

**Original article**

**Knowledge, Awareness and Perception about HIV/AIDS among Primary School Teachers in Bangladesh**

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**Abstract**

**Objective:** Information is very important to have accurate understanding of people about the modes of HIV/AIDS transmission and its prevention strategies. Teachers at all levels are always expected to play a foremost role in the provision of information to promote awareness leading to behavioral change among students. Therefore, this article is aimed to evaluate the knowledge, awareness and perception about the deadly disease HIV/AIDS among primary school teachers in Bangladesh. **Materials and methods:** To do so, about 120 teachers from 28 primary schools, out of 68, in Rajshahi City Corporation (RCC) areas were interviewed purposively for this study using a self-administered questionnaire. **Results and discussion:** The results showed that the teachers serving at primary schools level were not too sure of their own knowledge about the issue. They had much misperception about the knowledge of facts, modes of transmission to reduce contamination and the modes of transmission from one person to another of HIV/AIDS. **Conclusion:** Government should provide adequate funding to organize and sponsor teachers to attend in training workshops, seminars and conferences related to HIV/AIDS and that the pandemic should be discussed with other for the purpose of awareness.

**Keywords :** HIV/AIDS, Knowledge, Awareness, Perception and Teachers.

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**Introduction:**

Since the first report in 1981 among homosexuals in the United States, HIV/AIDS has been described as the most dangerous and deadly disease of the millennium, caused by a tiny germ called Human Immunodeficiency Virus (HIV). Ogunbodede (2004) showed in a study that the pandemic of HIV/AIDS has not only been the most awful tragedy in contemporary history, but has also posed serious demographic, humanitarian, economic and developmental crisis<sup>1</sup>.

The achievements of the global HIV response over the last 10 years have been extraordinary.

The incidence of HIV infection declined by more than 25% between 2001 and 2009 in 33 countries,

and the HIV prevalence among young pregnant women attending antenatal clinics has declined by 25% or more in 7 countries<sup>2</sup>. At the end of 2010, more than 6.6 million people were receiving anti-retroviral therapy in low- and middle-income countries, a 16-fold increase from the approximately 400 000 people recorded in December 2003. Forty-eight low- and middle-income countries now provide anti-retroviral therapy to more than 50% of adults in need, including 10 countries with universal access, and about 50% of pregnant women received the most effective regimens to prevent the mother-to-child transmission of HIV in 2010. As a result of these efforts, the number of people newly infected globally with HIV has fallen from 4.9 million in 2005 to 2.7 million in 2010, including 390 000 chil-

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dren, while the annual number of AIDS related deaths worldwide has fallen from the peak of 2.2 million recorded in 2005 to an estimated 1.8 million in 2010, bringing the total number of people living with HIV to 34 million in 2010 from 40.3 in 2005<sup>2</sup>.

The Bangladesh Government has embarked on credible and multiple strategies aimed at curtailing the HIV/AIDS scourge across the country. It has been regularly collecting information on HIV prevalence in the country since 1998 by conducting HIV surveillance among populations who are considered to be most at risk. According to the 9<sup>th</sup> Round of HIV Serological Surveillance<sup>3</sup>, the overall prevalence of HIV in population most at risk remains below 1% and most importantly, HIV prevalence has declined among people who inject drugs (PWID) in Dhaka from 7% to 5.3%, however, the decline is not statistically significant. The scaling up of the Needle/Syringe Programme (NSP) and the special attention given to PWID living with HIV are possible factors contributing to the decline in rates<sup>4</sup>. In spite of, Bangladeshis still engage in unwholesome behavioral practices that may foster the spread of the disease.

**Table 1: HIV Prevalence among Key Affected Populations over the Years<sup>5</sup>**

Surveillance Rounds	Year	Total sample	HIV prevalence in %
1 <sup>st</sup> round	1998-1999	3,871	0.4
2 <sup>nd</sup> round	1999-2000	4,338	0.2
3 <sup>rd</sup> round	2000-2001	7,063	0.2
4 <sup>th</sup> round	2002-2003	7,877	0.3
5 <sup>th</sup> round	2003-2004	10,445	0.3
6 <sup>th</sup> round	2004-2005	11,029	0.6
7 <sup>th</sup> round	2006	10,368	0.9
8 <sup>th</sup> round	2007	12,786	0.7
9 <sup>th</sup> round	2011	12,894	0.7

The evaluation of teachers' knowledge is necessary because of its implications on the accuracy of information about HIV/AIDS, which they deliver to students, and also for them to know how to protect their own health. Several studies carried out to evaluate the knowledge of adolescents mostly under school-based settings in Nigeria have identified gaps in awareness, thus recommending the involvement of school based programs in the HIV awareness campaign.<sup>6,7,8</sup> However, the literatures on evaluation of the knowledge of the primary school teachers in Bangladesh who are the ones to be at the vanguard of the implementation of the school based HIV enlightenment activities are quite limited. Thus, the objective of this study was to evaluate the knowl-

edge, awareness and perception about HIV/AIDS among primary school teachers in Bangladesh.

