

# Sexual Behaviour and Risk Perceptions among Young Men in Border Towns of Nepal

*Migrant men are probably more at risk of STD/HIV infection than residents*

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The incidence of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) has increased significantly in Nepal in recent years. As of 31 May 2000, there were 1,541 identified HIV-positive cases in the country, of which 69.9 per cent were adolescents and young adults aged

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between 14 and 29 years (Ministry of Health, 2000). The major transmission route in this country is through heterosexual relations with non-regular sex partners and commercial sex workers (Karki, 1998). In view of the hidden nature of the problem, the actual size of the infected population is likely to be considerably larger.

Although there are no “red light” areas and brothels in Nepal, commercial sex work is prevalent in many towns, and particularly so along the country’s open border with India. In addition, it is estimated that several thousand girls and women from Nepal are serving in the sex industries in major Indian cities (National Planning Commission/Government of Nepal and UNICEF, 1996). Once they are diagnosed with HIV/AIDS, they are forced to return to Nepal, where they have no other choice but to continue their trade. In the process, they transmit the virus to their new clients.

The nature and extent of sexual contacts between individuals and their non-regular partners have important bearings on HIV transmission. In the absence of a cure or effective vaccine, the only way of preventing the spread of the disease is to try to change the sexual behaviour of sexually active persons by disseminating information about HIV/AIDS and by encouraging the use of condoms. Given their circumstances, it is difficult for many people to learn about or adopt safe sexual behaviour, or to insist on it from their partner (UNAIDS, 1996). Knowledge of safe sexual practices is a prerequisite for behavioural change, although, of course, it is not sufficient. Unless sexual behaviour changes and, in particular, condom use in relationships of risk increases, the incidence of HIV infection will continue to grow in Nepal.

This article aims to examine the extent to which young men aged 18-24 years who live in the border towns, as well as those who frequently visit these towns, engage in casual sexual relations and use condoms. It also explores whether these men consider themselves to be at increased risk of contracting sexually transmitted diseases, including HIV/AIDS, as a result of their activities.

### **Data sources and methodology**

The data for the present article are derived from a larger research study entitled “Sexual risk behaviour and knowledge and attitude to condom use and HIV/AIDS transmission among men in live border towns of Nepal” conducted by the authors during the period 1997-1998 with funding support from the World Health Organization (WHO). The article presents data gathered from

242 resident and 84 non-resident young men between 18 and 24 years old. The term "resident men" was defined to include those men who were resident in the town under study and had been so for the six months or more preceding the survey. The term "non-resident men" was defined as including those men who visited the town for business, project/official work or for religious matters, but who were not resident there. Most of the non-resident young men were short-term visitors (six days at most). A few (13 per cent) of them were citizens of India. Half of the non-resident young men stayed in a hotel or lodge, and nearly a third stayed at the home of relatives or friends.

Case studies of young men who showed high-risk sexual behaviour (14 from the resident and 8 from non-resident respondents) were also carried out to supplement the survey findings.

### **The site of the study**

The study was conducted in five border towns, namely, Kakarbhitta, Birgunj, Bhairawa, Nepalgunj and Dhangadi. These towns were purposely selected because of the higher concentrations of commercial sex workers in these locations, and also because of the free flow of a large number of transient people from both Nepal and India. Border towns such as Birgunj and Bhairawa were for a long time the principal trade routes between India and Nepal until, more recently, Kakarbhitta was opened as the eastern corridor for cross-border traffic of passengers and goods. The remaining towns (Nepalgunj and Dhangadi) function primarily as transit points for agricultural products.

### **The sample**

Data collection was accomplished in two phases: April-June 1997 for resident men and July-September 1997 for non-resident men. The sample of residents was chosen randomly from the core residential areas of the study sites. A cluster sampling approach was used in the selection of settlement clusters and sample households.

