

KNOWLEDGE REGARDING HIV/AIDS AMONG THE ADULT POPULATION IN A RURAL COMMUNITY

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Abstract

Introduction: The consequences of HIV/AIDS are alarming. It causes not only loss of life but also social and economic disruption. Being deadly disease, HIV/AIDS has become an important issue of recent times throughout the world. To date, little is known about awareness of HIV/AIDS in Bangladesh.

Objectives: To assess the level of knowledge regarding Human Immunodeficiency Virus (HIV)/ Acquired Immune Deficiency Syndrom (AIDS) among the adult population of a rural community.

Place and Period of study: the study was done at 'Tepir Bari, Saitalia, Tengra' village under 'Teli Hati' union of Shreepur Upazilla in Gazipur district during the study period of 27 March 2010 to 31 April 2011.

Materials and Methods: This cross sectional type of study was conducted with 360 respondents. Semi structured interview schedule was used for collection of information and sampling technique was 'selective cluster sampling'.

Results: Among the total 360 respondents 92.5% respondents had knowledge regarding HIV/AIDS and 7.50% had no knowledge about HIV/AIDS. The respondents who were familiar with the term of HIV/AIDS, 86.79% had gathered information from mass media. Most of respondents 83.78% consider that sexual route is the principal means of spreading HIV/AIDS.

According to them the other most common ways of spreading HIV/AIDS were sharing same needle (49.55%), through blood and blood products (43.24%), vertical transmission 19.21%. Among 333 respondents, 64.72% considered that the top most high risk group was commercial sex workers. 55% considered individuals sharing same needle, 40.2% thought individuals having illegal relationships, 23.33% considered unsafe blood recipients, 11.11% considered drivers, 10.28% considered frequent traveler and 15.83% respondents had no knowledge about high risk groups. Regarding the knowledge about preventing HIV/AIDS majority of respondents (64.44%) considered that the safe sexual behavior is the main way to prevent HIV/AIDS. 32.22% respondents considered using unshared needle, 28.89% respondents thought health education regarding AIDS, 26.44% individuals thought proper maintenance of religious values, 21.44% considered proper screening where as 16.11% respondents had no knowledge about preventive measures.

Conclusion: Among the study subjects majority of the respondents had knowledge regarding HIV/AIDS and few had no knowledge and they need information and health education.

Key-Words: Knowledge regarding HIV/AIDS, transmission of HIV/AIDS, prevention of HIV/AIDS.

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Introduction

HIV/AIDS is a global problem. At the end of 2009, 33.3 million people were estimated to be living with HIV¹. An estimated 2.6 million people newly became infected with HIV in 2009 and 1.8 million died. In Bangladesh the first case was detected in 1989. Since then about 6300 people were infected by 2009 and the number is increasing day by day. The actual number of people living with HIV and AIDS may be around 7,500 in Bangladesh².

The risk factors include low level of knowledge on HIV and AIDS^{3,4} low use of condoms^{3,5,6,7} multiple sexual partners^{4,7} high incidence of sexually transmitted infections (STIs)^{3,4} poor blood safety^{4,8} risk of transmission from returned expatriates^{4,6,9} and the presence of HIV in neighboring countries, such as India and Nepal^{3,6,4,9} with which Bangladesh shares not only cultural similarities but also a porous border. A total of 240 AIDS cases were detected so far of which 109 have already died¹⁰. An estimated 11.8 million young people worldwide (7.3 million young women and 4.5 million young men), aged between 15 to 24 years are living with HIV/AIDS. AIDS has killed more than 25 million people in the world since it was first recognized in 1981, making it one of the most destructive epidemics in recorded history¹¹. Recent works in the field of HIV and AIDS prevention and control in Bangladesh has highlighted the impending HIV epidemic in the country since the prevalence of HIV is rising among injecting drug-users (IDUs) with a grave risk of transmission to other groups in society¹².

AIDS indeed is a terribly dangerous disease found almost everywhere in human society¹³. People having AIDS are always under the threat of death and the disease is caused by the Human Immunodeficiency Virus, usually known as HIV. HIV is a kind of virus which makes the human body almost incapable of fighting any kind of infection¹⁴. The most advanced stage of HIV infection is

Acquired Immune Deficiency Syndrome (AIDS) which takes about 10-15 years to develop and this is the end stage of life. The anti retroviral drugs can slow the progress but cannot cure the person. No vaccine against HIV is yet available¹⁵. So, knowledge about HIV and its prevention is the only possible way to stay safe.