**Materials and methods**

The present study was conducted in Rajshahi City Corporation (RCC), one of the divisional cities of Bangladesh. There are about 68 primary schools in RCC area, of which 47 government primary and 21 non-governments registered primary. Among these, only 28 primary schools were selected purposively (27 from government primary schools and 1 from non-governments registered primary schools) due to time and money constraint. The teachers who were found on the day of survey in these selected schools constituted the study participants. A total of 120 teachers (113 teachers from government primary schools and rest of them from non-government registered primary) were interviewed purposively for this study using a self-administered questionnaire where every question carried a specific score. The questionnaire covered mainly on some background information such as age, sex, occupational & educational status, religion etc., health hazards, maintenance of personal hygiene, sanitary system, preventive approaches of diseases and their habits. The collected data were then coded & edited and statistical analysis was performed using frequency and percentage distribution in computer by the software - Statistical Packages for Social Sciences (SPSS).

**Ethical issue**

As integrity in research is vital, ethical consideration should be given prime importance when preparing research designs<sup>9</sup>. Therefore, the purpose and importance of this study were explained to teachers before participating in the study and verbal consent was taken both from the head teachers and assistant teachers of the schools. The teachers were told that their participation is voluntary and have the liberty not to answer all or any part of the questionnaire. They were assured that the information will be kept confidential and will be used only for research purposes.

**Results**

Table 2 revealed the background information of the respondents participated in the study. It is revealed that the respondents comprised 24 males (20.0%) and 96 females (80.0%); most of the respondents were married (87.5%), only 7.5% and 5.0% were unmarried and divorced/widowed respectively.

Their mean age was 39.7 years with a standard deviation of 9.15, and ranged from 21 to 58 years (Table 2). Approximately 41.0% (n = 49) of the respondents were born in rural areas, while the rest of them were born either in urban or semi-urban areas. About 72.5% of the respondents were serving in the primary school as assistant teachers, where approximately 96.0% of the respondents were Muslim. The results also revealed that a little more of 45.0% of the respondents were being graduate and above degree, while only 15.0% were being Secondary School Certificate (SSC) pass and 39.0% were being Higher Secondary Certificate (HSC).

**Table 2: Background Profiles of Respondents (N = 120)**

Variables	No. of Teachers	Percentage
<b>Gender</b>		
Male	24	20.0
Female	96	80.0
<b>Marital Status</b>		
Married	105	87.5
Unmarried	9	7.5
Divorced/Widowed	6	5.0
<b>Current Age*</b>		
20-29	16	13.3
30-39	28	23.3
40 and above	76	63.4
<b>Birth Place</b>		
Rural	49	40.8
Urban	65	54.2
Suburb	6	5.0
<b>Designation</b>		
Head Teacher	15	12.5
Assistant Head Teacher	18	15.0
Assistant Teacher	87	72.5
<b>Religion</b>		
Muslim	115	95.8
Non-Muslim	5	4.2
<b>Level of Education</b>		
SSC	19	15.8
HSC	46	38.3
Graduation & above	55	45.9

\* **Note that:** Mean age of the respondents was 39.7 year, standard deviation of the age was 9.15, and all the respondents belonged to the age of 21 and 58 year.

The respondents' knowledge of fact about HIV/AIDS is shown in Table 3, giving correct answers to each of the four questions. Only 16 (13.3%) respondents knew that HIV is a viral infection. However, 32 respondents (26.7%) were aware that infection with other sexually transmitted diseases could increase the risk of contracting HIV infection. Although 67 respondents (55.8%) were believed that there is no treatment for HIV/AIDS but

at the same time, it is to observe that about 17% mentioned HIV/AIDS can't be cured.

**Table 3: Knowledge of Facts about HIV/AIDS among Primary School Teachers (N = 120)**

Facts	Correct Answer	Frequency of Correct Answer	Percentage
HIV/AIDS is a virus infection	Yes	16	13.3
HIV/AIDS can be cured	No	20	16.7
HIV/AIDS is communicable disease	Yes	32	26.7
There is a treatment for HIV/AIDS	No	67	55.8

Table 4 shows the percentage distribution of the primary school teachers with correct response on modes to reduce transmission of HIV/AIDS. Only 44% of the respondents stated that safe blood can play a role to reduce transmission of HIV/AIDS and 45% stated of maintaining only one sex partner who is not affected by HIV and emphasized on using disposable syringe.

