

Original Article

Knowledge And Awareness About The Risk Of HIV/AIDS Among Truck Drivers Of A Selected Area

G Sadhya¹, AKMS Islam², R Islam³, NU Ahmed⁴, M Rahman⁵

Abstract

This cross-sectional study was conducted among the truck drivers at Daulatdia Ghat, Goalanda, Rajbari district. The objective of this study was to find out the knowledge and awareness about the risk of HIV/AIDS transmission among the truck drivers. Out of 226 respondents, 37.3% were within the age group 25 to 35 years. Most of the respondents (74%) were married and 44% were educated up to primary level. Half of the respondents (50%) had monthly income from taka 10,000 to taka 15,000 per month. From this study, it was found that 97% respondents had heard the name of HIV/AIDS, 61.8% had known about HIV/AIDS from media and newspaper. In respect of the route of HIV transmission, 39.8% of respondents thought that HIV is transmitted by sexual activities and 58.7% thought the disease is transmitted by syringe, transfusion. About 47.8% respondents thought that HIV can be detected from blood and 76% knew the fate of HIV/AIDS is death. Majority (82.5%) of the respondents obtained correct knowledge about HIV/AIDS transmission and 13.2% of them knew the place where test of HIV can be done.

Key word: Knowledge, HIV/AIDS, Risk, Truck drivers

Introduction

AIDS is an emerging socio-economic and medical problem of great magnitude having a world wide distribution. Among the global public health problems, AIDS becomes top the listed. Bangladesh is an HIV/AIDS vulnerable area due to its geographical situation. India has the highest prevalence of HIV/AIDS among the SAARC countries having the greatest boundary with Bangladesh. The other neighboring countries like Nepal, Myanmar also have remarkable prevalence^{1,2}. Recent sentinel sero-surveillance indicates HIV infection could become an alarming situation for our country. Ignorance and unsafe reproductive health behavior are the important causes of HIV transmission.

1. Dr. Gautam Sadhya, MPH (Nutrition), Lecturer, Dept. of Community Medicine, FMC, Faridpur.
2. Dr. A. K. M. Shariful Islam, DCM, DDV, Professor & Head, Dept. of Skin & VD, SSMC, Dhaka.
3. Dr. Rafiqul Islam, MPH (Epid), Lecturer, Dept. of Community Medicine, FMC, Faridpur.
4. Dr. Nasir Uddin Ahmed, D Card., Lecturer, Dept. of Physiology, FMC, Faridpur.
5. Dr. Mahbubur Rahman, MPH (Epid), Lecturer, Dept. of Community Medicine, FMC, Faridpur.

Address of correspondence:

Dr. Gautam Sadhya, MPH (Nutrition), Lecturer
Dept. of Community Medicine, Faridpur Medical College.
Phone: +880-01712175372. E-mail: gautamsadhya@yahoo.com.

The number of individuals infected with HIV, however, is many times higher than the number of AIDS cases. 10,000 people may become infected with HIV everyday. Approximately one out of three children born to an HIV-infected woman is HIV-infected and dies of AIDS, usually by the age of five years. The remainders eventually become orphans when their mother or both parents die of AIDS¹.

HIV is a retro virus from the Lentivirus family containing a single stranded (ss) molecule of RNA in its core. This core is surrounded by a double layered outer shell composed of a lipid layer lined by a matrix protein and studded with gp 120 and gp 40 spikes surrounding the protein core³. HIV is present in blood, semen, vaginal secretion and other body fluids such as breast milk, saliva and tears. Exposure to infected fluid leads to a risk of contacting infection, which is dependent on the integrity of the skin or mucosa of the exposed site, the type and volume of body fluid and the viral load^{4,5}.

Recognized as an emerging disease only in the early 1980s, AIDS has rapidly established itself throughout the world, and is likely to endure and persist well the 21st century. AIDS has evolved from a mysterious illness to a global pandemic which has infected more

than 10 millions in less than 20 years⁶. Globally, there were an estimated 33 million [30 million–36 million] people living with HIV in 2007⁷. Already more than 20 million people have died from AIDS, 2.0 million [1.8 million–2.3 million] people died due to AIDS in 2007, compared with an estimated 1.7 million [1.5 million–2.3 million] in 2001^{6,7}. Four million children have been infected since the virus first appeared⁶.

