living alone
- Fewer females were educated especially in rural areas
- Most participants lived with their families and relatives irrespective of geographic area and sex.

Fig. 1. Marital status of male and female respondents in urban and rural areas



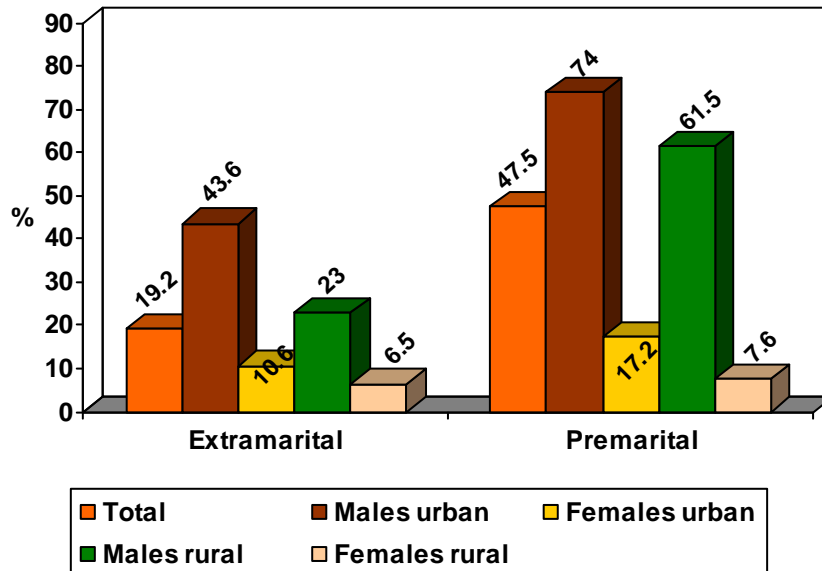
These geographical and gender differences need to be considered when designing intervention programs.

##### Sexual behaviours and condoms

Extramarital and premarital sex was not uncommon in both urban and rural areas and reported more by males than females (Fig. 2). Premarital sex was more commonly

reported by unmarried males compared to extramarital sex by married males. It is noteworthy that the proportions of females having extramarital or premarital sex were also high compared to other countries in the SAARC region where this data is available (8, 9).

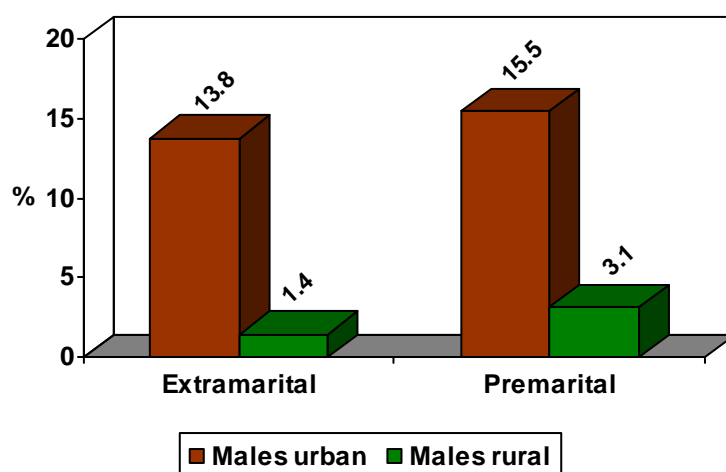
Fig. 2. Proportions reporting extramarital sex in the last year and premarital sex ever in their lifetime



Among those who had premarital sex, the average ages for males at first sex were 16-17 years, and for females this was 18-19 years; in both sexes it was lower in the rural areas. This finding is similar to that reported in the out-of-school youth survey of Bhutan (7). This is unusual as in most countries females are initiated into sex at an earlier age than males (10). It is not clear why this is the case in Bhutan but it has been suggested that increased education among females has played a role in delaying age at first sex.

The most common partner was girlfriend or boyfriend for either extra or premarital sex. Males also commonly had extra or pre marital sex with casual acquaintances or neighbours particularly in rural areas. However, despite the high levels of reported casual sex, 13-15% of urban males bought sex from sex workers in the last year (Fig. 3).

Fig. 3. Proportion of males who bought sex from sex workers in the last year



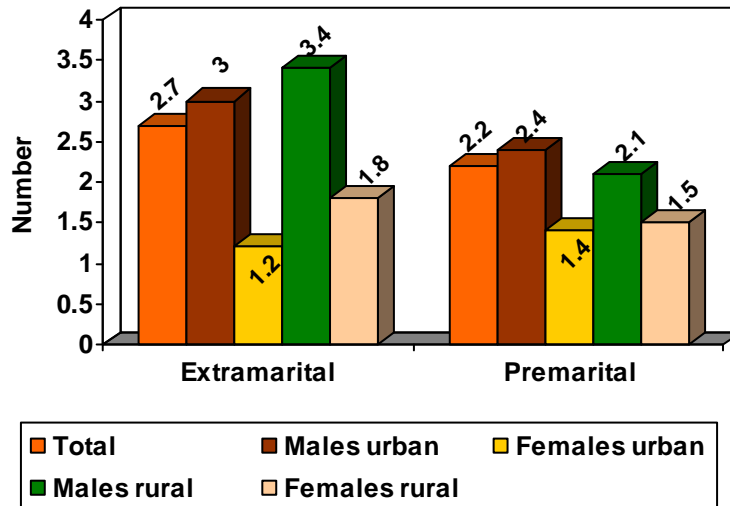
In a newly published report of the AIDS Commission submitted to the UN Secretary General, the risk factors that may accelerate an HIV epidemic in Asia have been analysed (8). According to this report, unprotected casual sex is not a major driver of HIV epidemics in Asia even where such levels are high such as in Japan and increases in the populations having unprotected casual sex do not contribute as much to the HIV epidemic as commercial sex. One of the key determinants of the epidemic is the numbers of clients per sex worker, so that where the proportions of men buying sex are high but the numbers of sex workers are low, the risk of HIV transmission is greater. Furthermore, using the Asian Epidemic Model to predict the course of HIV epidemics (11), it has been shown that if 5% of males of the general population in any country buy sex from sex workers in one year, the HIV epidemic remains at low levels. However, if 10% visit sex workers the epidemic is accelerated and can reach high levels in a few years (8, 12). The data from the present general population survey show that large numbers of men are not only having casual sex but are also buying sex from sex workers and there is other data suggesting that the numbers of sex workers in Bhutan are few and very hidden (13). If, as suggested by the AIDS Commission Report, the client sex worker ratio is indeed a key determinant in the spread of HIV, Bhutan is very vulnerable to an HIV epidemic.

