Knowledge on mode of transmission and prevention of HIV/AIDS among the floating sex workers in some selected areas of Dhaka City

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Abstract

Knowledge on sexually transmitted disease like HIV/AIDS can affect and help in reducing the incidence and number of cases of the disease in the community. The present study makes an attempt to assess the knowledge on mode of transmission and prevention of HIV/AIDS among the floating sex workers in some selected areas of Dhaka city. A descriptive type of cross-sectional study was conducted for a period of six months from January to June 2009, in Drop in centers in some selected areas of Dhaka city. Data were collected from 90 floating sex workers to find their knowledge about HIV/AIDS. Of the 90 respondents, 88 (97.8%) respondents had heard of HIV/AIDS. Majority of them (52, 57.9%) were got knowledge on HIV/AIDS from NGO workers followed by 13 (14.4%) from radio and 12(13.3%) from television. Most of the respondents (74, 82.2%) knew that HIV could be transmitted by unsafe sex with a known case of AIDS. Regarding prevention of HIV/AIDS, 73(81.1%) respondents knew that use of condom was a way of prevention of AIDS. Majority (51, 56.7%) scored average knowledge on transmission and prevention of HIV/AIDS. Government and non-government organizations and media can play effective role to make people aware of HIV/AIDS particularly the high risk groups.

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Introduction

The prevalence of HIV/AIDS in Bangladesh is still low (>1%)[1], but there is a potential for expanding HIV/AIDS epidemic in the future, because the country is very receptive to HIV infection. The receptivity is due to increasing trend of prostitution, domestic and international migration, urbanization, poverty, and proximity to areas with advances epidemics and sexual permissiveness or high-risk sexual behavior of members of certain groups of people[1]. After the first detection of AIDS in 1981 in New York City and San Francisco, the disease in Bangladesh was first detected in 1983. Since the first detection of HIV in Bangladesh, the rate of infection has not increased in comparison to neighbors (India)[2]. Bangladesh continues to maintain low prevalence status 0.7%[3]. Mobile Sex Workers in Bangladesh would play a critical role of HIV/AIDS infections. Due to the nature of their work, the lack of knowledge on sexually transmitted infections (STI/STDs) and low acceptance of condom use, Mobile Sex Workers represent a highly vulnerable group in Bangladesh. The sharp rise in other sexually transmitted infections (STIs) in Bangladesh contributes to the spread of HIV and may lead to an extensive epidemic, as the heterosexual mode of other STI transmission accounts for an increasing percentage of HIV transmission[4]. The UNGASS (2008) Country Report by Bangladesh estimates that 90,000 to 150,000 sex workers are operating in the country[5], while the World Bank estimated 105,000 sex workers in 2006.[6,7] Sex work is widespread in Dhaka, particularly among people belonging to the lower socio-economic status. Dhaka has 14 acknowledged brothels and approximately 5,000 to 15,000 female sex workers (FSWs)[8].

Mobile or floating sexworkers are closely associated with the tourism and transport station where they find a large number of potential clients. Tourism, which provides additional clients for sex workers, and transport workers, who exploit commercial sex

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workers, facilitates transmission of the virus to the general population. It is a visible fact that a large number of migrant and travelling or transport sector worker in Bangladesh several times meet mobile/ floating sex workers. Mobility and migration are not in themselves risk factors for HIV, but can create environment in which people are more vulnerable. Separation from spouse, family and socio-cultural norms, together with isolation and loneliness, and a sense of anonymity, can lead to situations which make migrants and mobile workers more susceptible to exposure to HIV. It is then carried back to their families, the intended beneficiaries of the income from the migration[1].

However, Mobile Sex Workers and HIV/AIDS are not regarded as complex social phenomenon in Bangladesh. But it is suspicious, though there is no information about HIV/AIDS prevalence among M-SWs and their clients, which can become a critical issue of general public health, especially if we keep in mind that HIV/AIDS prevalence among M-SWs and their client groups vary in deferent region in Bangladesh[9].

As a huge number of mobile sex workers are floating in Dhaka city there are every possibilities of spread of HIV-AIDS to others. Education and awareness regarding HIV/AIDS is now the only weapon to stop the infection. Since an accessible, affordable and complete cure for HIV/AIDS and an effective vaccine to prevent HIV infection may not be available in the near future, primary prevention to control the spread of HIV infection is through awareness and changing behaviour remains at the highest priority for HIV control programmes.

