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Knowledge and Awareness Regarding HIV/AIDS in School Children of Guwahati City of India

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Abstract: *HIV/AIDS has killed more than 25 million people since it was first recognized in 1981, making it one of the most destructive epidemics in history. The epidemic of HIV/AIDS is progressing at a rapid pace among young people. School children of today are exposed to the risk of being victims of HIV/AIDS unlike their predecessors a few decades ago. This study was carried over a period of one year with the objective to study the knowledge and awareness regarding HIV/AIDS among school children of Guwahati city of India. Total 1000 students from 5 different schools were given a pretested questionnaire on random basis and requested to fill it up and return within 30 minutes.500 children were taken from government school and 500 from private school. In this study it was found that there is significant difference in knowledge and awareness regarding HIV/AIDS between students of Government school and Private school with p value < 0.01.*

Keywords*: HIV/AIDS, Knowledge, Awareness.*

I. Introduction

The lack of knowledge in todays world is a major issue which is causing the spread of many dangerous health problems including AIDS. AIDS an acronym for acquired immune deficiency syndrome has become a global crisis. Since its recognition in 1981, HIV/AIDS has become the most serious infectious disease in the world.

According to WHO, it is estimated that there are 4 million people living with HIV(PLHIV) in the South-East Asia Region, constituting nearly 11.8% of PLHIV globally. In India, an estimated 2,70,000 new HIV infections and 2,50,000 adult and child deaths due to AIDS were reported in 2010. HIV and AIDS has a great negative effect amongst students both at primary and secondary level if no proper measures are put in place to avert them. School students especially those at secondary level are much more vulnerable to HIV/AIDS because their social, emotional and psychological development is incomplete, they tend to experiment with risky behaviour, often with little awareness of the danger. Nevertheless, most young people have limited knowledge about HIV/AIDS, largely because the society makes it difficult for them to obtain information. At the same time, social norms and expectations, along with peer opinion, affects young people thereby exposing them to risky behaviour. HIV/AIDS awareness initiative is a collective responsibility that is not limited to the health sector only. As children are a valuable resource for the future of a country, it is imperative that they be equipped with ample amount of information so as to protect themselves and their counterparts from falling prey to this still an-incurable killer disease. In the view of above facts, the present study was undertaken with the objective to asses the knowledge and awareness of school children regarding HIV/ AIDS .

II. Materials And Methods

It was a cross sectional study carried out from June 2012 to may 2013. The Institutional Ethical Committee cleared the study. Permission to carry out the study was obtained from the principals of the schools where survey was performed. A total of 5 schools in Guwahati were randomly selected for the proposed study taking care to include both Government and Private educational institutions. Total 1000 students were taken for the study of which 500 students were from Government school and 500 students were from Private school. A self administered, English language questionnaire comprising close ended questions was developed for the study. 30 minutes was given to answer the questions. Pretesting of the questionnaire was conducted in 25 school students and subsequently certain modifications were made in the light of experience gained from

pretesting. Students were informed that participation was voluntary and anonymous. Students who were not willing to participate or refused to give consent for the study were excluded. At the beginning of each session, an information statement was read to students outlining the aim of the survey. Since the questionnaire was in English, help of the local female teacher was taken where needed in order to explain specific questions and to ensure appropriate individualized response. Participants sat apart and were asked not to communicate with each other during administration of the questionnaire so as to ensure honest response.

Data Analysis The data collected was scrutinized individually and analyzed manually. The data was also subjected to proportion test wherever needed. The data was analyzed using SPSS analytical software. A p-value of < 0.01 was considered statistically significant.

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III. Results and Observations

In the present study, the age of the participants ranged from 14 to 17 years with mean age of 15.5 years (S.D. = 1.29). Out of 1000 participants 586 (58.6%) were males and 414 were (41.4%) females.

Table 1 : Age wise distribution of respondents

Age (in Years)	Number	Percentage (%)	Mean Age	Standard Deviation
14	235	23.5	15.5	1.29
15	251	25.1		
16	254	25.4		
17	260	26.0		

Fig1: Sex-wise distribution of respondents

Knowledge on HIV/AIDS – Majority of the respondents knew the full form of HIV (72.5%) and AIDS (66.2%). Although the overall respondents knowledge regarding full form of HIV and AIDS was high, it was interesting to learn that their knowledge on difference between HIV and AIDS was low (42.8%). 68.9% respondents were correct in answering that there is no cure for AIDS but it was of concern to know that only half of the participants (55.4%) knew that there was no vaccine developed so far to prevent HIV infection. With regards to prevention of HIV/AIDS, 78.4% students knew that HIV/AIDS could be prevented by use of condoms, screening of blood before transfusion and avoiding sharing of needles.

Knowledge on modes of transmission of HIV/AIDS – Most of the students were aware that HIV infection could be transmitted from infected mother to baby (90.4%), sexual route (77.5%), through blood transfusion (67.4%) and sharing of infected needles and syringes (74.7%).