The most common location for either extra or pre marital sex was own or partner's house for both sexes. But in urban areas, hotels were often used by men. In such a situation, working in hotels together with the hotel management to ensure that awareness messages and condoms are easily available should be actively undertaken as a strategy for HIV prevention.

Both males and females who had extra or pre marital sex in the last 6 months, reported multiple partners, and the numbers were higher for males than females especially in urban areas (Fig. 4). A global sex survey conducted in 41 countries revealed that among the countries surveyed, Indians reported the least average number of sex partners in their lives which was three (10). However, in the global survey the question was for lifetime sex partners whereas in our present survey the time frame was the last six months and the question was asked only to those who admitted having extramarital or premarital sex. Therefore, direct comparisons are difficult but given that these high numbers only reflect the numbers in the last six months, the numbers

of lifetime partners are likely to be much higher. In fact, the earlier survey of out-of-school youth did show high partner numbers for male youth (7).

Fig. 4. Average number of sex partners in the last six months amongst those who had extra or pre marital sex



In general knowledge about the uses of condoms was high but more so in men than women. Multiple sources were identified from where they had learnt about condoms - friends, peers, radio, TV, awareness programs, family members, health workers and even school teachers and the school curriculum. Interestingly, awareness programs were mentioned by approximately one third of all respondents but in urban areas this was stated more frequently by men than women. Since awareness programs have reached one third of Bhutan's population, it is worthwhile attempting to strengthen these programs so that all can benefit from them equally. The impact of mass media campaigns on behaviour change has been debated and a review of 24 mass media effectiveness studies published between 1990-2004 from developing countries (14) revealed that the experience was mixed – some studies showed an impact whereas others did not. However, overall significant differences in knowledge level and reduction in high risk sexual behaviours was observed. Therefore it can be worthwhile conducting awareness campaigns that are designed appropriately.

This survey found that condoms were frequently used in extra and premarital sex. The reasons provided for using condoms were multiple – contraception, prevention of HIV and/or STIs. The most common reason for not using condoms was disliking condoms. This is a common reason provided by men globally (15). More in-depth and qualitative studies are required to understand how this barrier can be overcome and approaches used by other countries can then be tailored to meet the needs of urban and rural Bhutanese. Among those respondents who thought of using condoms at the time of sex but did not use, the main reason for not using was not having a condom at hand. This reason was stated despite the evidence that condoms appear to be easily accessible from multiple sources.

However, considerable gender differences were observed in condom use and accessibility:

- Fewer women reported using a condom in last sex than men in both urban and rural areas (Fig. 5).
- Many more women than men said that they had never used condoms during extramarital or premarital sex in last six months (Fig. 5).
- More males felt that they had easy access to condoms than females (Fig. 6) while females reported more barriers to access.

Fig. 5. Condom use in last six months during extra or premarital sex

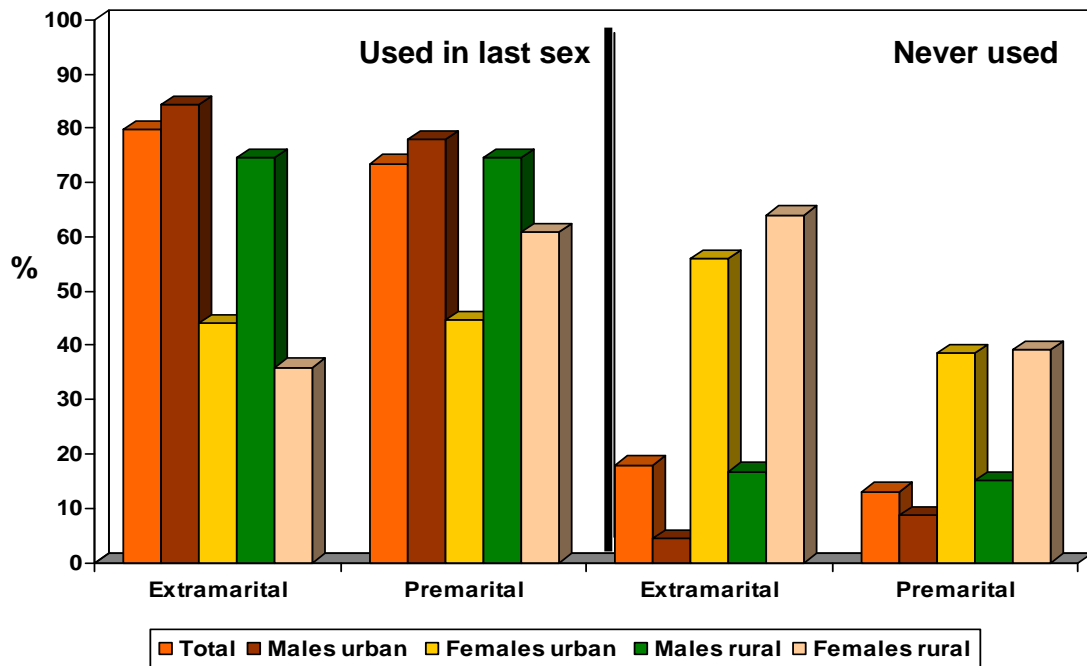
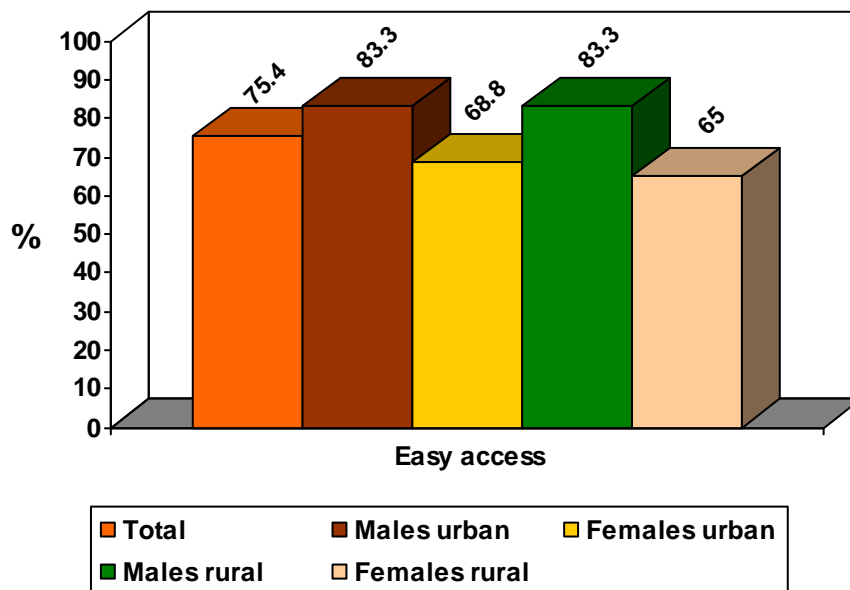


Fig. 6. Proportions of respondents who felt they had easy access to condoms





Taking all this into consideration and the fact that women had lower levels of knowledge on condom use, women need to be specifically targeted to receive prevention messages as well as condoms to enable them to practice safer sex.

