# Knowledge and Beliefs about HIV/AIDS among Young People in Urban Nepal

Among young people in urban Nepal, females and married individuals are disadvantaged in terms of knowledge of HIV/AIDS and other sexually transmitted infections and preventive measures relative to their married and unmarried counterparts.

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Until recently, little information has been available on sexually transmitted infections (STIs) in the Nepalese population. Prior to the recognition of HIV/AIDS as a national health problem in the mid-1990s, health authorities in Nepal paid little attention to STIs. Few hospitals or clinics collected statistical information on cases or treatment<sup>1</sup>.

A 1993 survey by the World Health Organization found STIs to be more prevalent in urban than in rural areas and that those seeking treatment — primarily in the private sector — were mostly males and aged between 15 and 25. Since then,

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various investigations have suggested incidence rates ranging from 6 to more than 100 per thousand adults. Serologic testing of blood donors and pregnant women has shown syphilis seroprevalence to be between 1 and 2 per cent nationally. Other STIs reported include gonorrhea, chancroid and genital herpes.

AIDS was first detected in Nepal in 1988. As of October 2001, 2,097 HIV-positive cases (1,508 males and 589 females) had been reported to the National Centre for AIDS and STD Control (NCASC) at Kathmandu. Most of the infected individuals (56 per cent of all cases) were in the age group 20–29 and were likely to have been infected as a result of heterosexual relations. Sentinel surveillance has been sporadically in place since 1991. HIV prevalence was found to be 1 per cent among prostitutes in the period 1991–1992, and 0.2 per cent among women seen at antenatal clinics in 1996. NCASC estimated a total of 15,000 HIV-infected individuals in Nepal as of 1999 and projected that the annual death toll from AIDS would reach 1,000 the following year.

The first baseline knowledge, attitudes and practice (KAP) survey on STI/AIDS in Nepal was conducted in 1993 in Nuwakot district. Interviewing "clusters" of respondents, the KAP survey found their knowledge of HIV/AIDS to be relatively low (24 per cent), but higher than for STIs in general (15 per cent). Not surprisingly, those with higher educational attainment were the most likely to be aware of STIs and HIV/AIDS while illiterate respondents had the least knowledge. Overall, only 13 per cent knew about any of the signs or symptoms of STIs and less than 10 per cent knew about any measures to prevent or reduce the likelihood of their transmission.

More recent investigations in Pokhara and Nepalganj, using anonymous self-administered questionnaires, have found a higher level of HIV/AIDS knowledge — as high as 90 per cent among higher-educated males — but persistent gender and educational differentials. An ethnographic study in 1996, conducted in several areas, suggested a high awareness of syphilis, gonorrhea and HIV/AIDS, and the fact that most respondents thought that HIV was spread by sex with multiple partners. There was consensus that better health education and reduced pre- and extramarital sexual activity were the most effective preventive measures. Few respondents mentioned condom use as an effective means of preventing the spread of HIV.

The HIV/AIDS situation in Nepal is worrying and worsening. Nepal has progressed from being a low-prevalence, low-risk population to one with a "concentrated" epidemic in the early 2000s (UNICEF, undated). For several years, HIV/AIDS has been concentrated in certain high-risk populations such as injecting drug users, commercial sex workers and truck drivers. In those populations, the pace of the epidemic's growth has recently accelerated. For example, in the capital city of Kathmandu, HIV infection among injecting drug users remained negligible during the early 1990s, but by 1997, nearly half of the users were infected (UNAIDS, 2002). Furthermore, in recent years, the epidemic has been found to be spreading among traditionally lower-risk populations, such as pregnant women.

The number of persons currently infected with HIV/AIDS is estimated at 58,000 (UNAIDS, 2002). The trafficking of girls (most of whom end up in brothels in Indian cities) and the seasonal out-migration of males to India (the rate in some districts is known to be as high as two thirds of the male population for four or five months annually) are generally thought to be two of the major factors contributing to the rise in infection rates. Owing to the potential for rapid spread of the epidemic to the general population, it is necessary to intensify urgently the efforts to promote preventive measures and behavioural change throughout Nepal's population, particularly among young adults.

This study focuses on the young population for several reasons. First, both the incidence and the prevalence of STIs are higher among young people than the general population. Second, there is a paucity of comprehensive age-cohort data and marital-specific cohort data for Nepalese under the age of 25. Third, for economic as well as social and health reasons, the public and private sectors in Nepal increasingly recognize the need to protect the health of the country's next generation of adults (Thapa and others, 2001).