The sample of non-residents was obtained through purposive sampling to represent different occupational categories. The occupational categories considered for the study were drivers, conductors/assistants on public and private vehicles, rickshaw-pullers, businessmen, students and people engaged either in construction activities or the execution of development projects requiring frequent visits to the towns. These respondents were approached at meeting places such as bus parks, public places, places of work, restaurants and lodges. The respondents' consent to participate in the study was obtained and they were interviewed in private.

## **The questionnaire**

The questionnaire for the individual interviews was designed on the basis of the Global Programme on AIDS questionnaire for men, developed by WHO (1990), with modifications to suit the Nepalese context. The questionnaire for both resident and non-resident respondents was the same. Multivariate logistic regression analysis has been performed to identify the factors associated with the likelihood of involvement in casual sexual relations among sexually active males.

To identify men involved in non-regular sex, the respondents were asked whether they had had sex with anyone apart from their wife (in the case of married men) or regular partner (in the case of unmarried men) in the past 12 months. Among the sexually active unmarried young men, 52 per cent had a regular sexual partner, though no attempt was made to identify what type of sexual partner that person might be.

## **Results**

### **Background characteristics**

The demographic characteristics of 242 resident and 84 non-resident young men aged 18-24 years are presented in [table 1](#). Note that the samples differ in several respects. For example, in the non-resident sample, there are larger proportions of men with schooling above the secondary level; similarly, there are large proportions of those employed in the transport industry as drivers, conductors or assistants, than in the resident sample. Unmarried men (74-80 per cent) and those from ethnic communities in the hill areas (73-75 per cent) are well represented in both groups.

### **Sexual experience among unmarried young men**

Among the unmarried men, over half (54 per cent) of the residents and 40 per cent of the non-residents had had some sexual experience ([figure 1](#)). Of these, nearly a third of the residents and over half the non-residents said that they had a regular partner (data not shown). In terms of education, the better educated among the single residents seemed to be more sexually experienced: over half of those educated to the middle school level (58 per cent) and to the secondary level or above (51 per cent) were sexually experienced compared with only 43 per cent of those with primary education or less ([figure 1](#)). Among non-resident single men, however, 50 per cent of those with middle-grade education levels were sexually experienced compared with 43 per cent of

**Table 1. Percentage distribution of resident and non-resident young men, by their background characteristics, in Nepalese border towns**

Characteristics	Residents (percentage) (n = 242)	Non-residents (percentage) (n=84)
<b>Age (years)</b>		
18-19	40	18
20-24	60	82
<b>Marital status</b>		
Unmarried	80	74
Married	20	26
<b>Ethnicity</b>		
Hill origin	73	75
<i>Terai</i> origin	27	25
<b>Education</b>		
Primary (grade 5) or less	12	12
Middle (grade 6-10)	41	24
Secondary or above (grade 11+)	47	64
<b>Occupation</b>		
Student	53	42
Businessman	21	14
Service	14	14
Driver/conductor/helper	3	19
Others <sup>a</sup>	9	11
<b>Total</b>	<b>100</b>	<b>100</b>

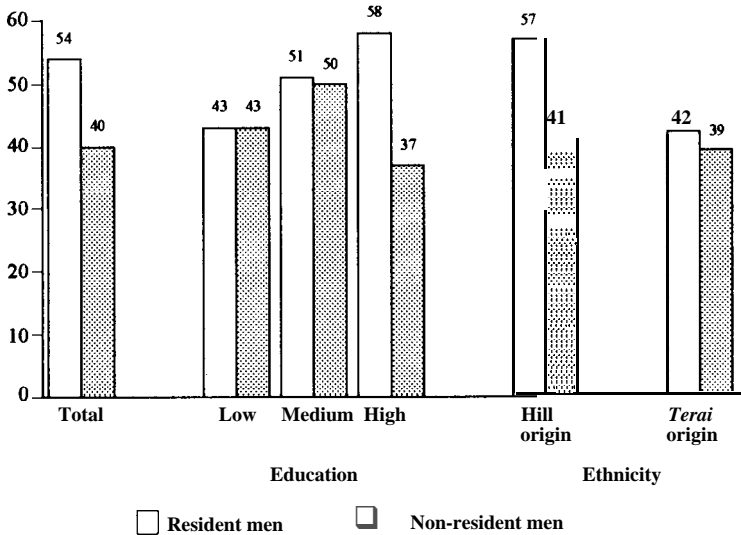
<sup>a</sup> Others include daily wage labourer, farmer, mechanic, social worker (volunteer), photographer and laundryman.