### **Knowledge about HIV/STI transmission and prevention**

Among the sources of knowledge on HIV/AIDS, those that were mentioned by more than 40% of respondents (males and females in urban and rural areas) are shown below, ranked from the highest:

- Urban males – TV, peer group/youth, health workers, hospital/clinic/BHU, books/newspapers/magazines, awareness campaigns.
- Urban females – TV, hospital/clinic/BHU, peer group/youth, health workers
- Rural males – Radio, hospital/clinic/BHU, health workers
- Rural females - Radio, hospital/clinic/BHU, health workers

It is apparent that TV or radio, medical facilities including health workers were common to all. In urban areas, males had more choices than females and the awareness campaigns appear to be more geared for males.

When asked which sources they prefer, the same sources were most commonly mentioned. However, it needs to be borne in mind that many expressed concerns regarding the negative attitudes of service providers.

In general, knowledge on HIV transmission and prevention was better than that for STIs (Fig. 7); a substantial proportion did not know mode of STI transmission (Fig. 8). The proportions who said they did not know modes of transmission and prevention were higher in rural areas and in females. An exception was for STI prevention in rural areas where fewer females than males did not know (Fig. 8). This is indeed a missed opportunity because STIs and HIV are closely related in their mode of transmission and certain STIs can facilitate HIV transmission. The ongoing programs on HIV awareness such as campaigns, leaflets and mass media programmes, are obviously not including messages on STIs. This gap needs to be bridged.

Fig. 7. Knowledge on HIV/STI transmission where 1 = sex with HIV/STI infected person, 2 = sex with multiple partners, 3 = from HIV/STI infected blood, 4 = using non-sterile needles/syringes, 5 = From mother to child during pregnancy or delivery

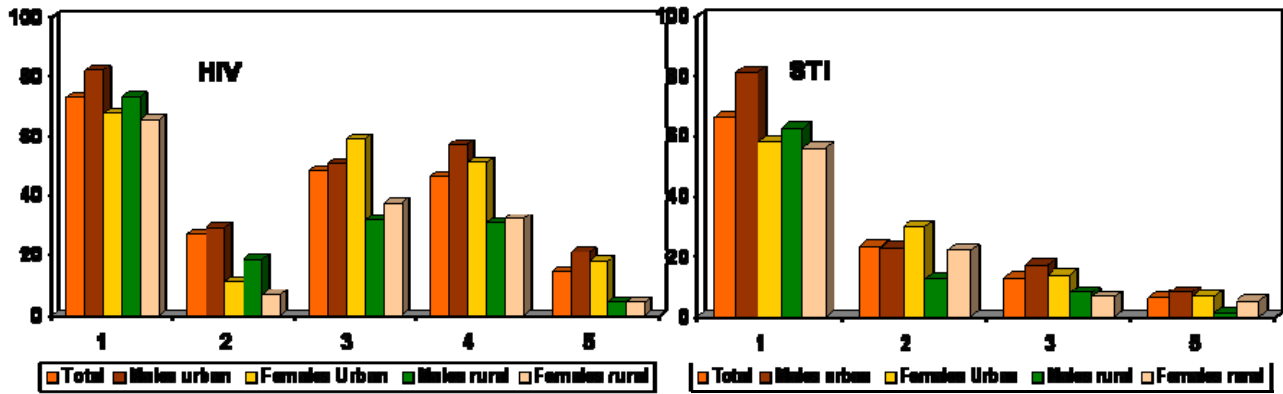
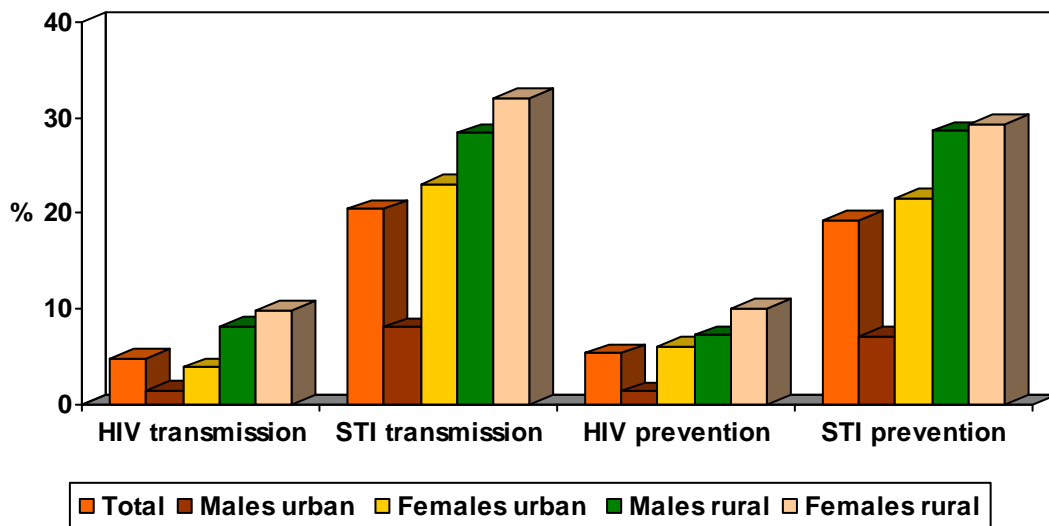
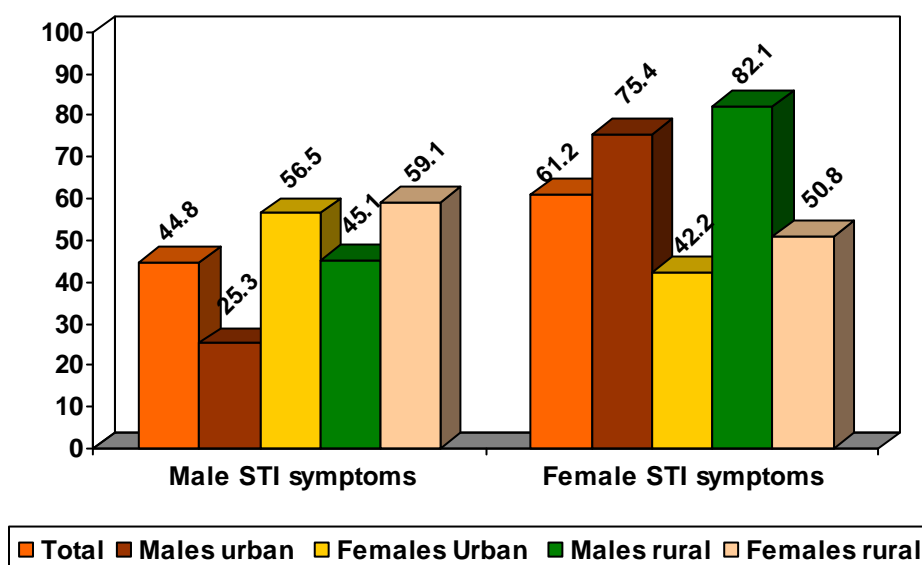


