Original Article

Knowledge on HIV/AIDS among Secondary Level School Students in Kathmandu, Nepal

Tulsi Ram Bhandari[1*]

[1]**Department of Public Health, School of Health and Allied Sciences, Faculty of Science and Technology, Pokhara University, Lekhnath, Kaski, Nepal.**

ABSTRACT

Introduction: HIV/AIDS is a global epidemic and is considered one of the greatest public health problems both in developed and developing world. It has come into viewed as the single most dreadful challenge to public health, human rights and development in the new millennium. This study was under taken to assess the knowledge on HIV/AIDS among secondary level school students in Kathmandu district.

Methods: This was school based descriptive cross-sectional study. From Kirtipur municipality of the Kathmandu district, Balkumari secondary school was selected for the study. One hundred forty students of grade 8, 9 and 10 were the study population, out of the total students 43 % were selected purposively for the study.

Results: The results of the study showed that out of total respondents 62% were male and 60% were between 16 to 18 years of age group. Majority (91.6%) of the respondents reported that they heard about HIV/AIDS from the mass media. Regarding the modes of transmission, more than two-third respondents had got knowledge on causes of the transmission, from those the highest (85%) had reported the unsafe sex, 72% reported contaminated blood, 67% said vertical transmission and remaining 27% had not got any ideas about route of HIV transmission.

Conclusion: Most of the respondents had heard about HIV/AIDS. Regarding the modes of transmission, higher number of respondents has got knowledge about unsafe sex and contaminated blood with compare to vertical transmission. Likewise, almost of the respondents were attentive from mass media such as television, radio and peers.

Key words: Knowledge, HIV/AIDS, Mode of transmission, Prevention, School student.

INTRODUCTION

HIV/AIDS has emerged as the single most formidable challenge to public health, human rights and development in the new millennium. UNAIDS estimates 38 million people across the world are living with HIV/AIDS and 61000 of these people are living in Nepal.[1] The latest epidemiological trends in Asia, an estimated 4.7 million people were living with HIV in 2008. Similarly, in 2008, it was estimated 330000 people died of AIDS-related illnesses. While the annual number of deaths in South and South-East Asia in 2008 was approximately 12 %, the rate of HIV-related mortality in East Asia continues to increase. Asia, home to 60 % of the world's population, is second only to sub-Saharan Africa in terms of people living with HIV. India accounts for roughly half of Asia's HIV prevalence. With the exception of Thailand, every country in Asia has an adult HIV prevalence of less than 1%. While the regional epidemic appears to be stable overall, HIV prevalence is increasing in some parts of the region, such as Bangladesh and Pakistan.[2]

In Kathmandu Valley, an estimate of HIV cases is about 8000 (6000-8000), the main groups being IV drug user (IDU) and client of female sex worker (FSWs). Nepal's vulnerability to HIV/AIDS is fuelled by poverty, gender

* **Correspondence:** Tulsi Ram Bhandari, Department of Public Health, School of Health and Allied Sciences, Faculty of Science and Technology, Pokhara University, Lekhnath, Kaski, Nepal. Email: tulsib2004@gmail.com.

inequalities, low level of education and illiteracy, denial, stigma and discrimination. Nepal is fortunate in that it still has relatively few HIV/AIDS cases. However, there are already concentrated epidemics in the country. Immediate and vigorous action must be taken now to prevent further spread of HIV among groups at high risk and to stop the infection from taking a foothold in the larger population.[3]

Knowledge among high school students in Kathmandu valley on some aspects of the disease was quite low. Nearly 45 % had prior knowledge of HIV, 65.2 % knew that HIV/AIDS could be transmitted by sharing same needle, 46.2 % knew that vaccine is not yet available for HIV/AIDS. As sex wise distribution of the sample, female's knowledge about HIV was low 43.2 % as compared to male 48 %, male's knowledge about transmission of HIV/AIDS from pregnant mother to child was low; 89.7 % as compared to female's knowledge 94.2 %. Female's knowledge about commercial sex worker as high risk group was low (87.8 %) as compared to male's knowledge (90.6 %). [4]

The main purpose of this study was to assess the existing knowledge of secondary level school students on HIV/AIDS in Kathmandu district. The prevalence rate of HIV and AIDS is increasing gradually, with the injecting drug use as the primary mode of transmission of HIV/AIDS and STDs in young generation,[5] the young population will continue to be a priority of the nation thus the study was carried out among the youngsters.