The consequences of HIV/AIDS are alarming. It causes not only loss of lives but also social and economic disruption. Being a deadly disease, HIV/AIDS has become an important issue of recent times throughout the world¹⁶. To date, little is known about awareness of HIV/AIDS in Bangladesh. So our study will help the Government and Non Government organizations to take necessary strategic interventions to improve the knowledge and outlook of AIDS in rural people. This will help them to live a disease-free healthy life.

Materials and Methods

This is a descriptive type of cross sectional study which was conducted at TepirBari, Saitalia, Tengra Village under ward no-08 and 09 of Telihati union of Shreepur Upazilla in Gazipur District. In this study the study population was adult rural people of both sexes between the age of 18-60 years and the study was carried out between 27 March 2010 to 31 April 2011. The sample size was 360 of rural population which was determined conveniently. Semi-structured interview schedule was used for collection of information and the sampling technique was selective cluster sampling.

Data collection and filling up gaps as well as data review were done carefully. Collected data were checked, verified and edited for consistency. The result was analyzed using SPSS version 12 in computer.

Results

Age distribution of respondents reveals that minimum and maximum age were 18 and 60 years respectively. The table shows that most of the respondents (26.94%) were in the age group 30-35 years where the lowest numbers of respondents (1.94%) were in 54-59 years age group, 20.27% were in 24-29 year age group (Table-I).

Table-I: Age distribution of respondents

Age in year	Frequency	Percentage
18 - 23	69	19.17
24 - 29	73	20.27
30 - 35	97	26.94
36 - 41	49	13.61
42 - 47	33	9.17
48 - 53	24	6.67
54 - 59	07	1.94
≥ 60	08	2.22
Total	360	100

The mean age of respondents was 33.23 years with SD of ± 9.85 years.

Fig-1 shows that out of 360 respondents female were 52.5% and male were 47.5%.

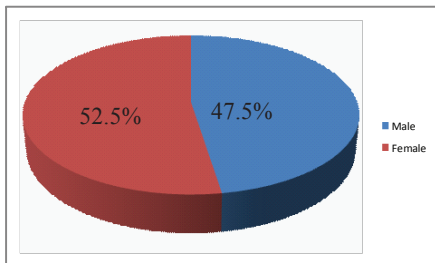


Fig-1: Sex distribution of respondents

Fig-2 shows that, out of 360 respondents 73.61% (265) respondents were institutionalized and 11.94% (43) were non institutionalized where as 14.44%(52) respondents were illiterate.

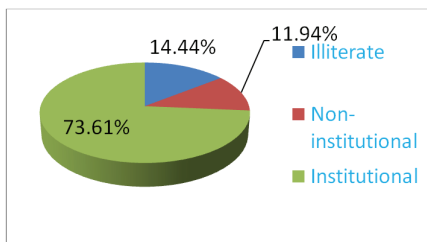


Fig-2: Educational status of respondents

Regarding occupational distribution Fig-3 shows that, out of 360 respondents 46.10% respondents were housewife, 17.50% were farmer, 14.17% were businessmen, 7.22% were labourer, 6.67% were service holder and 2.50% were unemployed.

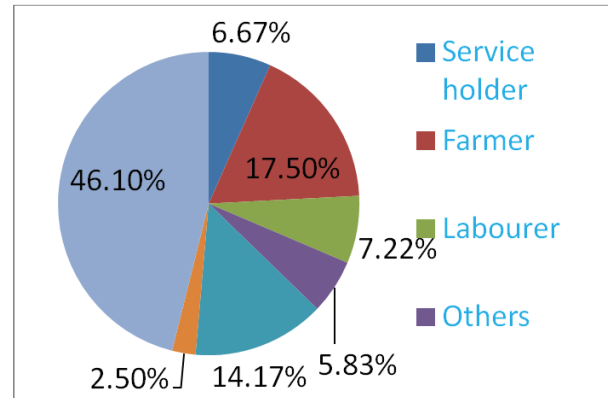


Fig-3: Distribution of respondents according to their occupation.

Among the total 360 respondents 92.5% respondents have knowledge regarding HIV/AIDS and 7.50% have no knowledge about HIV/AIDS. Among those having knowledge regarding HIV/AIDS, 48.95% were male and 51.05% were female. Among those having no knowledge regarding HIV/AIDS 29.63% was male and 70.37% were female.