Fig. 8. Proportions who did not know modes of HIV/STI transmission and prevention



Concurrently to having less knowledge about STI transmission and prevention, the proportions who did not know the symptoms of STIs were substantial. Urban males were the group that was the most knowledgeable about STI symptoms in males (Fig. 9).

Fig. 9. Proportions who did not know the symptoms of STIs



Among all respondents, the vast majority (96.5%) said that they would seek medical advice from health professionals if worried about STIs. Very few complained of STI symptoms in the last year and of those who did, 75.1% went to a hospital or a doctor. Regarding the barriers to seeking STI services, distance to service providers or their working hours were not issues for close to 90% of the respondents. The main barriers were concerns regarding maintenance of confidentiality and that services were not user friendly. Similar concerns were expressed by out-of-school youth in the survey conducted earlier (7). Negative attitudes towards people who may be infected with HIV were reported by many university graduates in the 2005 survey (5). Stigma and discrimination is a major factor globally that impedes service delivery programs for HIV/STI and addressing this is essential.

### Other issues that enhance vulnerability

There are certain behaviours which carry high risk of HIV transmission and some of these are discussed below.

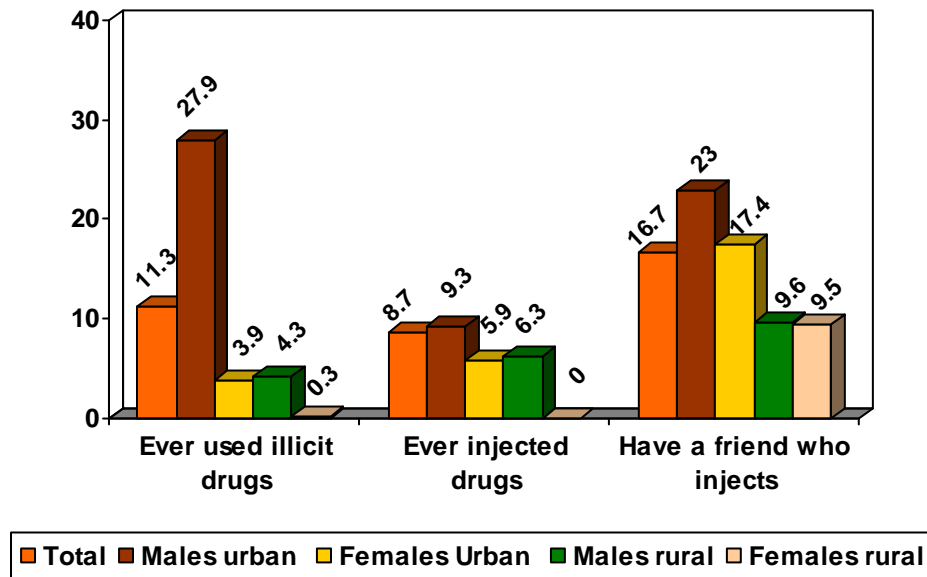
#### *Male to male sex*

An important behavioural determinant in the spread of HIV is male to male sex (8). In this survey, same sex partner was rarely reported. This may be an underreporting as male to male sex is very stigmatised and hidden in most societies (16).

#### *Illicit drugs*

Approximately 11% of the population said they had used any kind of illicit drugs in their lifetime and this was most common in urban males (Fig. 10). Among those who took illicit drugs, a small proportion said they had injected drugs at some point in their lives. However, substantial proportions said that they had a friend who injected drugs. Many countries in Asia are experiencing IDU driven epidemics (17) and the data available so far from Bhutan suggest that the although IDUs exist the numbers are probably small.

Fig. 10. History of illicit drug use and injecting drugs



**Violence**

35 unmarried respondents said they had been forced to have sex some time in their lifetime and of these 18 were men and 17 women; the overall proportions being higher for females than males and very often the perpetrators forcing sex were boyfriends or even girlfriends. It is believed that forced sex is likely to be unprotected and possibly associated with trauma, both of which can facilitate HIV /STI transmission. The proportion reported here is not large and whether this is an underreporting is not known. Nonetheless, this is an issue that requires special attention.

## 5. CONCLUSIONS

Overall, this survey reveals that there are factors that may allow the spread of an HIV epidemic but on the other hand there are many positive measures being undertaken and protective behaviours that are being adopted.

The main concern is the high numbers of men and women engaging in casual sex with multiple sex partners and the large numbers of men buying sex from presumably a small group of sex workers. The encouraging findings are that condom use is relatively high, condoms appear to be readily available and there are many programs through which prevention messages for HIV are being provided. However, women, especially in rural areas, appear to be being left behind in terms of receiving knowledge and services. In addition, fear of disclosure and stigma are major barriers to service provision.

There are some major gaps in information in Bhutan particularly about the most-at-risk populations – sex workers, males having sex with males and injecting drug users, who in many countries in Asia are the main drivers of the epidemic. Data from this general population survey suggests that there are sex workers and that there are people who inject drugs. More in-depth studies are required to be able to reach such populations and make services available to them to prevent an HIV epidemic in Bhutan.

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## 7. APPENDIX

### HIV/AIDS General Population Baseline Survey Questionnaire, BHUTAN

Date : \_\_\_\_\_

ID No:

Interviewer ID

Time started \_\_\_\_\_ AM PM finished \_\_\_\_\_ AM PM

#### INFORMED CONSENT FOR RESPONDENT

Hello. My name is \_\_\_\_\_. We are now conducting a national survey about prevention of HIV/AIDS under the authority of Ministry of Health. We would very much appreciate your participation in this survey. I would like to ask you some questions about sexual health issues and HIV/AIDS. This information will help the government to plan prevention services to stop the spread of HIV/AIDS in Bhutan. The survey usually takes between 30 to 40 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?  
May I begin the interview now?

