

Original Research Article

Knowledge on mode of transmission and prevention measure of HIV and AIDS

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Received: 06 August 2021

Revised: 04 October 2021

Accepted: 06 October 2021

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ABSTRACT

Background: HIV prevalence in Bangladesh is low (<1%) among the general population, even within the vulnerable population it continued to be low other than certain sections of injecting drug users.

Methods: This cross-sectional descriptive study was conducted in the Polly Chikitsok/rural medical practitioners in Hobiganj, Narayanganj, Rangpur and Kurigram District of Bangladesh during January 2014 to April 2014. One hundred eighty (180) Polly chikitsok/rural medical practitioners were interviewed with a semi-structured questionnaire. Purposive sampling technique was used. Statistical analysis of the results was done by using computer software SPSS version 22 with tabulation plan. The ethical committee of the department of public health, Daffodil International University of Bangladesh, approved the thesis with their signature.

Results: A total of 180 participants were interviewed, of whom 176 were males and 4 were females. 17.8 percent of the respondents are of 21-30 years of age, 37 percent respondents are 31-40 years old. 27.8 percent of the study participants were in their 41-50. Hundred percent respondents, they had ever met any HIV positive patient in the course of their occupational responsibility in the workplace. 97.8 percent respondents correctly knew blood transfusions transmit HIV/AIDS, followed by sharing needles (98.3 percent), and maternal child transmission (68.9 percent). However, more than two thirds of the respondents (77.8 percent) correctly identified HIV/AIDS preventive measures. Nearly half the sampled population (84.4 percent) did not think condoms were useful in preventing transmission of HIV.

Conclusions: In Bangladesh, the prevalence of HIV infection is growing and PC/RMPs are increasingly involved in a range of HIV prevention and care activities.

Keywords: HIV, Knowledge, Practitioners, Prevention, Transmission

INTRODUCTION

HIV prevalence in Bangladesh is low (<1%) among the general population, even within the vulnerable population

it continued to be low other than certain sections of injecting drug users. Experts predicted several possible reasons for this: high levels of circumcision among men, until recently relatively low levels of injecting drug use,

and relatively low risk behavior in the society. Migration, unsafe sexual intercourse, needle sharing etc. are mostly liable for the massive worldwide transmission of HIV and AIDS. However, lack of adequate knowledge about AIDS and sex education has further aggravated the present epidemic. Although much development in care and increase of funds for HIV infection has been made, HIV and AIDS induced morbidity and mortality is quite high in the developing world.¹ Feminization of HIV and AIDS discloses several other facts. Violence against women associated with sexual harassment is a major factor for the spread of HIV.² In 2011, the NASP reported 455 new cases of HIV and 251 new cases of AIDS, and death of 84 people. Thus, it is estimated that currently there are 2,871 cases of HIV and 1,204 cases of AIDS with 390 deaths until date. In third world countries like Bangladesh, there are very limited treatment and support provision for PLHIV. Most of the HIV infected people cannot carry on required facilities of testing HIV. Since these tests are expensive and their scope is limited, a few NGOs solely carry on this responsibility. There are more or less 12000 HIV infected people in Bangladesh.³ The results indicate that programmers to reduce irrational fear about transmission of HIV are urgently needed. HIV AIDS sensitization sessions are regularly carried out in Bangladesh for health care Professionals both provided by government and non-government organizations. As to Parker transmission and prevention of AIDS differs between developed and developing nations.⁴ He further exemplifies it by citing the case of the USA and Western Europe and Brazil. Because of this, strategies made for one country or region may not be very appropriate for another. This is important that AIDS is intimately linked with sexual behaviors; this intimate area of human relationship is many times challenging to study and research.

In Bangladesh, there are only two hospitals that provide direct, inpatient clinical and psychological care to AIDS patients free of costs to the clients Dhaka Hospital of the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR) and infectious disease hospital (IDH). These hospitals wish to provide a high standard of stigma and discrimination free care to PLHIV, but both experiences challenges in achieving this goal. Bangladesh, being a developing country, still has a low prevalence rate of HIV transmission.

METHODS

This cross-sectional descriptive study was conducted in the Polly chikitsok/rural medical practitioners in Hobiganj, Narayanganj, Rangpur and Kurigram District of Bangladesh during January 2014 to April 2014. One hundred eighty (180) Polly chikitsok/rural medical practitioners were interviewed with a semi-structured questionnaire. Aim of the study was to assess the knowledge regarding mode of transmission and prevention measure of HIV and AIDS. Purposive sampling technique was used. Data collection was done

by face-to-face interview. A semi structured interview schedule with a series of close and open-ended questions was used.