those with primary schooling or less, and only 37 per cent of the best-educated group. Ethnicity made a difference for residents but not for non-residents. Among single residents belonging to hill ethnic groups, 57 per cent were sexually active compared with only 42 per cent of those from *terai* (plains) ethnic groups, but non-residents of both ethnic groupings showed little divergence in terms of sexual experience.

### Age at first sexual experience

Among young men aged 20-24 years, 30 per cent of the residents and 35 per cent of the non-residents had become sexually experienced before they were 18 years old (table 2). Twenty-four per cent of the residents and 35 per cent of the non-residents had never had sex, and 15 per cent of the residents and 12 per cent of the non-residents were over 20 years old before their first

**Figure 1. Percentage of unmarried young men aged 18-24 years who are sexually active, by their background characteristics, in Nepalese border towns**



sexual experience. The median age at first intercourse was 18 years for residents and 17 years for non-residents. The in-depth interviews indicated that it was peer group influence that steered young men towards sexual experimentation. The following case study is such an example:

“I first had sex when I was 15 years old. I had little knowledge on this subject but was inspired by my village friend. One day he asked me to accompany him if I wanted to have contact with a *bhaloo* (commercial sex worker). Then, I accompanied my friend to a village near Taranagar where my friend used to have contact with a goldsmith’s daughter for a long time. After arrangements and fixing the deal, we had sex with her in the nearby forest. The cost of Rs. 200 (US\$ 1 = Nepalese Rupees 74.5) was borne by my friend. After getting and liking the taste of sex, I have been habituated to it and have had sexual relations with seven to eight women since then”.  
**(20-year-old single student resident)**

**Table 2. Percentage distribution of residents and non-residents aged 20-24 years, by age at first sexual intercourse, in Nepalese border towns**

Age at first intercourse (years)	Residents (percentage) (n = 153)	Non-residents (percentage) (n = 47)
<15	6	7
15	3	3
16	13	12
17	8	13
18	19	13
19	12	6
20+	15	12
No sexual experience	24	35
<b>Total</b>	<b>100</b>	<b>100</b>
Median age at first intercourse	18	17

### Sex with non-regular partners

One in four residents (27 per cent) and non-residents (25 per cent) said that they had had sex with a non-regular partner in the 12 months preceding the survey (table 3). A substantially higher percentage of married (46 per cent) than single non-residents (18 per cent) appears to have been engaged in non-regular sex and a slightly higher proportion of men with schooling up to middle grade or higher, wherever they lived, had had sex with non-regular partners than had those educated to the primary level or less. The ethnic background of the respondents had no marked effect on their involvement in non-regular sex.

Respondents were asked about whether their last non-regular sexual partner (NRSP) was a commercial sex worker, a friend or another person. The last NRSP of the large majority of single (82 per cent) and half of the married non-residents (50 per cent) was a sex worker (figure 2). In contrast, the last NRSP for the majority of both single (62 per cent) and married (69 per cent) residents was a friend (either in school/college or in the community). Even so, for about one third of the residents (31-33 per cent), their last NRSP was a commercial sex worker.