Signature of interviewer: \_\_\_\_\_ Date: \_\_\_\_\_

RESPONDENT AGREES TO BE

INTERVIEWED Yes \_\_\_ No \_\_\_



**INFORMED CONSENT OF PARENT/GUARDIAN FOR INTERVIEWING SUBJECTS 15 TO 17 YEARS OF AGE**

Hello. My name is \_\_\_\_\_. We are now conducting a national survey about prevention of HIV/AIDS under the authority of Ministry of Health. Adolescents and youth will be interviewed from all over the country to have an idea about sexual health issues and HIV/AIDS. Your son/daughter was selected to be interviewed. We would very much appreciate your consent for his/her participation in this survey. This information will help the government to plan prevention services to stop the spread of HIV/AIDS in Bhutan. The survey usually takes between 30 to 40 minutes to complete. Whatever information your daughter/son provides will be kept strictly confidential and will not be shown to other persons.

At this time, do you want to ask me anything about the survey?  
 May I now ask your son/daughter for permission to be interviewed?

Signature of interviewer: \_\_\_\_\_ Date: \_\_\_\_\_

PARENT/GUARDIAN AGREES  
 to son/daughter being interviewed Yes \_\_\_ No \_\_\_

**IDENTIFYING INFORMATION: I would like to begin by asking a few questions about yourself and your family. If you do not understand my question, please tell me and I can further explain.**

1. DZONGKHAG: _____	<input type="checkbox"/> <input type="checkbox"/>
2. SITE: _____ _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3. GENDER 1 = Female 2 = Male	<input type="checkbox"/> <input type="checkbox"/>
4. AGE (in years)  4. a. If 15-24 years, site of interview 1 = school 2 = at home	<input type="checkbox"/> <input type="checkbox"/>
5. MARITAL STATUS: 1: married 2. formerly married 3. never married	

**SECTION I: SOCIO-DEMOGRAPHIC CHARACTERISTICS**

	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101.	What is your religion?	Buddhism..... 1 Hinduism ..... 2 Christian.....3 Others.....4	<input type="checkbox"/>
102.	What ethic group do you belong to?	Ngalop.....1 Scharchop (Tshangla).....2 Kurtep.....3 Bumthap.....4 Lhotsampa.....5 Khengpa.....6 Tibetan.....7 Other .....8	<input type="checkbox"/>
103.	What is the highest class you completed?  <b>Enter only completed Class.</b>	Never attended school ..... 00 Class _____ Don't Know.....99	→ Go to 104 <input type="checkbox"/> <input type="checkbox"/>
103a.	If no schooling, other education?	Non-formal education.....1 Monastic Institution.....2 Other .....3 (Specify) None.....4	<input type="checkbox"/>
104.	Can you read in any language?	Yes.....1 No.....2	<input type="checkbox"/>
105.	How often do you read newspaper or magazine: every day, at least once a week, or less than once a week?	Every day.....1 At least once or more in a week...2 Less than once a week.....3 Do not read newspaper/magazine.4	<input type="checkbox"/>
106.	How often do you listen to the radio: every day, at least once a week, less than once a week?	Every day.....1 At least once or more in a week..2 Less than once a week.....3 Do not listen radio.....4	<input type="checkbox"/>
107.	How often do you watch television: every day, at least once a week, less than once a week?	Every day.....1 At least once or more in a week..2 Less than once a week.....3 Do not watch television.....4	<input type="checkbox"/>
108.	What is your occupation, that is, what kind of work do you <b>mainly</b> do?	Student .....01 Housewife .....02 Civil Service(Officer) .....03 Civil Service(Clerical) .....04 Business .....05 Trading (Small business) .....06 Professional (Doctor/Teacher/Engineer) .....07 Farmer .....08 Artisan .....09 Skilled Laborers .....10	

		Domestic Help..... 11 Day labor..... 12 Bus/Truck driver ..... 13 Driver ..... 14 Transport helper ..... 15 Restaurant worker..... 16 Lay monk..... 17 Unemployed..... 18 Others ..... 19 (Specify)	<input type="checkbox"/>
109.	Do you work full time, part time or occasionally?	Full time..... 1 Part time..... 2 Occasionally..... 3	<input type="checkbox"/>
110.	How much does your family earn in an average month?	1 = Nu 0 – 499 2 = Nu 500 – 999 3 = Nu 1000 – 1999 4 = Nu 2000 - 4999 5 = Nu 5000 - 9999 6 = Nu 10000 + 7 = no answer 8 = don't know	<input type="checkbox"/>
111.	Who do you usually live with?	Own Family..... 1 Parents..... 2 Relatives..... 3 Friends..... 4 Hostel..... 5 Alone..... 6 Others ..... 7 (specify)	<input type="checkbox"/>

## SECTION II: KNOWLEDGE ABOUT CONDOMS

Now I would like to ask you questions about condoms, some of which may be sensitive for you. However, your answers will be extremely helpful to us. Your cooperation will be highly appreciated.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201.	Do you know what a condom is?	Yes..... 1 No..... 0 →	<b>Go to section 3</b>
202	From where/whom have you learned about condoms?  <b>Probe and circle positive responses</b>	Friend/Peers..... A Radio..... B TV..... C School Teacher/curriculum... D Health Workers..... E Husband/wife..... F Relatives..... G Awareness Programs..... H Shopkeepers..... I Family..... J Others ..... X	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		(Specify)	
203.	Why is a condom used?  Probe and circle positive responses	For contraception/Prevent Pregnancy.....A Prevent HIV/AIDS.....B Prevent STI.....C Other.....X (Specify) Don't know.....Y	
204.	From where can you get condoms?  Probe and circle positive responses	Hospital.....A ORC/BHU.....B Pharmacy.....C Shop.....D Village Health Worker.....E Condom/Daechong Box.....F Other.....X (Specify) Don't know.....Y	
205.	How many times can a condom be used for sex?	Once.....1 More than once.....2 Don't know.....7	
206.	If you were to want a condom, do you have easy access to them?	No.....1 Yes.....2 Don't know.....3	