Exclusion criteria

Exclusion criteria were attendant unwilling to give informed consent to take part in the study and patient with economic constraints to do the necessary investigation.

The interview schedule included six parts containing information regarding the socio demographic characteristics of the study participants. Statistical analysis of the results was done by using computer software SPSS 22 with tabulation plan. Prior to the commencement of the study, the ethical committee of the department of public health, Daffodil International University of Bangladesh, approved the thesis with their signature.

RESULTS

A total of 180 participants were interviewed where 176 were males and 4 were females. 17.8% of the respondents were of 21-30 years of age, 37% respondents were 31-40 years old. Twenty-seven-point eight (27.8)% of the study participants were in their 41-50 years, the 11.7 were 51-60 years old and least number of respondents (5) belong to the age group of 61-70 years. More than three fourth of the participants had completed at least a secondary education. Most of the respondents were Muslims (86.7%); only 13.3% respondents were Hindus. The monthly household income of the majority of surveyed respondents (82.7%) was between Tk. 5,000-Tk. 15,000, followed by an income range of 5,000 to 45,000 taka. Data on marital status reveal that 91.7% of the respondents were married, whereas 8.3% of the respondents were unmarried. As regards the duration in the existing service, more than 34% said they have been in their respective services for ten years while the rest of the respondents had job experience of varying age with 20 years (30%), 15 years (14.4%) and 5 years (21.1%) respectively (Table 1).

The respondents were also asked whether they had ever met any HIV positive patient in the course of their occupational responsibility in the workplace. In response, 100% answered in the affirmative (Figure 1). Moreover, out of 180 and 179 respondents who had heard about HIV and AIDS, 97.8% correctly knew blood transfusions transmit HIV/AIDS, followed by sharing needles (98.3%), and maternal child transmission (68.9%).

However, misconceptions are also there, in particular misconceptions about disease transmission were observed among the surveyed participants. Mosquito bites (58.3 percent) and casual touch (22.8 percent) were incorrectly regarded as modes of transmission. However, more than two thirds of the respondents (77.8 percent) correctly

identified HIV/AIDS preventive measures. Nearly half the sampled population (84.4 percent) did not think

condoms were useful in preventing transmission of HIV (Table 2).

Table 1: Socio-demographic profile of the respondents (n=180).

Socio-demographic characteristics	Frequency	
	N	%
Age (in years)		
21-30	32	17.8
31-40	68	37.8
41-50	50	27.8
51-60	21	11.7
61-70	9	5.0
Sex		
Female	4	2.2
Male	176	97.8
Marital status		
Married	165	91.7
Single	15	8.3
Educational status		
In class six to nine	4	2.2
Ten to twelve	126	70.0
Thirteen to fourteen	39	21.7
Fifteen to sixteen	8	4.4
Above	3	1.7
Religion		
Muslim	156	86.7
Hindu	24	13.3
Duration of practice		
5 years	38	21.1
10 years	62	34.4
15 years	26	14.4
20 years	54	30.0
Monthly income		
5,000-15,000	149	82.7
16,000-25,000	21	11.8
26,000-35,000	7	3.9
36,000-45,000	3	1.7

Table 2: Level of knowledge regarding mode of transmission and prevention measure of HIV and AIDS (n=180).

Variables	Frequency	
	N	%
Can HIV be transmitted by using public toilet		
Yes	45	25.0
No	135	75.0
Is HIV screening required before blood transfusion or organ transplantation within relatives		
Yes	176	97.8
No	4	2.2
HIV can be transmitted through handshaking/hug with an HIV infected individual or through wearing his/her clothes		
Yes	41	22.8
No	139	77.2
HIV infection can be transmitted through drinking water in same glass with a HIV infected individual		
Yes	36	20.0
No	144	80.0
Does HIV transmit through mosquito bites		
Yes	75	41.7
No	105	58.3

Continued.

Variables	Frequency	
	N	%
HIV does not spread through breathing or sneezing a cough		
Yes	39	21.7
No	141	78.3
AIDs an infectious disease		
Yes	140	77.8
No	40	22.2
It is possible for a healthy looking person to have the HIV virus		
Yes	123	68.3
No	57	31.7
Sharing needle/syringe is a risk factor for HIV transmission		
Yes	177	98.3
No	3	1.7
HIV infected person can live only a few months at best		
Yes	81	45.0
No	99	55.0
Sexual intercourse is not the only way to transmit HIV		
Yes	67	37.2
No	113	62.8
HIV transmit through mother to child during pregnancy and delivery		
Yes	124	68.9
No	56	31.1
HIV transmit through mother to child during breast feeding		
Yes	110	61.1
No	70	38.9
There is no task of HIV infection if anybody have sexual intercourse without condom with friends or familiar persons		
Yes	28	15.6
No	152	84.4
It is possible to be cured from HIV/AIDS through traditional with healing		
Yes	72	40.0
No	108	60.0
Avoiding HIV infected person is the most effective way to prevent HIV transmission		
Yes	70	38.9
No	110	61.1
Risk of HIV transmission persists even after genital part is shed by urine or water after sexual intercourse		
Yes	167	92.8
No	13	7.2
Total	180	100.0