# Data and methods

The data for the analysis are from the Nepal Adolescent and Young Adult (NAYA) Survey, conducted in 2000 in both urban and rural areas. The NAYA Survey oversampled the urban population to allow reliable estimates based on the urban adolescent and young adult population (Bastola, 2000). The analysis presented here focuses on the urban sample. The survey's sampling universe included the five largest urban areas — Kathmandu, Lalitpur, Pokhara, Biratnagar and Birgunj — which together accounted for approximately 50 per cent of the country's urban population as of the 1991 census. Respondents aged 14 to 22 years were selected by means of a stratified, two-stage sampling design with probability proportional to the estimated number of dwellings in the enumeration area.

Fifty-nine persons (11 supervisors and 48 interviewers) were assigned to work in the field for the urban component of the survey. Of them, 31 were men and 28 were women. Most of the survey staff were students having an average of 14 years of schooling. More than two thirds had spent their childhood in rural areas; 44 per cent were married.

A total of 18,311 houses were visited in all of the urban sample blocks. The houses contained 24,972 households (defined as household members who shared the same kitchen) or about 1.4 households per house visited. Among the households surveyed, 10,298 had eligible members — that is, males and females aged 14 to 22 who had spent the previous night in the house. From this number, a total of 3,053 eligible respondents in 2,000 households were selected for the interviews. Further details on sampling are given in Thapa, Dhital and Neupane (2002).

Ninety-six per cent of the selected households were successfully interviewed. A total of 2,824 respondents (92.5 per cent) were successfully interviewed in the five urban areas. All the results in this analysis are weighted

(Bastola, 2000). The weighted samples included in 988 single females, 451 married females, 1,272 single males and 113 married males. Given the small sample size for married males, the results for this subgroup should be interpreted with caution.

The overall non-response rate (including incomplete interviews) was 7.5 per cent (Thapa, Dhital and Neupane, 2002). Of the 229 non-response cases, 42 per cent were not interviewed because they were not at home (despite up to three attempts by interviewers to contact them), 29 per cent refused to participate in the interview, 13 per cent had their interviews terminated primarily because of interference by elders or other family members and 17 per cent could not be interviewed for various other reasons.

This paper is based on analysis of the data collected in the NAYA Survey's STIs and HIV/AIDS survey module (Family Health International and Valley Research Group, 2000), which examined respondents' knowledge, attitudes and practices related to sexually transmitted diseases. Given the sensitive nature of some of the questions in that module, it is likely that responses to some of the questions were not entirely candid (Thapa, Dhital and Neupane, 2002). Because of the very small number of persons reporting personal experience with an STI, the present report does not address incidence or prevalence. Instead, it focuses on awareness of STIs, knowledge of signs and symptoms, modes of transmission, preventive measures treatment, and sources of information. The main focus of the analysis is HIV/AIDS, although some data on two other types of STIs — syphilis and gonorrhea — are also included.

Results are disaggregated for four subgroups — single males and females and married males and females. This analysis, therefore, focuses on differentials by gender and marital status, factors that are increasingly known as important dimensions in health and development in general. An analysis based on the same survey data set also found that whether a young person is married or unmarried, male or female results in large differences in access and exposure to mass media in urban Nepal (Thapa and Mishra, 2003).

### Results

Respondents were asked if they had ever heard of three specific types of sexually transmitted infections (STIs) or diseases — HIV/AIDS, syphilis and gonorrhea. The results are shown in table 1. Two main themes emerge from these data. First, HIV/AIDS is the most commonly known and gonorrhea is the least known.

Second, awareness varies considerably according to the marital status of females, though much less so among males. Of the four population groups, married females have the lowest level of awareness. For example, whereas over 95 per cent of males (single or married) and single females have heard of HIV/AIDS, only about two thirds of married females have done so. Married females have consistently lower awareness of other types of STIs as well. While awareness of all three types of STIs is generally very low among all four groups, it is the lowest (6 per cent) among married females.