### SECTION III: SEXUAL PRACTICES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	<b>Now I would ask you some questions about your sexual practices. These are very personal for you; I will never tell anybody what you tell me.</b> <b>[If married ask questions 301 to 305]</b> <b>[If not married go to questions 306 to 315]</b>		
301.	In the past year have you had sex with someone other than your spouse/partner?	Yes.....1 No.....0	→ 304
301a.	With whom?  (Prompt for all possibilities – read out the options)	Girlfriend/Boyfriend.....A Commercial sex worker.....B Casual acquaintance or neighbor...C Relative.....D (Specify) Stranger.....E Other.....F (Specify)	
301b.	Where did you have sex?  (Prompt for all possibilities – read out the options)	Own house/partner's house.....A Someone else's house.....B Hotel.....C Workplace.....D Shop.....E Other.....F	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		(Specify)	
301c.	Did you pay/receive any cash/kind for sex?	Paid Cash.....A Paid Kind.....B Received Cash.....C Received Kind.....D No.....E	
302.	In the past 6 months with how many people (other than spouse/partner) have you had sex?	Number of persons <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> None.....0	
302a.	Did you use condoms when you had extramarital sex?	Never.....1 Sometimes.....2 Always.....3	→ 302c only 302b and d <b>then go to 312</b>
302b.	For what reasons did you or your partner use a condom?  <b>(Probe for all possibilities – DO NOT read out the options)</b>	For contraception/Prevent pregnancy.....A Prevent HIV/AIDS.....B Prevent STI.....C Other.....D (Specify) Don't know.....E	<b>Go to 302d</b>
302c.	What was the main reason for not using condom?	I do not like.....A Partner does not like.....B Bad experience.....C Was not available at that time.....D Other.....E (Specify) No reason.....F	
302d.	The last time you had sex (other than with your spouse) did you use a condom?	Yes.....1 No.....2	
303.	Has anybody ever taught you how to use a condom?	Yes.....1 No.....0	
303a.	Do you feel that somebody should?	Yes.....1 No.....0	
304.	Was there ever a time when you thought of using a condom but ended up not using it?	Yes.....1 No.....0	→ 305
304a.	Why did this happen?	Partner did not like.....1 Was not available at that time.....2 Other.....9 (Specify)	
305	In the past year have you had intercourse (slept with someone) with someone from the same sex	Yes.....1 No.....2	<b>Go to section IV</b>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
306.	Have you ever had sex with any one?	Yes ..... 1 No..... 0 →	<b>Go to section IV</b>
307.	At what age did you first have sex?	Years <input type="text"/> <input type="text"/>	
308.	Did you pay/receive any cash/kind for sex?	Paid Cash.....A Paid Kind.....B Received Cash.....C Received Kind.....D No.....E	
309.	With whom did you have sex in the past 12 months?  <b>(read out the options)</b>	Girlfriend/Boyfriend ..... A Commercial sex worker .....B Casual acquaintance/ Neighbor.....C Relative _____ ..... D (Specify)  Stranger.....E Other _____ ..... F (Specify) None.....X →	Go to 311c
309a.	Where did you have sex?  <b>(read out the options)</b>	Own house/partner's house .....A Someone else' house .....B Hotel.....C Workplace .....D Shop.....E Other _____ ..... F (Specify)	
310.	In the last 6 months with how many people have you had sex?	Number _____ <input type="text"/> <input type="text"/> <input type="text"/> If none →	312
311.	Did you or your partner use a condom	Never..... 1 → Sometimes..... 2 Always ..... 3 →	311b only  311a and c  <b>then go to 312</b>
311a.	For what reasons did you/your partner use a condom?  <b>(Probe)</b>	For contraception/ to prevent pregnancy .....A Prevent HIV/AIDS .....B Prevent STI.....C Other _____ .....D (Specify) Don't know.....E	
311b.	What was the main reason for not using a condom?	I did not like ..... A Partner does not like.....B Bad experience with condom .....C	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		Was not available at that time ..... D Cost ..... E Using other family planning methods..... F Other _____ ..... G (Specify) No reason ..... H	
311c.	The last time you had sex did you use a condom?	Yes.....1 No.....2	
312.	Has anyone instructed you about how to use a condom?	Yes ..... 1 No..... 0	
312a.	Do you feel that somebody should instruct you about how to use a condom?	Yes ..... 1 No..... 0	
313.	Was there ever a time when you thought of using a condom but ended up not using it?	Yes ..... 1 No..... 0	→ 314
313a.	Why did this happen?	Partner did not like ..... 1 Was not available at that time ..... 2 Other _____ ..... 7 (Specify)	
314.	Have you ever had forced sex against your will?	Yes.....1 No.....2	→ 315
314a.	By whom?  Prompt (read out all options)	Girlfriend/Boyfriend ..... A Casual acquaintance/ neighbor .....B Relative _____ .....C (Specify)  Stranger.....D Other _____ .....E (Specify)	
315	In the past year have you had intercourse (slept with someone) with someone from the same sex	Yes.....1 No.....2	<b>Go to section IV</b>

**SECTION IV: KNOWLEDGE AND ATTITUDES TOWARDS HIV/AIDS AND OTHER STIs**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401.	Have you heard about HIV/AIDS?	Yes..... 1 No..... 0	→ 404
402.	How does a person become infected with HIV?  (Probe) Anything else?	Sex with HIV/AIDS infected person.....A Receiving HIV/AIDS infected blood.....B  Using non-sterile needles/syringes.....C Through pregnancy/delivery by a HIV/AIDS infected mother.....D Through breast feeding by a HIV/AIDS infected mother.....E By not using a condom during sex.....F By having sex with sex worker.....G Sex with multiple partner.....H Others.....I (Specify) Don't know.....99	
403.	Tell me all the ways that a person can protect himself/herself from becoming infected with AIDS?  (Probe) Anything else?	Limit sex within marriage.....A Use condom during sex.....B Avoid HIV/AIDS infected/unscreened blood transfusion.....C Use sterile syringes/needles.....D HIV/AIDS infected women should consult doctors before getting pregnant.....E Have faithful partner.....F Avoid sex with HIV/AIDS infected person.....G Avoid sex with sex worker.....H Avoid sex with multiple partner.....I Others.....J (Specify) Don't know.....99	
404.a	Have you ever heard of voluntary counseling and testing for HIV/AIDS?	Yes .....1 No .....2	
404.b	Have you ever been tested for HIV/AIDS?	Yes .....1 No .....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
405.	<b>I would request you to answer the following questions: please tell me whether the statement is true or false. I will begin with a few practice questions.</b>		
	I live in Bhutan	True.....1 False.....0 Don't know .....7	
	Bhutan has no mountains	True.....0 False.....1 Don't know .....7	
	a. Coughing and sneezing spread HIV/AIDS	True.....0 False.....1 Don't know .....7	