Several countries have been already experienced intense epidemic in certain population or in the population at large. In these countries, including Cambodia, India, Myanmar and Thailand, AIDS has imposed new demands on health care system. In 1984 Thailand was the first country in South East Asia Region (SEAR) to report a case of AIDS⁸. Since the diagnosis of first case of AIDS in Bangladesh in 1989 the total number of reported death are 165 till December 2008. The number of reported cases of AIDS is 476 and HIV sero-positive cases are 1495 but some claims that number of estimated cases of HIV will be more than 12,000^{9,10}. Although HIV prevalence rate remain relatively low, there is widespread presence of risk factors that make our country particularly vulnerable to HIV and AIDS⁸.

Individuals who are infected with sexually transmitted Infections (STIs) are at least two to five times more likely than uninfected individuals to acquire HIV infection if they are exposed to the virus through sexual contact. In addition, if an HIV-infected individual is also infected with another STI, that person is more likely to transmit HIV through sexual contact than other HIV-infected persons¹¹. Studies conducted among truck drivers and helpers in Bangladesh revealed a high prevalence of sexual risk behaviors and certain STIs; 54% truckers in the Tejgaon truck stand had sexual encounters with a commercial sex worker (CSW) in the past year, whereas 50% of the married males in the sample had sex with both a CSW and their wife during the same period¹². Another study conducted among truck stand workers in Dhaka, Bangladesh revealed that the prevalence rates of syphilis, gonorrhoea and chlamydial infections among men were 4.1%, 7.7%, and 2.3% respectively, and among women were 2.9%, 8.3%, and 5.2%¹³. Because truck drivers in Bangladesh, like in other countries, were found at higher risk for STI and sexual risk behaviors, they are also at higher risk for HIV/AIDS.

Materials and Methods

It was a descriptive type of cross-sectional study

conducted among the truck drivers at Daulatdia, Goalanda, Rajbari district. The sample size was 226. The period of study was from March to October, 2009. Purposive type of sampling technique was applied. Data were collected by a semi structured questionnaire as research instrument to carry out the study by face to face interview. The variables were socio-demographic characteristics, knowledge about HIV/AIDS transmission, virus detection, fate of HIV/AIDS, protection of HIV.

Results

Table I: Age group of the respondents

| Age group of respondents | Number | Percentage |
|--------------------------|--------|------------|
| <25 year | 55 | 24.8 |
| 25to35 year | 85 | 37.3 |
| 36 to 45 year | 57 | 25.0 |
| >45 | 29 | 12.9 |
| Total | 226 | 100.0 |

It shows that the age of 37.3% of the respondents were within 25-35 years.

Table II: Education of the respondents

| Education level | Number | Percentage |
|-----------------|--------|------------|
| Illiterate | 49 | 22.8 |
| Primary | 101 | 44.3 |
| Secondary | 70 | 30.7 |
| Above secondary | 6 | 2.2 |
| Total | 226 | 100.0 |

It shows that most 44.3% respondents were educated up to primary level.

Table III: Monthly income of the respondents

| Income of the respondents | Number | Percentage |
|---------------------------|--------|------------|
| < taka 10000 | 74 | 33.3 |
| taka 10000 to taka 15000 | 114 | 50.0 |
| > taka 15000 | 38 | 16.7 |
| Total | 225 | 100.0 |

It shows 50% of respondents earned taka 10000 to taka 15000 per month.

Table IV: Respondents heard the name of HIV/AIDS

| Name of HIV/AIDS | Number | Percentage |
|------------------|--------|------------|
| Yes | 221 | 97.7 |
| No | 5 | 2.3 |
| Total | 226 | 100.0 |

It shows that most of the respondents (97.7%) had heard name of HIV/AIDS.

Table V: Source from where respondents heard about HIV/AIDS

| Source | Number | Percentage |
|----------------------------|--------|------------|
| Radio, TV, newspaper | 141 | 61.8 |
| Health workers & relatives | 81 | 35.5 |
| Others | 4 | 2.7 |
| Total | 226 | 100.0 |

It shows that 61.8% of respondents had knowledge about HIV/AIDS from Radio, TV and newspaper.

Table VI: Knowledge about route of HIV/AIDS transmission

| Route | Number | Percentage |
|------------------------------|--------|------------|
| Sexual activities | 90 | 39.8 |
| Syringe sharing, transfusion | 131 | 57.9 |
| Vertical transmission | 5 | 2.3 |
| Total | 226 | 100.0 |

It shows that maximum (57.9%) respondents thought HIV transmitted by blood transfusion and syringe sharing.