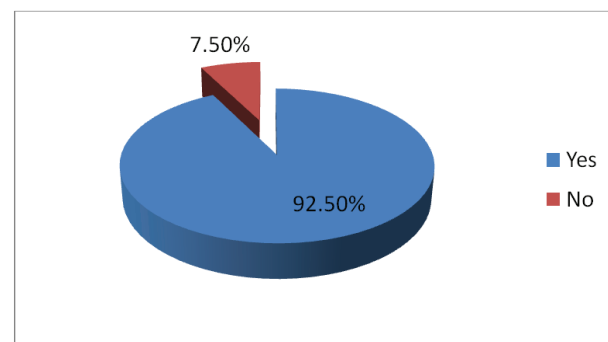


Fig-4: Respondents knowledge about HIV/AIDS

Fig-5 shows that the respondents who were familiar with the term of HIV/AIDS, 86.79% had gathered information from mass media. The other sources were health worker (16.51%), friends (24.02%), Spouse (2.10%) and 5.71% were other sources (here multiple responses present).

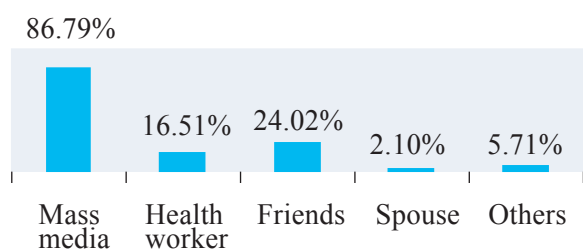


Fig-5: Respondents knowledge regarding source of information about HIV/AIDS

Table-II shows that most of respondents (83.78%) consider that sexual route is the principal means of spreading HIV/AIDS. Other most common way of spreading that they consider were sharing same needle (49.55%), Blood and blood products (43.24%), Vertical transmission (19.21%), 18.32% persons had no knowledge about mode of transmission.

Table-II: Respondents knowledge regarding modes of transmission of HIV/AIDS (n=360)

Mode of transmission	Frequency	Percentage
Sexual route	279	83.78
Sharing same needle	165	49.55
Blood and blood products	144	43.24
Vertical transmission	64	19.21
Having no knowledge about mode of transmission	61	18.32

n = 360 (Multiple response present)

Fig-6 shows that among 360 respondents, 64.72% considered that the top most high risk group was commercial sex workers. 55% considered individual

sharing same needle, 40.2% thought individuals having illegal relationships, 23.33% considered them to be unsafe blood recipients, 11.11% considered drivers, 10.28% considered frequent travellers, 15.83% respondents had no knowledge about high risk groups (here multiple response present).

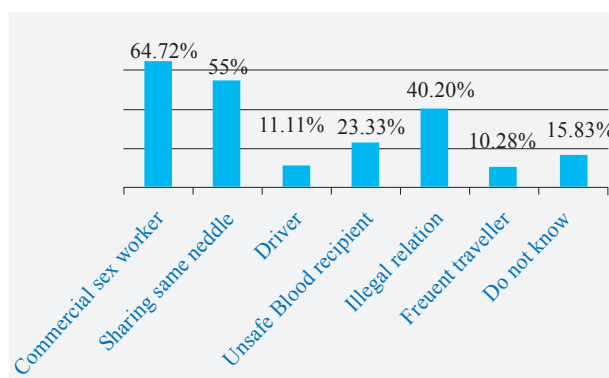


Fig-6: Concept among the respondents about high risk group of HIV/AIDS.

Table-III shows that majority of respondents (64.44%) considered that the safe sexual behavior is the main way to prevent HIV/AIDS. 32.22% respondents considered it to be using unshared needle, 28.89% respondents thought health education regarding AIDS, 26.44% individuals thought proper maintenance of religious values, 21.44% considered proper screening where 16.11% respondents had no knowledge about preventive measures.

Table-III: Respondents knowledge regarding prevention of HIV/AIDS.

Preventive measure	Frequency	Percentage
Safe sexual behaviour	232	64.44
Using unshared needle	116	32.22
Health education	104	28.89
Proper maintenance of religious values	97	26.44
Proper screening	79	21.44
Having no knowledge	58	16.11

n=333 (Multiple response present)

Fig-7 shows that among 360 respondents 61.67% were sympathetic to AIDS patients where as 30% respondents had negative attitude towards AIDS patients and 8.33% respondents were reluctant to give comments.