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	b. A person can get HIV/AIDS by sharing food/water with someone who has HIV/AIDS	True.....0 False.....1 Don't know .....7	
	c. All pregnant women infected with HIV will have babies born with AIDS	True.....0 False.....1 Don't know .....7	
	d. People are likely to get HIV/AIDS quickly and show serious signs of being infected	True.....0 False.....1 Don't know .....7	
	e. There is a vaccine that can prevent adults from getting HIV/AIDS	True.....0 False.....1 Don't know .....7	
	f. A person will not get HIV/AIDS if she or he is taking antibiotics	True.....0 False.....1 Don't know .....7	
	g. A person can get HIV/AIDS by taking bath in the same pool/tub with a person who has HIV/AIDS	True.....0 False.....1 Don't know .....7	
	h. HIV/AIDS is a curable disease	True.....0 False.....1 Don't know .....7	
	i. A healthy looking person may be HIV/AIDS positive	True.....1 False.....0 Don't know .....7	
	j. Injection drug use can be a source of HIV/AIDS	True.....1 False.....0 Don't know .....7	
	k. Unscreened blood can increase the risk of HIV/AIDS transmission	True.....1 False.....0 Don't know .....7	
	l. Risk of HIV/AIDS transmission can be reduced by using condoms	True.....1 False.....0 Don't know .....7	
	m. Transmission of HIV/AIDS can be reduced by limiting sex with one faithful partner	True.....1 False.....0 Don't know .....7	
	n. Using oil or a lubricant lowers the chance of getting HIV/AIDS	True.....0 False.....1 Don't know .....7	
	o. A woman cannot get HIV/AIDS if she has sex during her period	True.....0 False.....1 Don't know .....7	
	p. Taking a test for HIV/AIDS within one week after having sex will tell a person if she or he has HIV/AIDS	True.....0 False.....1 Don't know .....7	
	q. Having sex with more than one partner can increase a person's chance of being infected with HIV/AIDS	True.....1 False.....0 Don't know .....7	
	r. Showering, or washing one's genitals/private parts after sex keeps a person from getting HIV/AIDS	True.....0 False.....1 Don't know .....7	
	s. People are likely to get HIV/AIDS by kissing, putting their tongue in their partner's mouth, if their partner has HIV/AIDS	True.....0 False.....1 Don't know .....7	

	t. A woman can get HIV/AIDS if she has anal sex with a man having HIV/AIDS	True..... 1 False..... 0 Don't know ..... 7	
	u. A person can get HIV/AIDS from oral sex	True..... 1 False..... 0 Don't know ..... 7	
406.	From whom/where you have learnt about HIV/AIDS?  <b>Probe, anything else?</b>	Peer group/Youth..... A Radio..... B TV ..... C Booklet..... D School Teacher/curriculum..... E Book/newspaper/magazine/leaflets F Poster ..... G Bill Board/Sign Board ..... H Health Workers ..... I Hospital/Clinic/BHU ..... J Father ..... K Mother..... L Husband/wife ..... M Relatives ..... N Neighbor ..... O Community events (tshechus etc.) P Awareness Campaigns..... Q Others ..... X (Specify)	
406a	For you, what sources of information about HIV/AIDS have been helpful?  <b>Probe, anything else?</b>	Peer group/Youth ..... A Radio ..... B TV ..... C Booklet ..... D School Teacher/curriculum ..... E Health Workers ..... F Hospital/Clinic/BHU ..... G Father..... H Mother ..... I Husband/wife ..... J Community events (tshechus etc.)..... K Awareness Campaigns..... L Others ..... X (Specify)	
406b	For you, from the sources you mentioned, what has been the most helpful source of information about HIV/AIDS?	Peer group/Youth..... 1 Radio..... 2 TV ..... 3 Booklet..... 4 School Teacher/curriculum..... 5 Health Workers ..... 6 Hospital/Clinic/BHU ..... 7 Father ..... 8 Mother..... 9 Husband/wife ..... 10 Community events(tshechus etc.) 11 Awareness Campaigns..... 12	

		Others _____ 13 (Specify)	
406c	For you, what would be the preferred source of information about HIV/AIDS in the future?	Peer group/Youth..... A Radio..... B TV..... C Booklet..... D School Teacher/curriculum..... E Health Workers..... F Hospital/Clinic/BHU..... G Community events (tshechus etc.) H Awareness Campaigns..... I Others _____ X (Specify)	
407.	Have you heard about sexually transmitted infections, known as STIs ( <b>other than HIV/AIDS</b> )?	Yes..... 1 No..... 0	
408.	Can you tell me the name of any STIs? (you can explain STI at this point)	STIs	Unprompted Prompted No
	<b>IF RESPONDENT CAN NOT TELL PLEASE READ OUT</b>	a. Syphilis	1 2 0
		b. Gonorrhoea	1 2 0
		c. Chancroid	1 2 0
		d. Genital herpes	1 2 0
409.	How does a person become infected with an STI? <b>(PROBE)</b> <b>Anything else?</b>	Unprotected sex with STI infected person..... A Receiving STI infected blood..... B Through pregnancy/delivery by a STI infected mother..... C For not using a condom during sex... D By having sex with sex worker.... E Sex with multiple partner..... F Others _____ X (Specify) Don't Know..... Y	
410.	Tell me all the ways that a person can protect themselves from becoming infected with STI? <b>(PROBE)</b> <b>Anything else?</b>	Limit sex within marriage..... A Use condom during sex..... B Have faithful partner..... C Use new/sterile syringes/needles... D Avoid HIV/AIDS infected/unscreened blood transfusion... E Avoid sex with sex worker..... F Avoid sex with multiple partner... G Others _____ X (Specify) Don't know..... Y	