The test of significance was done by t test for two independent samples. The calculated value of t for comparison of knowledge and awareness between government school students and private school students was 7.444 (mean difference 18.65) which was found to be significant at 5% level (p value <0.01).

Source of information - The chief source of information about HIV/AIDS to the vast majority of respondents was mainly electronic media (internet and television). Out of the boy respondents from government school who had heard and had knowledge about HIV/AIDS, 26.4% got information from television, 18.8% got it from friends, 9.8% from internet, 1.8% from radio, 1.2% from newspaper, 0.8% from parents and 3% from others. Among boy respondents from private school, 19.8% got it

from internet, 17.2% from friends and 8.6% from television. 3.2%, 2.2%, 0.4% and 4% heard about HIV from parents, newspapers, radio and other sources respectively. In case of girls, 16.8%, 11% 3.8%, 2.4%, 1.4% 1.8%, and 1% from government school had knowledge from television, friends, internet, radio, other sources, newspapers and parents respectively. 15.2%, 12.2%, 9.8%, 5%, 1.2%, 0.6% and0.6% girl respondents from private schools got knowledge about HIV from television, internet, friends, parents, radio, newspaper and other sources respectively.

Consolidated evaluation of the knowledge on various aspects of HIV/AIDS – correct responses

Questions on knowledge regarding	Govt school Boys n = 500	Govt school Girls n = 500	Private school Boys n = 500	Private school Girls n = 500	Total n = 1000
Full form of HIV	39.4%	21.2%	48%	36.4%	72.5%
Full form of AIDS	34.2%	18.2%	44%	36.2%	66.2%
HIV and AIDS is same	17.4%	10%	30.8%	27.4%	42.8%
No cure for AIDS	26.8%	20.2%	50.8%	40%	68.9%
AIDS is preventable by use of codoms,screening of blood before transfusion and avoiding needle sharing	34.8%	32.2%	50.4%	39.4%	78.4%
No vaccine for AIDS	19.2 %	15.4%	43%	33.2%	55.4%

Consolidated evaluation of the knowledge on various modes of transmission – correct responses

Modes of transmission	Govt school Boys n = 500	Govt school Girls n = 500	Private school Boys n = 500	Private school Girls n = 500	Total n = 1000
Mother to baby	55.6%	31.2%	51.8%	42.2%	90.4%
Sexual route	42.2%	22%	50.4%	40.4%	77.5%
Blood transfusion	24.4%	19.2%	50.2%	41%	67.4%
Sharing of infected syringes and needles	37.8%	23%	50%	38.6%	74.7%

Source of information about HIV/AIDS

	Government School n=500				Private School n=500				Total n = 1000
Source	Boys	%	Girls	%	Boys	%	Girls	%	%
Internet	49	9.8	19	3.8	99	19.8	61	12.2	22.8
TV	132	26.4	84	16.8	43	8.6	76	15.2	33.5
Radio	9	1.8	12	2.4	2	0.4	6	1.2	2.9
Newspaper	6	1.2	7	1.4	11	2.2	3	0.6	2.7
Friends	94	18.8	55	11	86	17.2	49	9.8	28.4
Parents	4	0.8	5	1	16	3.2	25	5	5
Others	15	3	9	1.8	20	4	3	0.6	4.7