### Use of condoms

Information on the use of condoms during sex with NRSPs is shown in table 4. The proportion of men who had ever used a condom during sex with

**Table 3. Percentage of men aged 18-24 years who have had at least one non-regular sexual partner in the 12 months preceding the survey, by their background characteristics, in Nepalese border towns**

Characteristics	Residents	Non-residents
<b>Age (years)</b>		
18-19	20	7
20-24	31	29
<b>Marital status</b>		
Unmarried	27	18
Married	27	46
<b>Education</b>		
Primary or less	25	20
Middle grade	28	30
Secondary or higher	26	24
<b>Ethnicity</b>		
Hill origin	27	25
Terai origin	26	24
<b>All</b>	<b>27</b>	<b>25</b>

*Note:* Denominator includes virgins.

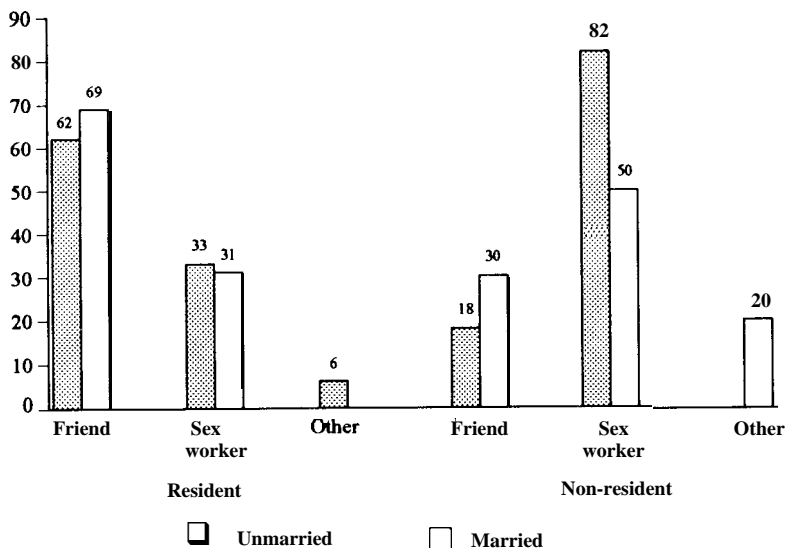
an NRSP is much higher among unmarried than married young men, whether resident or not. However, a rather smaller proportion (42-43 per cent) used a condom every time. But regular use of condoms by married men during non-regular sex was even lower: only 31 per cent among residents and 20 per cent among non-residents; and only 40 per cent of non-resident and 31 per cent of resident married men had used a condom during their last encounter with an NRSP. This is in marked contrast to the much higher percentage (52-82 per cent) of condom-users among unmarried men, whether resident or not, when they last had sex with an NRSP.

The case studies confirm that young men did not always use condoms with NRSPs, even if those partners were commercial sex workers. They were sure that they would not be the ones at risk of a sexually transmitted disease (STD) including HIV. Some did not use condoms in order to optimize “enjoyment”; others “did not have time to get condoms” or “could not buy a condom because of embarrassment”. The responses of these young men reflect the attitudes of a large number of men regarding condom use:

“As I have sex with clean or disease-free women, there is no need to use condoms... As this disease [AIDS] has spread everywhere, it is natural to fear it, but I take precautions by being selective about my partners”. **(22-year-old single student resident)**



**Figure 2. Among young men who had non-regular sex, the percentage reporting specified types of most recent partner, in Nepalese border towns**



“I have had sex with many girls and among them some may have had relations with others; also I never used a condom as the brain does not work while enjoying but so far I have no symptoms of AIDS”. (18-year-old student, unmarried resident)

“Sometimes due to excitement, my partners themselves take off the condom. . . They say ‘unless your semen comes out, we do not enjoy’ ”. (23-year-old truck driver of Indian origin)

“I had sex not only with women of my community but also with three other women in the past one year. Two of them were sex workers. I did not use condoms on any of the occasions. I did not have time to buy them and it is embarrassing for bachelors to buy condoms in our locality. However, I am sure that I do not have any diseases”. (22-year-old farmer, unmarried non-resident)

**Table 4. Percentage of men aged 18-24 years by extent of condom use during sex with non-regular sex partners in Nepalese border towns**

Condom use	Residents			Non-residents		
	Total	Unmarried	Married	Total	Unmarried	Married
Ever used a condom during sex with NRSP	60	65	38	76	91	60
Used a condom during last sex with NRSP	48	52	31	62	82	40
Used a condom every time during sex with a NRSP	41	44	31	43	64	20
<b>Number</b>	<b>65</b>	<b>52</b>	<b>13</b>	<b>21</b>	<b>11</b>	<b>10</b>

*Note:* NRSP = non-regular sex partner.