Materials and Methods

A descriptive type of cross-sectional study, conducted for a period of six months from January to June 2009. The study was conducted in some Drop in centers in selected areas of Dhaka city. Data were collected from Tk.90 floating sex workers to find their knowledge about HIV/AIDS. Among them 35(38.9%) floating sex workers were interviewed from Kamlapur, 23(25.6%) from Gulistan, 14(15.5%) from Moghbazar and 6(6.7%) from Fokirerpul areas of Dhaka city. The study was conducted on female floating sex workers present at the DICs (Drop in center), during data collection period. The required sample size of this cross-sectional study was calculated by using the statistical formula: $n = Z^2pq/d^2$. The required sample size determined was 171, but due to inconvenience of time and resources the sample size was limited to 90 respondents. Purposive sampling technique was followed to minimize time constrain. An interview schedule with semi-structured questionnaire was used for data collection. The instrument was pre-tested on fifteen respondents in place other than the study area. No sensitive or privacy invasive questions were asked. They were interviewed after fulfilling the informed consent form. All the data were checked and edited after collection. Then data were analyzed in computer using SPSS for Windows' XP program version 12.0.

Knowledge Score

Here knowledge related HIV/AIDS questions in the questionnaire were 4 in number. All questions have three parts- yes, no, don't know. We gave 1 mark on "yes" and 0 marks on "no" and "don't know". The highest score of knowledge level obtained was 20 marks and the lowest score of knowledge level was 0 marks. By dividing the knowledge score into four groups we divide the knowledge score by one forth for each group that is, Poor knowledge level (0-5), Average knowledge level (6-10), Good knowledge level (11-15) and Excellent knowledge level (16-20).

Result

Out of the 90 respondents, mean age of the respondents was 22.21 years (SD±4.87) with a range of 15 to 36 years. Among the respondents, majority 42 (46.7%) were married, 19 (21.1%) were unmarried, 12 (13.3%) were divorced and 15(16.7%) were separated from husband. Majority (88,97.8%) were Muslims and 2 (2.2%) were Hindus. The mean family income was Taka 7700.00 (SD±3872.838). The income of majority respondents 52(57.7%) were Taka 5001-10,000 followed by respondents 30(33.3%) income were Tk. <5000 and respondents 8(8.8%) were Tk.>10000 respectively. Regarding educational level, most (33, 36.7%) of the respondents were illiterate, 26 (28.9%) could sign only, the rest 18(20.0%) and 13(14.4%) respondents educated up to primary and secondary level respectively. (Table: 1) Majority 88(97.8%) of the

respondents knew about HIV/AIDS, where as 2(2.2%) respondents did not knew about it (Fig: 1). Out of 90 respondents, 52(57.9%) knew about HIV/AIDS from NGO workers followed by 13(14.4%) knew from radio, 12(13.3%) knew from television and 9 (10%) knew from health workers and rest 1(1.1%) respondent known from posters. (Fig: 2) out of 90 respondents, most 74 (82.2%) of them knew that HIV could be transmitted by unsafe sex with a known case of AIDS, the 8(8.9%) respondents knew that AIDS transmitted by infected blood transfusion, 5(5.6%) respondents knew that AIDS is transmitted by sharing used unsterile injections and rest 3(3.3%) by AIDS infected mother during pregnancy, delivery or during breast feeding. (Table: 2) Regarding prevention of HIV/AIDS, 73(81.1%) respondents knew that use of condom is a best way of prevention and 39(43%) knew use of disposable syringes and needles and 28(31%) respondents knew sex with a trusted partner and the rest 10(11%) respondents knew screening of blood prior to blood transfusion can prevent HIV/AIDS. (Table: 3) Respondent's knowledge level was scored. Among them, none scored excellent, of them 2 (2.2%) scored good knowledge, majority 51(56.7%) scored average knowledge and rest 37(41.1%) scored poor knowledge on prevention and transmission of HIV/AIDS. (Table: 4).

Table: 1 Distribution of sociodemographic characteristics of the respondents by age group, religion, marital status and monthly family income. (n=90)

Age in group	Frequency	Percent
18 yrs	23	25.6
19-20 yrs	17	18.9
21-22 yrs	16	17.8
23-25 yrs	20	22.2
26 yrs	14	15.6
Mean ±SD= 22.21±4.87		
Religion	**Frequency**	**Percent**
Islam	88	97.8
Hindu	2	2.2
Marital status	**Frequency**	**Percent**
Married	42	46.7
Unmarried	19	21.1
Divorced	12	13.3
Separated from husband	15	16.7
Widow	2	2.2
Monthly family income	**Frequency**	**Percent**
Taka <5000	30	33.3
Taka 5001-10000	52	57.7
Taka >10000	8	8.8
Level of education	**Frequency**	**Percent**
Illiterate	33	36.7
Primary	25	27.8
Secondary	6	6.6
Can sign only	26	28.9