Table 1. Percentages of youth (aged 14–22) having heard of different types of sexually transmitted infections, by sex and marital status: urban Nepal, 2000

TO CONTE	M	Males		Females		
Type of STI	Single	Married	Single	Married	Total	
HIV/AIDS	98.0	96.5	96.0	68.4	92.6	
Syphilis	52.1	48.7	44.0	33.7	46.2	
Gonorrhea	22.2	15.9	25.0	10.2	21.0	
Any one	98.0	97.3	96.0	68.7	92.6	
All three	19.2	11.5	20.4	6.4	17.3	
(N)	(1,272)	(113)	(988)	(451)	(2,824)	

Table 2. Among youth (aged 14–22) aware of HIV/AIDS, percentages having knowledge of the principal modes of HIV/AIDS transmission: urban Nepal, 2000

Knowledge about	M	ales	Fei	Females	
transmission	Single	Married	Single	Married	Total
Having sexual intercourse with an infected person	87.3	80.8	90.1	85.3	87.8
Using non-sterile needles	60.5	41.1	72.4	45.9	62.3
Having sexual intercourse with a commercial sex worker	62.7	64.1	51.3	60.2	58.4
Receiving a blood transfusion	52.8	32.2	64.4	44.3	55.1
Having sexual intercourse with many partners	45.8	35.6	39.1	48.7	43.3
Any one of the above	96.2	88.1	97.6	95.1	96.2
All five of the above	15.5	10.1	14.3	9.4	14.1
Other <sup>a</sup>	41.1	33.9	31.0	21.0	34.8
Don't know	3.2	8.3	2.2	4.9	3.3
(N)	(1,247)	(109)	(948)	(308)	(2,613)

<sup>&</sup>lt;sup>a</sup> Includes sharing a shaver/razor, infected pregnant mother to unborn child, infected mother to breastfed child, sexual intercourse without using a condom, sexual intercourse with same-sex partner, oral/anal sex, sharing clothing, kissing, using public toilets, sharing meals, insect bites, sharing drinking vessels, using drugs and abortion.

All those who had heard of HIV/AIDS were further asked how it could be transmitted. The results are presented in table 2. The most commonly cited mode of transmission was having sexual intercourse with an infected person. Between 81 and 90 per cent of the respondents in the four groups gave this response, with the percentages among married respondents being lower than those for unmarried respondents both male and female. The other two modes of transmission mentioned were use of non-sterile needles and having sexual contact with a sex worker. Married males and females had lower awareness than their counterparts with respect to use of needles. However, the level of awareness was about the same (except for single females) across the groups with regard to having sex with a sex worker as a mode of transmission. The percentage who were aware that having multiple sex partners is a significant risk factor was generally low (ranging from 36 per cent among married males to 49 per cent among married females). Overall, although the great majority of the young people indicated an awareness of at least one mode of transmission, only about one is six was aware of all five modes. Awareness was lower among married males and females than among their unmarried counterparts.

Nine out of 10 respondents knew that a person who appeared to be healthy could spread the virus that causes AIDS (table 3). Males and females had similar levels of knowledge in this regard, but single individuals were better informed than married persons. The remaining 10 per cent were nearly equally divided between having misinformation and not knowing whether it was possible to identify an infected person from his or her appearance.

Table 3. Among youth (aged 14–22) aware of HIV/AIDS, percentage distribution of opinions regarding the possibility that a person who looks healthy can transmit HIV: urban Nepal, 2000

Is it possible for a person who	M	lales	Females			
looks healthy to transmit HIV?	Single	Married	Single	Married	Total	
Yes	89.5	81.7	92.6	84.7	89.7	
No	5.3	8.3	3.1	4.2	4.5	
Don't know	5.2	10.1	4.3	11.0	5.8	
Total	100.0	100.0	100.0	100.0	100.0	
(N)	(1,248)	(109)	(949)	(308)	(2,614)	

Respondents were asked what measures could be taken to reduce or avoid the possibility of exposure to HIV/AIDS or any other type of STI. At least 70 per cent of the respondents, irrespective of their sex or marital status, stated that avoiding sex with a sex worker is a precautionary measure (table 4). Using a condom during sexual intercourse and having only one steady partner were almost as frequently cited. However, married males and females were considerably less likely to cite condom use than unmarried young males and females. Although the

percentage of respondents with knowledge about at least one of these measures was quite high, the percentage knowing all three measures was much lower.