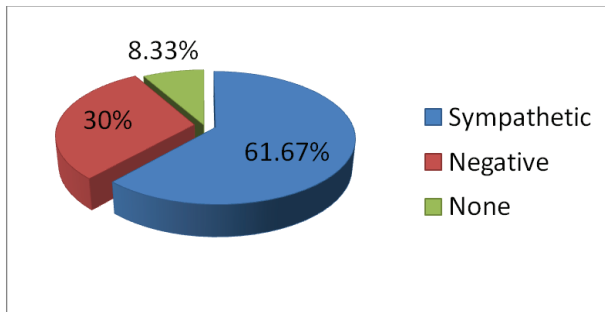


Fig-7: Attitude of respondents towards HIV/AIDS patients

Discussion

In our cross sectional study, the aim was to evaluate the level of knowledge regarding HIV/AIDS among the adult population in a selected rural community at Sreepur Upazilla of Gazipur district. In this study, different levels of knowledge of adult population regarding HIV/AIDS were considered. In spite of being an observational study, this may provide an excellent means to take appropriate interventions in preventing the spread of HIV/AIDS in Bangladesh.

There was a distinct pattern in the distribution of the respondents in age category. In this study the age of the respondents ranged from 18 to 60 years. The mean age of the male respondents was 35.91 years with standard deviation of 11.46 years. For female, most respondents were between 30-35 years with mean age of 30.71 years and SD ± 8.24 years. In a study conducted by Rahman MM, Kabir M, Shahidullah M, mean age of respondents was 33.4 ± 7.4 years with a range of 20 to 55 years¹³. Another study was conducted by Jiajian Cher, Chen

Shengi and Minja Kim among adults aged between 15 – 49 years⁶. So, in comparison with national and international studies, the age selection of our study was quite justifiable because this age range is the age of active sexual life and the knowledge of this age group can give an overall idea about the knowledge of at risk population.

Regarding sex distribution, female respondents were 52.5% and the males were 47.5%. Sex distribution was equal in the study conducted by Rahman et al¹³. In the study by Jiajian Cher, Chen Shengi and Minja Kim 52% were male and 48% were female⁶. We had more female respondents because we visited the houses during working hour, when men were not at home.

In our study 85.56% of the respondents were literate and illiterate were 14.44%. Among the literate 73.62% were institutional and 11.94% were non institutional. An almost similar result was revealed by a study conducted by Rahman et al where 16% were illiterate and 25% had primary level of education¹³. This result is almost similar to our study result.

Among the respondents 46.10% were housewives, next to it were farmers (17.5%), businessmen (14.17%), service holders 6.67%, labourer (7.22%), unemployed (2.50%) and others were 5.83%. A study conducted by Rahman M M, Kabir M & Shahidullah M showed that $\frac{1}{3}$ of the respondents were labourers, 28% small traders, 19% businessmen & 17% were service holders¹³. In a study by Prosannajid Sarker 68% people were found to be having permanent employment¹². The occupation distribution of our study population do not coincide with these results. The geographic variation affecting the occupation of people may be the cause of this disparity.

In our study, among the 92.5% respondents who were familiar with the term of HIV/AIDS, 86.79% had gathered information from mass media. The other sources were health workers (16.51%), friends

(24.02%), Spouse (2.10%) and others 5.71%. A study done by Moshiur Rahman showed that , 8.4% of people learnt about HIV/AIDS from health workers, 8.1% learnt from newspapers/ magazines, 4.8% people learnt from posters¹⁶. Another study done by Rahman et al showed that 41.4% men gained idea about HIV/AIDS from radio, 66.4% from TV , 26.8% from newspapers, 33% from health workers and 30.4 % from friends¹³. A study conducted by Mohammad Shafiqur Rahman and Mohammad Lutfur Rahman showed that 77.1% of female TV watchers and 67% of male daily radio listeners were concerned about AIDS⁹. A study conducted by O.F. Deji and Enueswemba based on "Assessment of the awareness of HIV/AIDS among the rural dwellers in its zone of ocean state, Nigeria' on 2005 revealed that 67% respondents was aware of HIV/AIDS¹⁵. Radio (36.3%) and television (14.1%) were the most common source of awareness. All these results were similar to our results and they reveal that mass media is the main source of knowledge for most people.