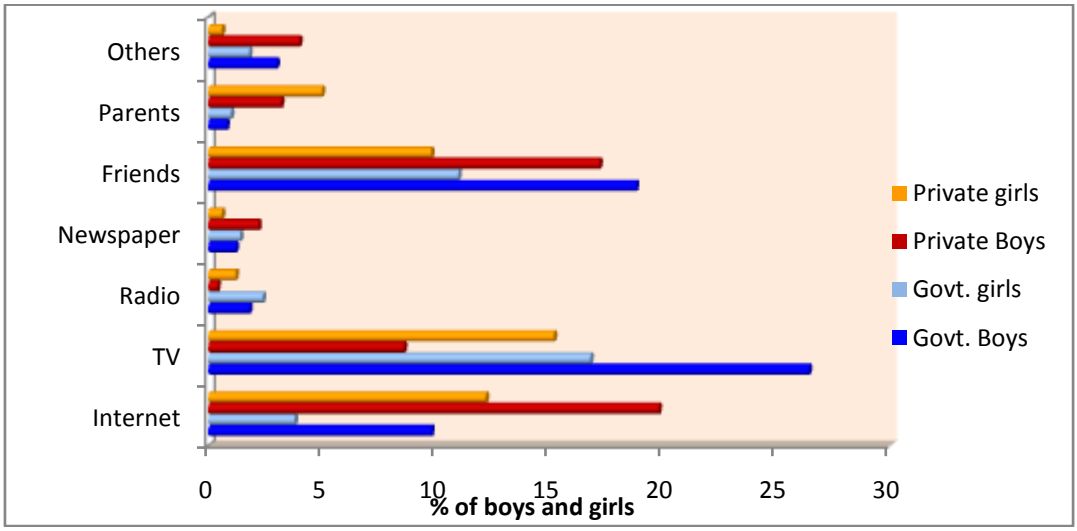

Fig 2: Showing source of information about HIV/AIDS

IV. Discussion

The present study revealed that full form of HIV is known by 72.5 % of students which is comparatively higher than the previous studies of Neena V. Nagdeo et al 2010[7] (44.69%), Anjali Singh et al 2009[2] (34.7%) and P Lal et al 2005[12] (19.9%). The full form of AIDS is known by 66.2 % students which is more than the studies by P Lal et al 2005[12] (51.4%) and Anjali Singh et al 2009[2] (34.7%) but comparable to the study by Neena V Nagdeo et al 2010[7] (66.89%).

The study indicated good awareness about the modes of HIV transmission. 77.5 % knew about sexual, 67.4 % about blood borne, 90.4 % about vertical and 74.7 % about infected needles and syringes as modes of transmission. The result of sexual mode of transmission is somewhat comparable to Srivastava et al 2011[3] (76.5%) and Anjali Singh et al 2009[2] (73%). However, knowledge of blood transfusion as a mode of transmission has been found to be strikingly lower than the studies by Sudha B Yadav et al 2011[18] (91.11%) and Anjali Singh et al 2009 [2] (94%) but comparable to Kumar et al 2012[4] (66.66%) and Srivastava et al 2011[3] (72.4%). Regarding vertical transmission, the result is comparable to the study by Anjali Singh et al 2009 [2] (91%) but higher than the other studies by Kumar et al 2012[4] (65.68%), Basumatary et al 2012[14] (43%), Srivastava et al 2011[3] (54.3%) and Sudha B Yadav et al 2011[18] (83.66%). The knowledge of transmission of HIV infection through infected needles and syringes is comparable to the study conducted by Srivastava et al 2011[3] (76.8%) but is in contrast to the studies by Sudha B Yadav et al 2011[18] and Anjali Singh et al 2009[2] where the knowledge about the same is 87.84% and 91.7 % respectively.

Less than half of the respondents (42.8%) students know that HIV and AIDS are not synonymous. The knowledge about the difference although is higher than the previous studies by Srivastava et al 2011[3] (39.6%) and Anjali Singh et al 2009 [2] (35%). About 68.8 % students knew that there is no cure for AIDS which is comparable to the study by Anjali Singh et al 2009[2] (68.3 %) but relatively less than the studies by Basumatary et al 2012[14] (99 %) and Neena V. Nagdeo et al 2010[7] (86.7 %). A fair number of students (78.4%) students knew that HIV/AIDS is preventable which is comparable to studies by Anjali Singh et al 2009 (63.3%) and P Lal et al 2005 (72.1%). On the contrary only 55.4 % students knew that there is no vaccine available for HIV/AIDS which is lower than the study by Neena V Nagdeo et al [7] (69.02%).

In this study, the major source of information has been found to be media which mainly included electronic media (Internet 22.8% and TV 33.5%). It has been observed in this study that internet (22.8 %) forms the third most common source of information. This could be due to urbanization and easy access of school children to mobile phones and computers. Friends who because of their own ignorance and misconceptions could be dangerously misguiding formed the second most common source of information (28.4 %) which is comparable to studies by Murugan et al [16] in 2010 (42.6 %) and Neena V Nagdeo et al [7] in 2010 (20.35 %) but in contrast to the study by Sudha B Yadav et al[18] in 2011 (77.39 %) where friends are the most common source of information. It has been seen in this study that a very small number of school students discuss about HIV/AIDS with their parents (5%).

The study reveals that there is significant difference in knowledge and awareness regarding HIV/AIDS between students of Government school and Private school. This difference may be due to difference in economic background between students of Government and Private school. Students from private school come from higher economic status and hence have better access to sources of information like internet, TV and newspaper. Besides in this study it has been found that a negligible number of students from Government school (0.8% boys and 1% girls) discuss about HIV/AIDS with their parents. On the other hand, 3.2% boys and 5% girl students from private school were found to discuss about issues related to HIV/AIDS with their parents. So in addition to school, media and newspaper, parents should also play a role in educating their children about HIV/AIDS.

V. Conclusion

From this study we arrive at the conclusion that the knowledge and awareness regarding HIV/AIDS is fairly good in school students of Guwahati city. Schools are the place where children spend most of their time; therefore it is imperative that they are equipped with updated information on HIV/AIDS awareness. The students are aware that their knowledge is not complete and are also receptive to learning more. In order to prevent school children from falling prey to HIV infection,

HIV/AIDS awareness programs should be implemented in schools, colleges and community. Mass education should be done with the help of television, internet, radio, newspaper etc for propagating safe sex and dispelling the myths about HIV/AIDS. The government can also set up adolescent friendly health services in schools, colleges and neighborhood to spread awareness regarding HIV/AIDS.

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