Table VII: Knowledge about protection of HIV/AIDS transmission

| Protection | Number | Percentage |
|---|--------|------------|
| Avoid free sex, homo sex, use condom | 116 | 50.9 |
| Avoid sharing syringe, safe transfusion | 101 | 44.3 |
| No knowledge | 9 | 4.8 |
| Total | 226 | 100.0 |

It shows that most (50.9%) of respondents thought avoid free sex, homosex and use of condom best way to protect HIV/AIDS.

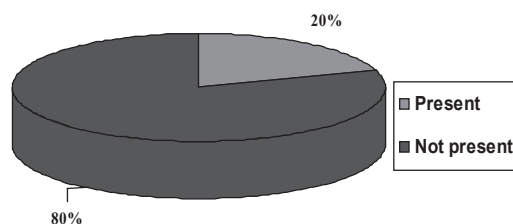


Figure 1: Knowledge about presence of HIV/AIDS patient in our country

The graph shows that about 20% of the respondents knew that there were AIDS patients in our country.

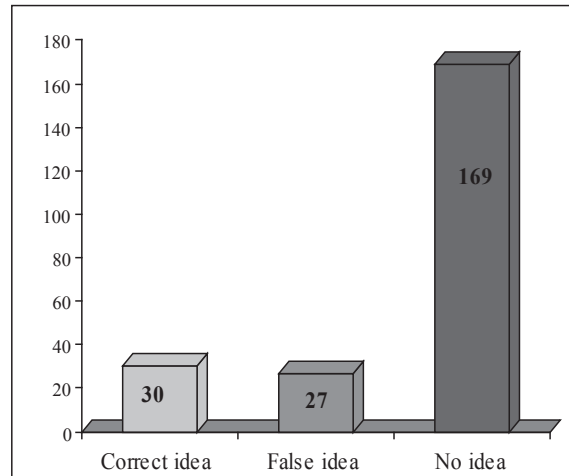


Figure 2: Idea about the place where HIV test can be done

It shows that majority of the respondents (74.78%) had no idea about the place where the test for HIV can be done in our country.

Discussion

This descriptive type of cross-sectional study was conducted among the truck drivers at Daulatdia ghat, Goalanda, Rajbari district during March to October, 2009. Out of 226 respondents 85 (37.3%) were within the age group 25-35 years, 57 (25%) were within age group 36-45 year. This age structure of truck drivers matched with the study done in Pakistan among same population¹⁴. One hundred and one (44.3%) of the truck drivers were educated up to primary level, 70 (30.7%) of truck driver were educated up to secondary level. Educational qualifications of the truck drivers of the study area also according with other studies^{14,15}. Among the respondents 169 (74%) were married and 57 (26%) were unmarried. In respect of monthly income, 114 (50%) of respondents earned taka 10,000 to 15,000 per month. This income structure clearly higher than per capita income of Bangladesh¹⁶. This better income structure might in part explained the high risk behavior of truck drivers of Bangladesh. From this study it was found that 221 (97%) respondents had heard the name of HIV / AIDS and 141 (61.8%) had known HIV / AIDS from media, newspaper, 81 (36.5%) from health workers and relatives. Study conducted by Rahman, et al. on role of media in mounting AIDS awareness among married couples in Bangladesh also found that both women and men those who regularly watch TV were 8.6 times more likely to be aware about AIDS compared to those who never watch TV¹⁷. Most of the respondents 131 (57.9%) had an idea that HIV transmitted

by syringe sharing and transfusion, 90 (39.8%) thought HIV transmitted by sexual activities. This knowledge level about route of transmission was clearly far lower than that found in the study conducted in Iran, but more or less same for the knowledge level found in Pakistan^{14,15}. So program should be undertaken to increase the knowledge level regarding route of transmission of this risk group in South East Asian countries. Maximum 180 (79.6%) respondents knew that we had HIV / AIDS patient in our country but 46 (20.35%) thought we had no HIV / AIDS patient in our country. Majority 173 (76.5%) of respondents knew that the fate of HIV / AIDS is death and 109 (47.8%) think virus can be detected from blood, 67 (29.4%) think from sexual secretion. From this study we found that 116 (50%) of respondents think that avoidance of free and homosex and use of condom can protect the transmission of HIV / AIDS. This picture accord with other studies^{14,15}, but awareness regarding use of condom and avoidance of unsafe sex should be strengthened. Maximum 188 (82.5%) of respondents had correct knowledge about HIV / AIDS and 30 (13.2%) knew the place where test of HIV/AIDS can be done, 169 (74.78%) of respondents didn't know the place where test of HIV / AIDS can be done. Policy makers should have plan regarding better coverage and access for information regarding the place where investigation for HIV/AIDS can be done.