### **Risk perceptions among men involved in non-regular sex**

The vast majority of resident (89 per cent) and non-resident (76 per cent) young men who have had sex with non-regular partners felt they were not at risk of contracting any form of an STD or HIV (table 5). Their reasons for this belief differ marginally between residents and non-residents. The majority of men (50-52 per cent) in both groups believed their partners to be uninfected with any disease. However, more than half the non-resident men (56 per cent) were also confident about themselves not being at risk, saying that they had been using condoms during sex.

The case studies showed that, generally, men indulging in risky sexual behaviour were unconcerned about transmission and continued to expose themselves as well as their partners (regular or non-regular) to disease. Only when they began to experience signs or symptoms of STDs did they become worried about their exposure to HIV.

“Once I had bought a condom but did not use it as I thought it would not give sexual satisfaction, but since I have come to know about AIDS, I have thought of using it despite its minimal enjoyment”. **(19-year-old trader, non-resident, unmarried)**

“I did not always use condoms. I had suffered from syphilis last year. After that, I started wearing condoms. Whenever I recall those days when I was suffering from syphilis, I become frightened”. **(23-year-old transportation worker from Bihar, India, married)**

**Table 5. Perceived risk of contracting sexually transmitted diseases including HIV among residents and non-residents aged 18-24 years who had had sex with a non-regular sex partner, and reasons for belief that they are not at risk, in Nepalese border towns**

	Resident (percentage)	Non-resident (percentage)
<b>Perceived risk of STD/AIDS to himself</b>		
Yes	9	19
No	89	76
Don't know	2	5
<b>Total per cent</b>	<b>100</b>	<b>100</b>
<b>Number</b>	<b>65</b>	<b>21</b>
<b>If not, reasons</b>		
My partner is not infected	52	50
I use condoms all the time	38	56
My partners have sex only with me	9	—
I avoid sex with girls having multiple partners	7	—
No symptoms of venereal disease have yet developed on me	3	—
I use condoms most of the time while having sex with commercial sex workers	2	—
No risk of contracting because blood test should be HIV-positive	2	—
AIDS had not originated when I had many partners	2	—
I have not had sex with many girls	2	—
I wash my penis with urine immediately after sex	2	—
<b>Number</b>	<b>58</b>	<b>16</b>

*Note:* Percentage total exceeds 100 due to multiple responses.

### **Predictors of non-regular sex**

Multivariate analysis was carried out to identify the factors associated with the likelihood of involvement in non-regular sexual contacts. The dependent variable in the multivariate analysis was whether the young man was involved in non-regular sex in the previous 12 months (i.e. sexual intercourse with anyone apart from his wife or a regular partner). The analysis was based on 242 resident and 84 non-resident young men aged 18-24 years. Residents and non-residents were analysed separately.

It appeared, on the basis of initial exploration of the data, that non-regular sex among non-residents was associated with factors such as frequency

of visits to the border town, duration of stay, place of stay and the habit of drinking alcohol. Thus, these variables along with socio-demographic variables were included in the multivariate model. A logistic regression technique was employed to estimate the likelihood of involvement in non-regular sex, as the dependent variable was dichotomous (Hosmer and Lameshow, 1989).