In our study, 83.78% of respondents consider that sexual route is the principal means of spreading HIV/AIDS. Other most common ways of spreading according to them were sharing same needle (49.55%), through blood and blood products (43.24%), and vertical transmission (19.21%). Persons having no knowledge about mode of transmission were of 18.32%. A study showed that 27% respondents did not know about the mode of transmission of AIDS. 83% of the respondents mentioned that AIDS may be transmitted through sexual intercourse by people who habitually have multiple sexual partners. This is followed by transmission through unscreened blood transfusion (64%), sharing needle for drug use (60%), sexual intercourse without condom (39%) and homosexuality⁸ (32%). Another study conducted by Mizanur Rahman and M Kabir shows that AIDS may transmit through sexual intercourse with affected person (36.9%) and through blood¹³ (14.3%). A study done by Moshiur Rahman shows that people believe that HIV transmits mostly through uncontrolled sexual relationship with multiple partners then through blood (32.8%) and through same injection 22%¹⁶.

A study conducted by Prosannajid Sarkar in 2009 based on information and knowledge about HIV/AIDS¹⁴. Bangladesh context revealed that, 48% of rural population knew blood transfusion as the route of transmission of HIV/AIDS and 34% knew it to be through unsterilized needle or syringe. So, our study population had a good knowledge about the transmission route which is almost similar to the findings of other studies.

Regarding preventive measures of HIV/AIDS, 64.44% respondents thought that safe sexual behavior is the main way to prevent HIV/AIDS. 32.22% individuals considered it to be by not sharing needles, 28.89% respondents thought health education regarding AIDS, 26.44% individuals thought proper maintenance of religious values and 21.44% considered proper screening as the other measure to prevent HIV/AIDS. 16.11% respondents had no knowledge about preventive measures. A study done by Prosannajid Sarkar shows that ,respondents thought that HIV/AIDS can be prevented by using condoms during intercourse (49%), by limiting intercourse to one uninfected person who has no other partner (51%) and also abstaining from sexual intercourse (51%)¹⁴.

A study done by Mizanur Rahman, M Kabir shows that, 16.8% respondents didn't know about preventive measures against AIDS. 65.3% of the people considered that the preventive measure is to avoid sexual intercourse with multiple partners other preventive measure that they considered were not to have sexual intercourse with risky persons (33.2%), screening blood before transfusion (19.6%) and to avoid used syringe (13.8%)¹³.

Another study done by Mizanur Rahman shows 30% respondents didn't know about the preventive measures against AIDS. Other considered the preventive measure to be avoid promiscuous sex (75%) followed by using condoms during sexual intercourse (68%), using sterilized syringe (47%), avoiding sex with commercial sex workers (46%), not to have sexual intercourse with multiple sexual partners (33%) and also by avoiding homosexual contact (25%)¹³.

Our study revealed that among our target population 61.67% were sympathetic to AIDS patients where as 30% respondents had negative attitude towards AIDS patients and 8.33% respondents were reluctant to give comments .Another study done by Soumya Deb, Sinjita Datta shows that 43.5% people were sympathetic to HIV/AIDS patients¹⁷. They felt that it was a matter of bad luck for these who have AIDS, while 32.4% encouraged their partners to use condoms. It is the natural attitude of mankind to become sympathetic towards any kind of diseased patients.

HIV/AIDS has become a national concern in Bangladesh and the government has already developed a national strategy and an operational plan to address the country's needs. Worldwide experience of HIV/AIDS has suggested that public knowledge on this disease is the most fundamental weapon that can be used to fight against the AIDS pandemic until a vaccine or cure would be developed¹⁸. In this regard, our study shows that majority of the people (92.5%) have knowledge about AIDS. This credit goes to mass media mainly TV. But it is a matter of regret that most of the people have superficial knowledge. They don't have clear conception about modes of transmission, high risk group and prevention. Even some of them possess absurd idea about AIDS. Literacy rate among our respondents was 85.56%. So, it is clear that education always plays an important role in creating awareness among people. It also gives a clear cut idea that proper health education and proper use of mass media can play a major role to inform people about HIV/AIDS. Being an unbiased one, our study may be an excellent source of information for other researchers and also for the concerned authority to take interventions. We can hope that in near future everyone will know about AIDS and none will be infected by this killer disease any more.

Conclusion

The present study revealed that majority of respondents had gathered information from mass media and they considered that the sexual route is the principal means of spreading HIV/AIDS and the safe sex behaviour is the principal way of

prevention of HIV/AIDS and majority of the respondents have the positive and healthy attitude towards HIV/AIDS. So, our study concludes that majority of the respondents have knowledge regarding HIV/AIDS and few have no knowledge and they need information and health education. AIDS is an incurable but preventable disease. Prevention remains the backbone to curb the epidemic in foreseeable future.

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