411.	What are the symptoms of STIs in males? <b>(PROBE)</b> <b>Anything else?</b>	Urethral discharge.....A Ulcer in genital region ..... B Burning sensation during urination..... C Pain in scrotum .....D Other_____ X (Specify) Don't know ..... Y																																									
412.	What are the symptoms of STIs in females? <b>(PROBE)</b> <b>Anything else?</b>	Genital ulcer.....A Increase vaginal discharge ..... B Pain during coitus ..... C May not have any symptoms.....D Other_____ X (Specify) Don't know ..... Y																																									
413.	Did you have any of the following symptoms in the past year?  Read out the options	<table border="1"> <thead> <tr> <th>Symptoms</th> <th>Yes</th> <th>No</th> <th>NA</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>ONLY FOR MALE</b></td> </tr> <tr> <td>A Urethral discharge</td> <td>1</td> <td>0</td> <td>___</td> </tr> <tr> <td>B Ulcer in genital region</td> <td>1</td> <td>0</td> <td>___</td> </tr> <tr> <td>C Burning sensation during urination</td> <td>1</td> <td>0</td> <td>___</td> </tr> <tr> <td>D Pain in scrotum</td> <td>1</td> <td>0</td> <td>___</td> </tr> <tr> <td colspan="4"><b>ONLY FOR FEMALE</b></td> </tr> <tr> <td>E. Genital ulcer</td> <td>1</td> <td>0</td> <td>___</td> </tr> <tr> <td>F. Increase vaginal discharge</td> <td>1</td> <td>0</td> <td>___</td> </tr> <tr> <td>G. Pain during coitus (sex)</td> <td>1</td> <td>0</td> <td><b>8</b></td> </tr> </tbody> </table>	Symptoms	Yes	No	NA	<b>ONLY FOR MALE</b>				A Urethral discharge	1	0	___	B Ulcer in genital region	1	0	___	C Burning sensation during urination	1	0	___	D Pain in scrotum	1	0	___	<b>ONLY FOR FEMALE</b>				E. Genital ulcer	1	0	___	F. Increase vaginal discharge	1	0	___	G. Pain during coitus (sex)	1	0	<b>8</b>	
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		If no symptoms	→ 414																																								
413a.	IF YES, What did you do for most recent symptom?	Consulted Doctors/Hospital.....A Went to BHU .....B Went to local/traditional healer.....C Went to village health worker.....D Shared with friend..... E  Other_____ F (Specify) Nothing .....G																																									
414.	If a person has an STI, is there any place known to you where one can get help? IF YES, from where/whom?	No/Don't know ..... 1 District hospital ..... 2 BHUs..... 3 ORCs.....4  Other_____ 5 (Specify)																																									

415.	Do you think that all STIs require medical treatment?	Yes ..... 1 No ..... 0 Don't know ..... 8	
416.	If you were worried you had an STI, what would you do?  <b>(PROBE)</b>	Consult a health provider/hospital A Seek advice of husband/wife ..... B Seek advice of parents ..... C Seek advice of peers/friends ..... D Seek advice from key adults ..... E Consult a traditional healer ..... F Consult a pharmacist ..... G Other _____ ..... H (Specify) Don't know ..... I Nothing ..... J	

**SECTION V: ATTITUDES, BARRIERS, SELF EFFICACY, SOCIAL NORMS, PERCEIVED RISK, REGARDING CONDOM USE, STI SERVICES AND OVERCOMING BARRIERS**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	<b>A. BARRIERS TO ACCESSING STI SERVICES AND CONDOMS</b> Now I would like to read you the following statements. Please tell me whether it is yes, no or don't know.		
501.	a. Do you know a health facility close to you where one can get STI services?	Yes ..... 1 No ..... 0 Don't know ..... 7	Go to c →
	b. Are the working hours of this health facility convenient to you?	Yes ..... 1 No ..... 0 Don't know ..... 7	
	c. If you ask for STI services do you think that the providers will refuse ?	Yes ..... 1 No ..... 0 Don't know ..... 7	
	d. Do providers keep information private?	Yes ..... 1 No ..... 0 Don't know ..... 7	
	e. Is there any place close by where you can get condoms?	Yes ..... 1 No ..... 0 Don't know ..... 7	
	f. Would you feel shy when getting condoms from these places?	Yes ..... 1 No ..... 0 Don't know ..... 7	
	g. Do people think badly if an unmarried person takes condoms?	Yes ..... 1 No ..... 0 Don't know ..... 7	

502	<b>B. SELF-EFFICACY FOR OVERCOMING BARRIERS</b>		
	How confident are you that you would be able to (if sexually active):		
	a. to discuss STIs with health workers?	Yes, comfortable..... 1 Not, comfortable ..... 0 Don't know ..... 7	
	b. to discuss STIs with your spouse/partner?	Yes, comfortable..... 1 Not, comfortable ..... 0 Don't know ..... 7 NA ..... 8	
	c. [for females only] ask your (regular/casual) spouse/partner to use condom?	Yes..... 1 No ..... 0 Unsure..... 7 NA ..... 7	
	d. [for females only] convince/negotiate your spouse/partner to use condoms?	Yes, I can ..... 1 No, I can't..... 0 Unsure..... 0 NA ..... 7	
	e. to buy a condom in a nearby shop even if the owner knows your family?	Yes, I can ..... 1 No, I can't..... 0 Unsure..... 0 NA ..... 7	
	<b>C. SELF-EFFICACY FOR CONTROLLING PARTICIPATION IN SEXUAL INTERCOURSE:</b>		
503	How confident are you that you would be able to:		
	a. To be able to say "no" when you do not want to have sex	Yes confident..... 1 Not confident ..... 0 Unsure..... 7	
	b. Ask for STI services at a nearby health center	Yes confident..... 1 Not confident ..... 0 Unsure..... 7	
504	<b>D. PERCEIVED RISK</b>		
	a. How likely is it that you could get a STI such as Syphilis or Gonorrhoea?	Yes, likely ..... 1 Unlikely ..... 0 Don't know ..... 7	
	b. Is it possible you could become infected with AIDS sometime in the future?	Yes..... 1 No..... 2 Don't know..... 3	
	c. How likely do you think it is that you could get HIV/AIDS? (chance)	Yes, likely ..... 1 Unlikely ..... 0 Don't know ..... 7	

**SECTION 6: This last section deals with the use of drugs. Again, let me emphasize any answers you give me will be strictly confidential and cannot be tied to you personally.**

<b>E. DRUG USE</b>		
601	Do you have a friend, close associate, who is an injection drug user?	Yes ..... 1 No..... 0
602	Have you ever used drugs?	Yes ..... 1 No..... 0 → end
603	Does that include any injection use?	Yes ..... 1 No..... 0 → End
604	Are you injecting drug currently?	Yes ..... 1 No..... 0 → Go to 607
605	For how long have you been injecting drug?	Years .....
606	What is the frequency of use?	Once a day..... 1 Once a week..... 2 Once a month ..... 3 Less than monthly.....4
607	Did you share needles in any occasion?	Yes ..... 1 No..... 0

**END OF INTERVIEW  
Thank You**