The results of the multivariate analysis are presented in [table 6](#). They indicate the habit of drinking alcohol to be the only significant predictor of risky sexual activity for resident men. Of the total of 242 resident men, 55 per cent drank alcohol; of those, 74 per cent reported at least one non-regular sexual contact. Resident men who drink were almost four times more likely to be involved in non-regular sexual behaviour than those who do not drink. However, this variable was dropped in the non-resident model owing to its inexplicably high coefficient, perhaps a reflection of the small sample size.

Marital status turned out to be a significant predictor of involvement in non-regular sex, but the effect was not the same for both groups. Among non-residents, married men were much more likely to be involved in risky sexual behaviour than single men, whereas among residents, the difference was small and not significant. Married non-residents were 87 per cent more likely to be involved in non-regular sex than single non-residents.

Neither education nor occupation showed significant association with non-regular sex. However, exposure to mass media emerged as a significant predictor, but not in the direction that might have been expected. Although one might suppose that increased exposure to television would be associated with lower involvement in non-regular sex because educational messages about safer sex practice in the context of HIV/AIDS appear quite frequently on television, the results in [table 6](#) contradict this expectation. They indicate that residents who watch television regularly were 51 per cent more likely to engage in risky sexual behaviour than residents who rarely watch. This result is of borderline significance at the 95 per cent confidence level. Similarly, among non-residents, men who watch television regularly were 89 per cent more likely to engage in risky sexual behaviour than those who rarely watch. This difference is statistically significant.

For non-resident men, three extra variables were included: frequency of visits to the town, duration stayed and place stayed during the visit. Non-resident men who visited the town more frequently were nearly three times more likely to be engaged in non-regular sex than those who visited the town less frequently. Similarly, non-resident men who stayed in a hotel, lodge

**Table 6. Estimated odds ratios (and 95 per cent confidence intervals) of having had non-regular sex, among residents and non-residents aged 18-24 years, by selected predictors, in Nepalese border towns**

Variables	Residents		Non-residents	
	Odds ratio	95 per cent CI <sup>a</sup>	Odds ratio	95 per cent CI <sup>a</sup>
<b>Education</b>				
Primary or less	1.00	—	1.00	—
Middle (grades 6-10)	1.30	(0.44, 3.90)	0.60	(0.07, 4.99)
Secondary or higher (grade 11+)	1.23	(0.39, 3.89)	0.33	(0.03, 3.41)
<b>Occupation</b>				
Professional	1.00	—	1.00	—
Non-professional	1.06	(0.42, 2.70)	0.75	(0.08, 7.24)
Student	0.78	(0.30, 2.02)	0.89	(0.13, 6.19)
<b>Marital status</b>				
Married (reference)	1.00	—	1.00	—
Unmarried	1.19	(0.51, 2.75)	0.13	(0.63, 0.60)
<b>Ethnicity</b>				
Hill origin	1.00	—	1.00	—
Terai origin	1.00	(0.48, 2.06)	0.40	(0.09, 1.83)
<b>Exposure to television</b>				
Almost every day	1.00	—	1.00	—
Rarely	0.49	(0.20, 1.18)	0.11	(0.02, 0.61)
<b>Frequency of visit to the town</b>				
Once in two months or less	—	—	1.00	—
Once a month or more	—	—	2.74	(0.57, 13.29)
<b>Duration stayed</b>				
Short (1-3 days)	—	—	1.00	—
Long (4 + days)	—	—	0.52	(0.08, 3.51)
<b>Place stayed</b>				
Friend/relatives	—	—	1.00	—
Hotel/lodge/vehicle	—	—	2.53	(0.66, 9.62)
<b>Drinking habit</b>				
No (reference)	1.00	—	—	—
Yes	3.94	(2.01, 7.74)	—	—
<b>Model chi-square</b>	25.08		21.32	
<b>DF</b>	8		10	
<b>Number</b>	242		84	

<sup>a</sup> CI = Confidence interval.

or guest house during their visits to the towns were two and half times more likely to have non-regular sex than those who stayed with friends or relatives (table 6). However, these effects do not attain statistical significance.