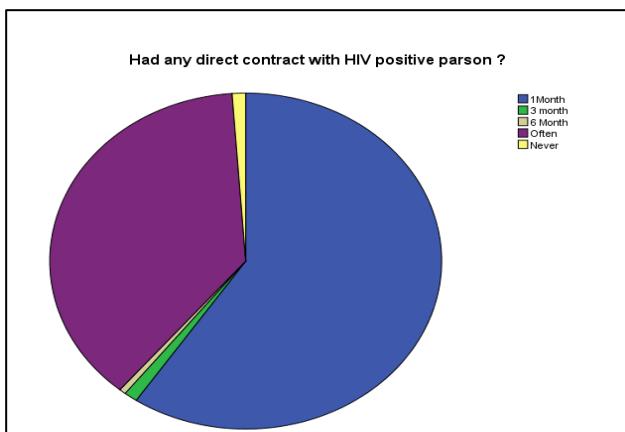


Figure 1: Ever had any direct contact with any HIV positive person at work (N=180).

DISCUSSION

Some findings came out in the study that, more than 25 percent think using public toilet spread HIV, more than 21 percent believes HIV transmits thorough coughing and sneezing, more than 62 percent think sexual intercourse is the only cause of spreading HIV/AIDS. 15.6 percent respondents believe sexual intercourse without condom with friends or familiar persons is not a threat for contracting HIV/AIDS. Half of the respondent believe of the respondents believe that clothe used by HIV affected person should be burned after using. Sixty percent of the respondent believe that blood test of the HIV positive patients should be done like other people's. 13.9 percent disagreed with the fact that HIV test should be bone during pregnancy and 7.2 percent think that drug users and sex workers only are the likely person to have risk of

contracting HIV virus. Moreover, structural factors also affect the transmission of HIV infection among sex workers.⁵ Consistent with the finding of this study, a study in south India found that 63 percent of the students and faculties of colleges did not know that breast-feeding is a mode of transmission of HIV. This study found that health professionals know about HIV but they have not enough knowledge about how it transmits and what actions should be taken to prevent it.⁶ The present study also found some misconceptions among the participants. The misconceptions about transmission of disease are probably due to reflection about integrate health education targeted more than disease. Some surveyed participants believed HIV is a curable disease. National survey in Malay and survey of selected entry-level medical students in India also found similar misperceptions.^{7,8} Students have found that HIV related misconception are found area the current and future health care professionals including qualified doctor, nurse and midwife and pharmacy students.^{9,10} Sexual networks largely determine the ultimate epidemic level, especially the proportion of men buying sex.^{11,12} This study identified that the Polly chikitsok/rural medical practitioners had both adequate and inadequate knowledge regarding HIV/AIDS. Among of them 98.9% have direct contact with HIV patient and 1.1% never contract. Prompt and vigorous action is needed to strengthen the quality and coverage of HIV prevention programs, particularly amongst IDUs.¹³ Study done in ICCDRB prevention of HIV/AIDS infection through continuous education is a key strategy for the control of HIV/AIDS epidemic at least vaccine and drug are available, accessible and affordable.¹⁴ That study conducted International Research Organization working in health research. In this study, given the importance of minimizing the risk of HIV transmission and the ways of its transmission are warranted.

Limitations of the study was because of purposive sampling method the sample size is very small, the study may not exactly represent the total population of the country.

CONCLUSION

In Bangladesh, the prevalence of HIV infection is growing and PC/RMPs are increasingly involved in a range of HIV prevention and care activities, including mother to child transmission provision of anti-retro-viral treatment, to people with HIV related illness and prevention of transmission through blood and unsafe injection practice.

Recommendations

It is recommended to take effective initiatives to increase knowledge for reducing discrimination about HIV in the hospital and community level. It needs to ensure the success of ARV treatment programs and health care delivery system must be significantly strengthened in

every stages. Long-term capacity should be increase, international donor should support to strengthen and sustain HIV related education program in all over the Bangladesh. Sustainable capacity should be developed as programs are expended.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Miah MS, Islam GMR, Amin MA, Akter MT, Hossain MM, Islam MK, et al. Knowledge on mode of transmission and prevention measure of HIV and AIDS. *Int J Community Med Public Health* 2021;8:5216-21.