Table 4. Among youth (aged 14–22) aware of STIs, percentages reporting knowledge of various precautionary measures against STIs: urban Nepal, 2000

D		Males		males	T-4-1	
Precautionary measure	Single	Married	Single	Married	Total	
Avoid sex with commercial sex workers	71.0	72.6	71.8	69.8	71.2	
Wear a condom during sexual intercourse	74.5	52.6	61.2	48.5	65.7	
Have only one steady sex partner	68.7	52.7	62.8	63.0	65.2	
Any one of the above	90.7	81.8	91.6	89.4	90.5	
All three of the above	46.1	34.2	27.5	24.6	36.3	
Other <sup>a</sup>	21.0	12.6	18.7	15.5	19.2	
Don't know	7.8	14.8	5.7	9.7	7.5	
(N)	(1,247)	(111)	(949)	(310)	(2,615)	

<sup>&</sup>lt;sup>a</sup> Includes abstention from sexual intercourse, having sex with only a clean and healthy partner, using antibiotics prior to sexual intercourse, avoiding sharing underwear, not having sex with a same-sex partner, not sharing needles/syringes, using sterilized syringes, avoiding infected-blood transfusions, not using public toilets, being informed about the disease and avoiding drug use.

A final question about respondents' knowledge of STIs (including HIV/AIDS) concerned how STIs could be treated. The vast majority (80 per cent or more) said they would see a doctor. The other main treatment measures mentioned were taking antibiotics or consulting a health worker. Responses to this question did not vary much by the respondents' sex or marital status and are not presented.

Respondents who had indicated their familiarity with HIV/AIDS were asked where they had learned about the disease. The results are shown in table 5. Television was the leading means of receiving information about HIV/AIDS — and probably other STIs as well — among urban young people. Over 90 per cent of single males and females had heard about HIV/AIDS from television, as had nearly 80 per cent of their married counterparts. Radio was the second most common source of information; single males were more likely to cite this source than the remaining three population subgroups. Print media (newspapers and magazines) were cited more by single males and than by married males and females. Friends were also an important source, but more so for males than for females.

Table 5. Among youth (aged 14–22) aware of HIV/AIDS, percentages reporting various sources of information about HIV/AIDS: urban Nepal, 2000

S	M	Males		Females	
Source of information	Single	Married	Single	Married	Total
Television	92.6	77.6	94.1	78.8	90.9
Radio	79.5	68.1	71.2	69.9	74.8
Newspaper/magazine	56.2	38.9	45.8	24.3	47.9
Friend	51.7	54.2	23.6	28.4	38.9
School/teacher	45.0	11.0	42.6	8.8	38.4
Brochure/poster/leaflet	27.9	34.5	11.3	5.3	19.5
Neighbour	3.7	1.3	4.9	17.2	5.6
Spouse	na	3.7	na	30.7	3.8
(N)	(1,247)	(109)	(948)	(308)	(2,613)

na = not applicable.

*Note:* Sources, including an unspecified source, mentioned by less than 10 per cent of the respondents in all four subgroups are not shown.

Respondents with knowledge of HIV/AIDS were asked where they could receive testing for the disease. The overwhelming majority knew they could obtain AIDS testing at a government hospital. Other sources mentioned were public and private clinics.

All respondents, including those not familiar with STIs, were asked with whom they usually discussed their own health problems. Their responses, presented in table 6, show wide differences by sex and marital status. Single females discussed such problems with their mothers (55 per cent) or female friends (23 per cent), almost to the exclusion of all other persons. Married females, however, were most likely to talk about such matters with their spouse (79 per cent).

Half of the single males discussed their health problems with a male friend (50 per cent). Married males were likely to discuss their problems with their own spouse (51 per cent), followed by a male friend (28 per cent). Thus a same-sex friend was identified as an important part of the health information network for single and married males and for single females, but not for married females, who tend to rely largely on their husbands.

Table 6. Percentage distribution of responses to question about the person with whom respondents usually discussed their own health problems: urban Nepal, 2000

D 11416. 1	M	Males		Females	
Person identified	Single	Married	Single Married		
Mother	16.4	3.6	54.8	9.8	28.3
Male friend	49.8	27.7	1.0	0.0	23.9
Spouse	na	50.9	na	78.5	14.6
Female friend	2.4	0.9	23.3	3.3	9.8
Other family member	7.4	0.0	13.3	4.4	8.7
Father	12.3	8.0	1.2	0.0	6.3
Other <sup>a</sup>	11.7	8.9	6.4	4.0	8.4
Total	100.0	100.0	100.0	100.0	100.0
(N)	(1,273)	(113)	(988)	(450)	(2,824)

na = not applicable.

That urban young people in Nepal are aware of HIV/AIDS is noted in table 7, which indicates that fully 70 per cent of the respondents stated that they had discussed HIV/AIDS with someone. Males and single respondents were more likely to have had discussions about HIV/AIDS than were females or married respondents. Males — both married and single — were most likely to have discussed this topic with a male friend; a comparatively low 24 per cent of married males said that they had discussed HIV/AIDS with their spouse. In contrast, three fourths of married females, had discussed HIV/AIDS with their husband. Females were more likely than males to have discussed this issue with a family member, and males were more likely than females to have had such discussions with a doctor or health worker.