### **Conclusions and discussions**

This is an exploratory study that attempts, for the first time, to understand the extent and nature of sexual risk behaviour of young men living in or visiting Nepalese border towns. It is also intended to contribute to narrowing existing information gaps pertaining to high-risk sexual behaviour among the adult male population at large.

About 50 per cent of single men aged 18-24 years living in border towns and visiting these towns are sexually experienced. Most of them had their first sexual encounter during adolescence, with the median age at sexual debut being around 18 years. As age at marriage for men in Nepal is about 22 years, this result implies that men in border towns typically experience several years of sexual exposure before marriage.

The design of the study was based on the assumption that migrant men would be more likely to engage in extramarital sex than resident men. Many studies in low-income countries have shown such a relationship (for example, Jochelson and others, 1991). In this study, however, little difference was observed between residents and migrants in the probability of non-regular sexual contacts. In each group, about one quarter reported at least one non-regular partner in the preceding 12 months. The striking contrast between the residents and migrants lies in the nature of the sexual partners. The latter appear much more likely to have sex with prostitutes. This distinction is readily explained by the likelihood that temporary visitors to border towns do not have the opportunity to establish relationships with women who are not involved in commercial sex. Because of this factor, migrant men (particularly those making frequent short visits to border towns) are probably more at risk of STD/HIV infection than residents, and this should be a matter of serious concern to health policy makers.

In many countries, single men are more likely to engage in non-regular sex than married men (Carael and others, 1995). In our study, no such pattern was found. Among residents, there was no difference between married and single men and, among migrants, married men were significantly more likely to report at least one non-regular partner than single men. Moreover, married men were less likely to use condoms during non-regular sexual encounters, which enhances the risk of infection.

Overall, only about 40 per cent of the men reported regular use of condoms during non-regular sexual encounters. The reasons for non-use parallel those found in 'many other studies: fear of losing sexual pleasure, embarrassment over buying condoms and a belief that careful selection of partners offers sufficient protection. It is of great concern to note that the large majority of young men who engage in non-regular sex perceive little or no risk of STD/HIV infection to themselves.

Analysis indicated that men who watch television often are more likely to engage in non-regular sexual behaviour than those who rarely watch television. The survey did not collect information on respondents' income, but it is likely that those who watch television belong to higher-income brackets and are therefore able to pay for commercial sex workers. Nevertheless, this apparent link needs further exploration. Among residents, drinking habits emerged as the only significant predictor of non-regular sex. This link is consistent with results from many other studies (for example, Kiraju and Zabin, 1993).

The findings have important policy implications. They show that mobile young men are more vulnerable to contact with sex workers and may therefore be responsible for the transmission of STDs and HIV/AIDS to their partners. Programmes aimed at the promotion of safer sexual practice should be targeted at such groups. Similarly, drinking habits have emerged as a strong predictor of sexual risk behaviour. Therefore, it is also important to develop suitable educational messages linking STD and HIV/AIDS infections to increased risk in casual sexual relations resulting from alcohol consumption. The existing messages on safer sexual practice and condom use also need strengthening to produce a more effective impact on the target audience. Further research is needed to examine the link between mass media, such as television and radio, and risky sexual behaviour and condom use.

### **Acknowledgements**

The investigation received financial support from the Department of Reproductive Health and Research, World Health Organization, Geneva. The authors are grateful to Iqbal H. Shah, Acting Chief, Strategic Component on Social Science Research on Reproductive Health, Department of Reproductive Health and Research, WHO, for funding the study. The authors also acknowledge the technical guidance in data analysis given by John Cleland, Centre for Population Studies, London School of Hygiene and Tropical Medicine, Roger Ingham and Zoe Matthews, both from the University of

Southampton, United Kingdom of Great Britain and Northern Ireland. The views expressed in this article are those of the authors and not necessarily those of the Centre for Research and Environmental Health and Population, Kathmandu.

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