METHODS

This study was school based descriptive cross-sectional study. From the Kirtipur municipality of Kathmandu district, Balkumari secondary school was selected for the study. All students (140) of grade 8, 9 and 10 were the study population; out of the total students, about 43% (60 students) were selected purposively for the study. Pre-tested interview schedule was used for collecting the data, before finalizing the interview schedule, it was pre-tested in 10 students of the Kirtipur secondary school of Kirtipur municipality, Kathmandu and it was finalized including the feedback of the pre-testing.

Before data collection, permission was obtained from the respective authority of the school as well as verbal consent was also obtained from the students and the data were collected by interviewing. The students were visited personally at convenient place and explained about the objectives of the study. During the interviewing, students were requested for answering according to their knowledge and attitude that they were feeling in existing situation related to STDs and HIV/AIDS. The data were analyzed and interpreted by using statistical package of social sciences (SPSS-11).

RESULTS

The results of the study showed that out of total respondents 62% were male and 60 % respondents were between 16 to 18 years of age group. The major castes of the respondents are Newar 26%, followed by Magar 21.6 %, Chhetri 18.3 %, Brahmin 15 %, Thakuri 8.3% and remaining are Gurung and Dalits. In the study, the respondents were equally represented from nuclear and joint family.

From the study it was seen that nearly 33% respondents were from illiterate parents and 26% parents of the respondents were just literate up to primary level. Regarding the occupational status of the parents, approximately 56% were agriculture, 27% were policy/ army and outstanding were labor, business and service. Similarly, most of the respondents were from migrant family and most of them were migrated there within ten years.

Majority of the respondents (91.6%) reported that they heard about HIV/AIDS. It indicates that majority of the respondents had some information about HIV/AIDS. The most of the respondents has got information from the mass media. The detail of the sources of information is given in table 1.

Table 1: Distribution of the respondents by sources of information/knowledge

Sources of Information	No.	%
Radio	8	13
Television	28	46
Teachers/Senior	12	20
Friends	9	15
Books	3	5
Total	60	100

Regarding the mode of transmission, more than two-third respondents had got knowledge on causes of the transmission of HIV/AIDS, from those the highest 85 % respondents had reported the unsafe sex, secondly, 72 % reported contaminated blood and thirdly, 67 % said vertical transmission and 27 % had not got any idea about route of HIV Transmission (Table 2).

Table 2: Distribution of the respondents by modes of transmission of HIV/AIDS*

Knowledge on Modes of Transmission	No.	%
Unsafe sex	51	85
Contaminated blood	43	72
Mother to child	40	67
No	16	27

(N=60) *Multiple responses

There are different methods of HIV transmission by contaminated blood but more 71 % respondents were familiar with unsterilized syringe and needles. Similarly most of them said that contaminated blood transfusion is the next common cause of the HIV transmission. For the diagnosis of the HIV/AIDS, nearly half of the respondents said that there is necessary laboratory blood test for the confirm diagnosis but remaining were not sure how to diagnose HIV/AIDS (Table 3).

Table 3: Identification HIV infected person with blood test

Response	No.	%
Possible	10	16.6
Not Possible	28	46.6
Don't Know	22	36.8
Total	60	100

Nearly two third respondents were familiar with condom from mass media (Table 4).