It is to be noted that some of the observed differentials in the subgroups' awareness and precautionary measures could be associated with differences in their socio-economic characteristics, such as geographic locale, ethnicity, household living standard, age, education and work status (see Thapa and Mishra, 2003). To examine the net influence of these factors on awareness of STIs and precautionary measures, multivariate logistic regression analysis was performed separately for three outcome variables — heard of HIV/AIDS, gonorrhea and syphilis; heard of all five principal modes of transmission of HIV/AIDS; and heard of all three principle precautionary measures against STIs. (Definitions of these measures were discussed previously.) These dependent variables were used as dichotomous. Of the six independent variables examined, the two consistently and

<sup>&</sup>lt;sup>a</sup> Includes health practitioner, teachers, neighbour and the response "don't know".

significantly related factors were educational background and exposure to mass media. The net effects of these two factors (controlling for the effects of other factors) are given in table 8.

Table 7. Among youth (aged 14–22) aware of HIV/AIDS, percentages who ever discussed HIV/AIDS with others, and with whom they discussed this topic: urban Nepal, 2000

Daniel Mari	M	lales	Fei	males	Total
Description	Single	Married	Single	Married	
Ever discussed HIV/AIDS?					
Yes	76.4	69.7	65.0	58.8	69.9
No	23.6	30.3	35.0	41.2	30.1
(N)	(1,246)	(109)	(948)	(308)	(2,611)
Among those who ever discu person with whom they discu Male friend		91.1	7.4	6.8	55.8
Female friend	9.2	9.3	82.4	55.1	38.4
Teacher	27.8	5.4	39.4	5.5	28.6
Other family member	10.0	6.6	30.6	28.2	18.8
Sibling	4.8	0	29.4	12.0	13.6
Doctor or health worker	11.8	13.1	5.8	4.6	9.2
Spouse	na	24.4	na	74.0	8.4
(N)	(952)	(76)	(616)	(181)	(1,825)

na = not applicable.

*Note:* Type of person with whom HIV/AIDS was discussed with, including an unspecified source, mentioned by less than 10 per cent of respondents in all four subgroups is not shown.

The results indicate that completing high school is strongly and significantly associated with the respondents having heard of the three types of STIs, having heard of all five principal modes of transmission of HIV/AIDS, and having heard of all three principle precautionary measures against STIs. Furthermore, reading a newspaper or magazine at least once a week also has a net influence on all three outcome measures. Exposure to television and radio has a positive influence on the odds of having heard of principal precautionary measures against STIs, although it does not have a significant effect on the other two outcome measures. The two factors — education and mass media exposure — independently influence the outcome measures.

Table 8. Relative odds ratios, based on logistic regression, of the influence of educational attainment and exposure to mass media net of selected background variables<sup>a</sup> on knowledge of STIs, the principal modes of transmission of HIV/AIDS, and the principal precautionary measures against STIs: urban Nepal, 2000

Variable	Heard of HIV/AIDS, gonorrhea, and syphilis	Heard of all five principal modes of transmission of HIV/AIDS <sup>b</sup>	Heard of all three principal precautionary measures against STIs <sup>c</sup>
Education			
None	1.005	ni	0.457*
Primary	1.0 (r)	1.0 (r)	1.0 (r)
Secondary	5.372***	1.417	1.093
High school or higher	10.138***	1.916**	2.360***
Exposure to mass media <sup>d</sup>			
Television	1.183	1.126	1.413**
Radio	1.167	1.031	1.336**
Newspaper/magazine	1.282*	1.695***	1.558***
(N)	(2,824)	(2,613)	(2,615)

<sup>\*</sup> p<0.05, \*\* p<0.01, \*\*\* p<0.001.

ni = not included in the model because of insufficient number of cases.

# (r) = reference category.

- <sup>a</sup> The other control variables included in the modelling were sex and marital status, location, ethnicity, household living standard, age and current working status. Details on ethnicity and household living standard variables are described elsewhere (Thapa and Mishra, 2003).
- <sup>b</sup> Having sexual intercourse with an infected person; using non-sterile needles, having sexual intercourse with a commercial sex worker, receiving, a blood transfusion and having sexual intercourse with many partners.
- <sup>c</sup> Avoiding sex with commercial sex workers, using a condom during sexual intercourse and having only one steady sex partner.
- <sup>d</sup> Listening to radio every day, or watching television at least once a week, or reading a newspaper/magazine at least once a week. reference group for each subgroup consists of those with no or irregular exposure.