Fig: 1 Distribution of respondents by whether ever heard of HIV/AIDS. (n=90)

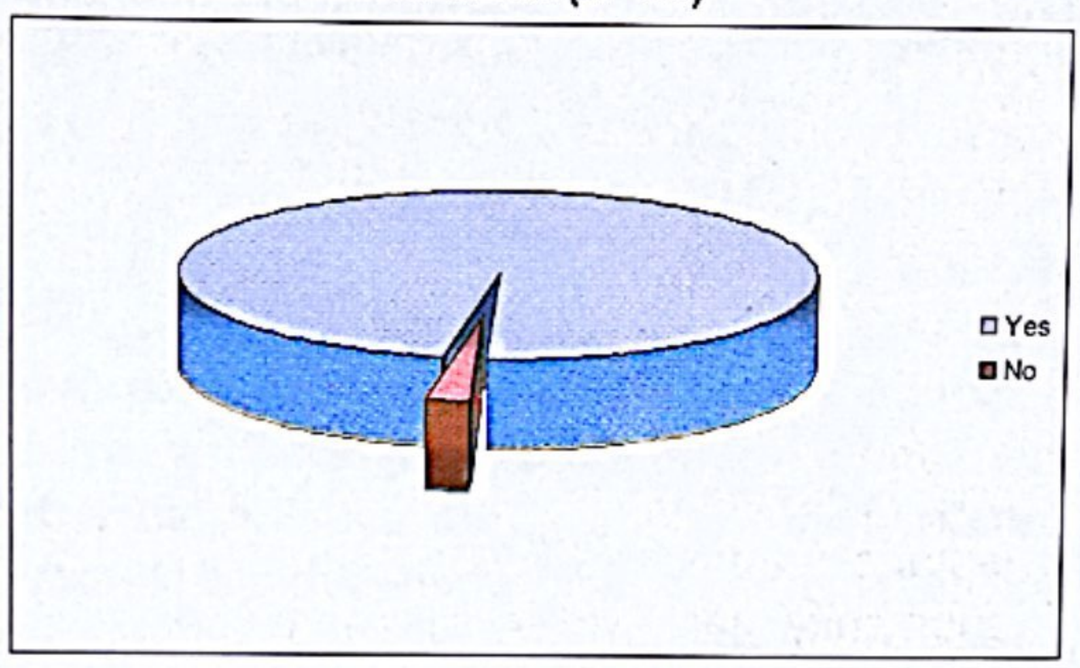

Fig: 2 Distribution of respondents by source of knowledge about HIV/AIDS. (n=90)

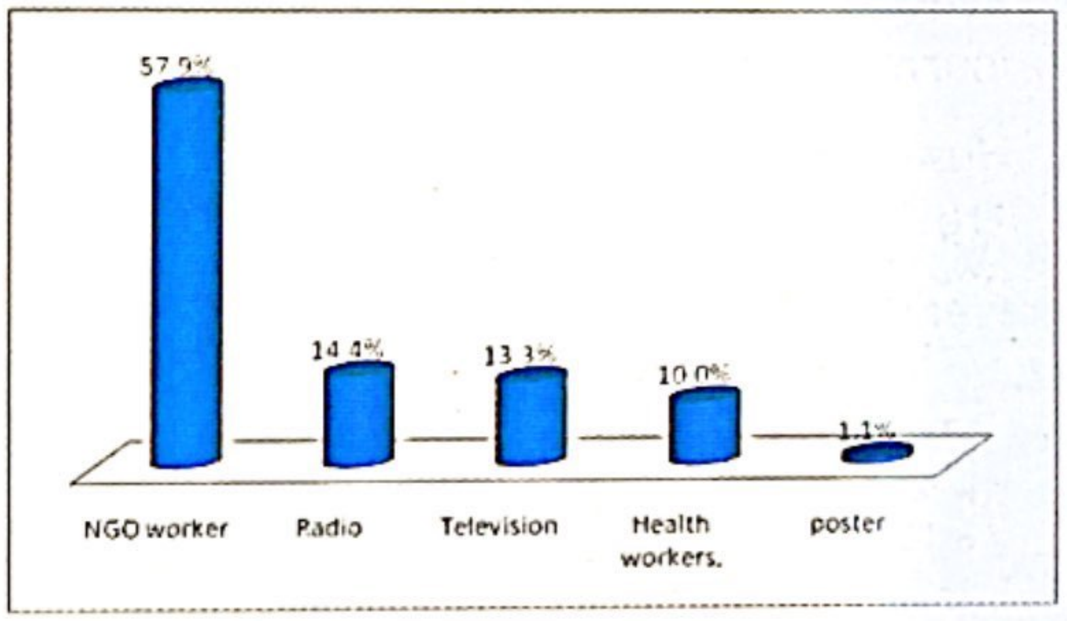

Table: 2 Distribution of the respondents by knowledge on mode of transmission of HIV/AIDS (n=90)