References

- Rashid K. M. Rahman M, Hyder S. AIDS. In: Rashid, Khabir, Hyder's. Textbook of Community Medicine and public Health . Fourth. Dhaka, Bangladesh: RHM Publisher's; 2004.353-356.
- Alam MK. Geographical location of Bangladesh and vulnerability to AIDS. Rainbow Nari O Shishu Kallyan Foundation. [Online]. 2007 [cited 2010 March 2]; Available from: URL: [http://www.free-articles-zone.com/article/2680/Geographical location of Bangladesh and vulnerability to AIDS](http://www.free-articles-zone.com/article/2680/Geographical%20location%20of%20Bangladesh%20and%20vulnerability%20to%20AIDS).
- Abul.k. Abbas. Disease of Immunity. In: Robbin's and cotran. Pathologic Basis of Disease. New Delhi, India: Elsevier; 2004.248-251
- Choudhury M. R Major General. Acquired Immune Deficiency syndrome. In: M.R.Choudhury. Modern Medical Microbiology. Third. Dhaka, Bangladesh: M. R. Choudhury;1988.622-623.
- Geo. F. Brooks, Janet S. Butel, Stephen A. Morse. AIDS & Lentivirusess. In: Jawetz,Melnick & Adelberg's Medical Microbiology. Twenty Second. United States of America: Appleton & Lange; 2001-521-523
- Park. k. AIDS. In: k. Park. Park's Textbook of preventive and social Medicine Eighteenth. Jabalpur' India: M/S Banarsidas Bhanot publisher's; 2005.275-276
- The Joint United Nation Program on HIV/AIDS /World Health Organization, Report on the global AIDS epidemic 2008, joint United Nation program on HIV/AIDS, Geneva. 2008
- WTA. Todd, DNJ. Lockwood, FJ Nye, EGL. Wilkins, P.B. Carey. Infection and immune failure In: Christopher Haslett, Edwin R. Chilvers, Nicholas A Boon, Nicki R. Colledge. Davidson's Principles and practice of Medicine. Nineteenth. New Dellhi, India: Elsevier; 2004.108-111
- Ministry of Health and Family Welfare. 2008 UNGASS Country Report for Bangladesh submitted to UNAIDS, Dhaka: Directorate General of Health Services, Ministry of Health and Family Welfare. 2008.
- Ahmad T, Chowdhury SGM, Islam N, Das KK, Alam R, Ahmad Q. The first case of AIDS in Bangladesh. Bangladesh Med J 1991;20:40-43.
- Wasserheit JN. Epidemiologic synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. Sexually Transmitted Diseases 1992;9:61-77.
- Gibney L, Saquib N, Macaluso M, Hasan KN, Aziz M.M, Khan AYM, et al. STD in Bangladesh's trucking industry: prevalence and risk factors. Sex Transm Infect 2002; 78: 31-36.
- Alam A, Rahman M, Gausia K, Yunus M, Islam N, Chaudhury P, et al. Sexually Transmitted Diseases 2007; 34(2):99-103.
- Chaudhry MA, Naeem M, Iqbal R, Shabbir I. Level of Awareness About HIV/AIDS Among Truck Drivers and Their Attitude Towards Persons with AIDS. Gomal Journal of Medical Sciences 2005;3(1): 19-23.
- Ramezani TF, Malek AH. Knowledge, attitudes and practices concerning HIV/AIDS among Iranian at-risk sub-populations. East Mediterr Health J. 2008;14(1):142-56.
- Bangladesh Bureau of Statistics. 2008 Statistical Yearbook of Bangladesh. Dhaka: Planning Division, Ministry of Planning, Government of the People's Republic of Bangladesh; March 2009.
- Rahman MS, Rahman ML. Media and education play a tremendous role in mounting AIDS awareness among married couples in Bangladesh. AIDS Research and Therapy 2007;4:10