# **Conclusion and implications**

The analysis of data based on the young population of urban Nepal shows that awareness of HIV/AIDS is very high. This must be considered a success as dissemination of information about HIV/AIDS is a relatively new phenomenon in Nepal, advocated widely only in the previous decade. Awareness of other two types of sexually transmitted infections or diseases — syphilis and gonorrhea — is relatively lower than that for HIV/AIDS. This is most likely due to the fact that information about these conditions has not received attention to the extent that HIV/AIDS has in the media. Other reasons may be that some respondents still feel shy or uncomfortable to talk freely about them or that local terms that refer to these may vary (Thapa, Dhital and Neupane, 2002). The data also reveal that a large proportion of the respondents are aware of at least one of the modes of transmission of the infections. Awareness of all modes of transmission is, however, low.

The data show unequivocally that married young people are generally less knowledgeable about STIs, their modes of transmission and preventive measures than unmarried young people and within each marital status category, females are generally less informed than males. In some respects, the finding that unmarried young people are more knowledgeable than their married counterparts should be considered an encouraging sign because, to the extent that premarital sexual behaviour occurs among young people, they might be expected to adopt safer sex behaviour. By contrast, the fact that married young people are less knowledgeable is disturbing and presents its own set of challenges. Should the pattern of transmission of new HIV/AIDS infections shift from being predominantely from sex workers-to-husbands to husbands-to-wives, a shifting risk pattern that has been emerging in such other countries as Cambodia (NCHADS, 2003), young married persons might potentially be at higher risk in the absence of knowledge and information regarding safer sex practices.

The reasons for lower levels of awareness among married females may be related to several factors, both contextual and personal. It is likely that their familial socialization and time allocation is different from that of their unmarried counterparts. They may not get as much time as unmarried individuals to socialize with peers, watch television or read print materials. Even when they socialize, their peers are likely to resemble them in terms of exposure and knowledge. Their educational background is also likely to be different. In other words, married young people might represent a different group of people than their unmarried counterparts. It should also be noted that because of early marriage patterns, the proportion of married young women in Nepal is large (see Choe, Thapa and Mishra, 2004; Ministry of Health, 2002).

The data also reveal that friends are generally the primary source for information-seeking and -sharing regarding STIs. This is true especially for unmarried males and females. For married males and females, the spouse is the primary source, although friends are also important.

The above findings have three main policy and programmatic implications. First, efforts must be made to narrow the information gaps that exist between the sexes and people's marital status. Married females remain largely neglected. Efforts must, therefore, be made to reach married females (and their husbands as well). Current approaches to information and knowledge dissemination do not seem to be sufficiently gender- or marital status-sensitive. As mentioned previously, married males and females are likely to have different patterns of time use and socialization than unmarried young people. This calls for a better understanding of these constraints and situations and the interventions that are designed appropriately for the situation.

Second, given that spouses and same-sex friends are an important source of information on health issues, it is important to pay more attention to developing quality and effective communication and trust skills among friends and between spouses. Young people and their peers should have access to quality information. Current school- or higher education-based curricula do not include interpersonal communication skills as a prerequisite in the learning process. Perhaps there is a need to look closely into this or at least to offer training programmes on a continuous basis through curricula in both in-school or out-of-school settings. Doing so could produce long-lasting benefits that would extend beyond HIV/AIDS concerns.

Third, completion of secondary education and regular reading of print media were found to be important vehicles for knowledge dissemination and acquisition. In the long run, as the proportion of young persons attending secondary school increases, along with access to the print media, knowledge dissemination or acquisition would seem to be a lesser problem. In the foreseeable future, however, finding ways to reach those with less than schooling at the secondary level or those having no access to print materials remains a challenge. Both gender- and marital status-sensitive approaches need to be developed and tested to reach them, probably through a combination of alternative approaches — television, local clubs, workshops, non-formal education curricula, and other modes. The rural setting may present even more difficult challenges, although this is outside the scope of the present analysis. Reaching out to the most disadvantaged and neglected segments of the population is not an easy task, but it should form an integral part of a comprehensive strategy aimed at a healthier future for young people in Nepal.

#### **Endnote**

1. The information in this section is based largely on Shrestha, Burathoki and Mugrditchian (1998) unless otherwise noted.

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