How HIV/AIDS spreads	Frequency	Percent
Unsafe sex with a known case of AIDS	81	90.0
AIDS infected blood transfusion	13	14.4
Sharing used unsterile injections	11	12.2
From AIDS infected mother during pregnancy, delivery or during breast feeding	9	10.0

Table : 3 Distribution of respondents by knowledge on prevention of HIV/AIDS. (n=90)

Knowledge on prevention of AIDS	Frequency	Percent
Condom use	73	81.1
Use disposable new syringe and needle each time	39	43.33
To meet with a trusted partner	28	31.11
AIDS infected mother should consult with doctor before getting pregnant	21	23.33
Blood screening before transfusion	10	11.11

Table: 4 Distribution of the respondents by knowledge score (n=90)

Knowledge score	Frequency	Percent
Excellent	0	0.0
Good	2	2.2
Average	51	56.7
Poor	37	41.1
Total	90	100.0

Discussion

The present study shows that majority 23(25.6%) respondents were at or below 18 years, mean age was 22.21(SD±4.87) years. Majority 88(97.8%) of the respondents were Muslims. The findings are similar with our national finding[10]. Majority 30 (33.3%) respondent's monthly income were Taka five thousand. About 63% respondents were literate. This findings is not comparable with our national findings [10] where female literacy rate were found about 41%. The difference may be due to the fact that data were collected from Dhaka city where education level comparatively more than the other cities.

This study interestingly noted that, most 88(97.8%) of the respondents had heard about HIV/AIDS transmission and its prevention. These findings are similar with a study conducted by Enkhbold S, Tugsdelger S, Morita S in Japan where > 90% of respondents had heard about mode of transmission of HIV/AIDS[11]. Further in another study conducted by T. Hesketh, J. Zhang, D.J. Qiang in United Kingdom found that nearly all the respondents had heard of HIV/AIDS[12]. Rahman et al. revealed that only 18% commercial sex workers in Bangladesh heard about AIDS[13]. The difference may be due to the fact of indifferences of study place. The study found most 51(56.7%) of the respondents had average knowledge on prevention and transmission of HIV/AIDS which is similar to study conducted by ICDDR-B[14].

The study identified the most common modes of transmission of HIV/AIDS was unsafe sex with a known case of HIV/AIDS (90%). This findings is consistent with the findings of Sentumbwe S in Africa[15] and also with Islam et al in Bangladesh[14]. But a study conducted by Rahman et al. found that only 8% respondents knew that AIDS can be transmit by sexual contact[13].

Regarding way of prevention of HIV/AIDS, most 73(81.1%) of the respondents of the study gave opinion that use of condom during sex is as a way of prevention of HIV/AIDS. Similar findings was also found in a study conducted by Sentumbwe S in Africa[15]. A study conducted by Rahman MM found that 65% respondents gave opinion that avoid sex with multiple partners and 33% respondents gave opinion that avoid sex with HIV infected person are the ways of prevention[16].

In the present study, majority 57.9% respondents were informed and gained knowledge about HIV/AIDS from NGO workers followed by 14.4% from radio, 13.3% from television. Studies conducted by Singh A[17] and Goel NK[18] in India also found that television is the most common source of information for HIV/AIDS. Both findings suggest that mass media are the useful ways for education and to create awareness of the people. Similar study was conducted by Sarker S in Pondicherry, India[19] showed that the major sources of knowledge of mass communication were television (81.98%), radio (42.79%), newspaper (15.67%) and healthcare providers (10.8%).

Conclusion

HIV /AIDS is one of the deadliest disease that does not have any treatment. The only way out there is its prevention. To prevent the spread of the disease, knowledge and awareness among the high risk group about it is indispensible. From the study findings it may be concluded that commercial sex workers and their clients are needed to be educated about HIV/AIDS and sexually transmitted infection. All the media including printing and electronics can play a very vital role to make the people aware of HIV/AIDS. Non-government organizations can play effective role to make people aware of HIV/AIDS. A vigorous AIDS awareness campaigns for the commercial sex workers and their clients is necessary to prevent an explosive epidemic in Bangladesh.

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