Table 4: Distribution of the respondents by knowledge about the condom

Source of Information	No.	%
Television/radio	39	65
Friends	9	15.
Family members	4	6.4
Health workers	4	6.4
School curriculum	2	3.2
No idea	2	3.2
Total	60	100

DISCUSSION

HIV/AIDS is a global epidemic and is considered one of the greatest public health problems both in developed and developing world. Millions of people have already lost their life since it was first detected in the 1980's. It is also considered one of the most destructive epidemics recorded in the history of the world.[6] Knowledge and attitude on HIV/AIDS plays vital role to reduce the disease. This study showed that majority (91.6%) of the respondents reported that they heard about HIV/AIDS. It indicates that majority of the respondents had some information about HIV/AIDS. The most of the respondents has got information from the mass media. AIDS is not a disease itself it is a syndrome caused by a virus in the body's immune system. It is the situation of losing the immunity power and finally gets death. There are three stages in the development of AIDS i.e. window period, carrier stage and full stage of AIDS. A person infected with HIV may be seen completely healthy prior to AIDS stage.

During the mid-1980s when adolescents survey about AIDS firs began, reserves were interested primarily in adolescents' knowledge of HIV transmission and in identifying the prevalence of sexual and drug use practices that might place them at risk of infection. Shortly thereafter, researcher began to compare the level of HIV knowledge and behavioral practices of different subgroups in the population.[7] The results of a study in Barbados showed high levels of correct knowledge about the principal routes of HIV transmission. However, a considerable proportion of the respondents harbored incorrect beliefs regarding mosquito transmission and dangers to blood donors, and many showed uncertainty or incorrect knowledge regarding possible HIV transmission by biting, spitting, or use of public toilets. About a third of the children (51.4% of the boys and 18.7% of the girls) said they had experienced sexual intercourse, though only 20% reported being sexually active in the year preceding the survey.[8] From this study it is seen that more two-third respondents had got knowledge on causes of the transmission of HIV/AIDS, from those the highest 85 % respondents had reported the unsafe sex, secondly 72 % reported contaminated blood and thirdly 67 % said vertical transmission and 27 % had not got any idea about route of HIV Transmission.

In traditional Nepali cultures and societies, any discussion on sex and sexuality is taboo, Husband and wife do not discuss sexuality and parents do not discuss sex with their children. In addition, low rates of literacy, a shortage of appropriate AIDS education message contributes to the growing AIDS problem in Nepal[9]. The proper usage of condom during sexual intercourse reduces the risk of transmitting and acquiring HIV infection and STDs. Use of condom is popular not only for the prevention of STDs and HIV but also popular

for family planning purpose. In recent year's condom promotion for prevention of HIV/AIDS transmission is gaining fair popularity among sex workers, migrant workers and the general people. Condom promotion is the best cost effective approach to prevent HIV/AIDS and it is one of the most popular devices of family planning method also. It is used for double purposes to prevent from STDs, HIV/AIDS and conception. So use of condom is very important to prevent HIV while having sex with infected partner. This study showed that nearly two third respondents were familiar with condom from mass media.

Public policies should enforce STD/HIV/AIDS prevention programs in elementary schools by encouraging teachers, parents and peers participation.[10] Still HIV/AIDS is regarded as non-curable disease, most of the efforts are concentrated on preventive measures of HIV/AIDS and research works for what may be the successful treatment of it.

CONCLUSION

It is concluded that most of the respondents had heard about HIV/AIDS. Regarding the mode of transmission, higher number of respondents has got knowledge about unsafe sex and contaminated blood with compare to vertical transmission. Likewise, almost respondents were become aware from mass media such as television, radio and peers.

Acknowledgement: I would like to express my sincere thanks to Mrs. Bisnu Ghimire, Mrs. Yamuna Baskota and Sakriya Sewa Samajha, Thapathali, Kathmandu for their financial and technical support. I would extend my hearty gratitude to the respondents and school family of Balkumari Secondary School, Kirtipur, Kathmandu.

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