**Table 4: Knowledge of Modes to Reduce Transmission of HIV/AIDS among Primary School Teachers (N = 120)**

Modes	Correct Answer	Frequency of Correct Answer	Percentage
Use Safe Blood if Necessary	Yes	53	44.2
Maintain One Sexual Partner Who is Not Affected by HIV	Yes	54	45
Use Disposable Syringe	Yes	55	45.8
Use Condom during Sexual Intercourse	Yes	84	70

The sources of information on HIV/AIDS mentioned by the teachers are revealed in Table 5. The respondents stated that television is the most important source of getting information about HIV/AIDS which is about 56%, followed by news paper (27.5%). The lowest ranked source of getting information about HIV/AIDS from reading books (2.5%).

**Table 5: Sources of Information on HIV/AIDS among Primary School Teachers**

Sources	Frequency	Percentage
Reading Books	3	2.5
Ever Unknown	4	3.3
Radio	5	4.2
From Volunteer	7	5.8
News Paper	33	27.5
Television	68	56.7

From Table 6, it is clear that only 19% of the respondents cited the transmission of HIV through unpro-

tected multiple sexual relations, about 10% and 5% of them stated of transmission of HIV through mosquito and sharing food utensil respectively. The result clearly indicates the misconception on routes of HIV transmission among teachers serving at primary school level.

**Table 6: Knowledge about Modes of Transmission of HIV/AIDS among Primary School Teachers (N = 120)**

Facts	Correct Answer	Frequency of Correct Answer	Percentage
Unprotected Multiple Sexual Relations	Yes	23	19.2
Mosquito	No	108	90
Sharing Food Utensil	No	114	95

**Discussion and conclusion:**

HIV in Bangladesh remains relatively at low levels in most at risk groups, except in injecting drug users (IDUs). Vigorous actions are required to prevent the spread of HIV in Bangladesh. Of these, World Bank<sup>10</sup> stated that advocacy and awareness program among the general population would be expanded through multi sectoral agencies like governmental & the non-governmental sectors, development partners and other stakeholders.

It is seen in general that the teacher’s knowledge and perception about the subject matter would influence how they are able to perform this role. From the study, it is revealed that the teachers who participated in the survey had not knowledge about HIV/AIDS at satisfactory level. A study conducted in Ogun State of Nigeria identified the problems for teaching of HIV/AIDS to students included lack of adequate knowledge, the fear that it might promote promiscuity among students and lack of special training on the subject<sup>11</sup>. Private primary schools based HIV/AIDS education strategies, include teacher capacity building program that has been developed jointly by the Ministry of Education of Botswana and UNDP, in collaboration with the Government of Brazil and with support from ACHAP, is trying to improve the teachers’ knowledge to demystify and destigmatizes HIV/AIDS and to break down cultural beliefs about sex and sexual-

ity<sup>12</sup>. The study also indicates that efforts are still considered necessarily to increase the knowledge of the teachers serving at primary school level as they had much misperception about the knowledge of facts (Table 3), modes of transmission to reduce contamination (Table 4) and the modes of transmission from one person to another (Table 6). In Bangladesh, like other countries in the region, HIV risk arises mainly from unprotected paid sex, sharing of used needles and syringes by IDU, and unprotected sex between men who have sex with men<sup>10</sup>. Although it is expected that teacher’s knowledge must have at a certain level to deliver high quality messages that will impact positively on the behavior of school going children but the study showed that they are not too sure of their own knowledge about the issue. It is immense necessary to train teachers to be able them to deliver sufficient quality information and passion that would have positive behavioral impact on the students. The respondents in this study stated that television and news paper were the first and second most important sources respectively of getting information about HIV/AIDS. The lowest ranked source is of reading books (Table 5). Bankole and Mabekoje (2008) in a study showed that television was the major sources of getting information on HIV/AIDS to the secondary school teachers in Nigeria<sup>11</sup>. From this scenario, it is to recommend the involvement of libraries in activities that will promote easy access and retrieval of HIV/AIDS information materials.

Government should regularly organize and sponsor teachers to attend in training workshops, where clarifications could be sought from experts on areas of misunderstandings. Last but not least, a lot still need to be done to inform teachers for getting information on all areas of human endeavors.

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