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A Study to assess the Knowledge Related to HIV/AIDS and Its Prevention among 12th Standard Students in a Selected School of Delhi

Abstract

Purpose: The objective of the study was to assess the knowledge of 12th standard students related to HIV/ AIDS and its prevention in a selected school of New Delhi.

Methods: The research approach adopted for the study was quantitative research approach and research design was descriptive survey design. The tool developed for data collection was structured knowledge questionnaire. The sample consisted of 50 students of Hamdard Public School, New Delhi. The data was collected through structured knowledge questionnaire and analysis was done using descriptive statistics.

Results: It was found that equal number of students, i.e., 50% each had adequate and inadequate knowledge regarding the prevention of HIV/ AIDS. Mass media (48%) was found to be playing a major role in disseminating the information towards HIV/ AIDS followed by teachers (24%). Family members (4%) and health professionals (10%) were source of information for a relatively small percentage of students.

Conclusion: It was found that students of 12th standard of Hamdard Public School had adequate knowledge regarding HIV/ AIDS and its prevention. It is also suggested to organize more awareness programs toward HIV/ AIDS through mass media to fill the gaps in knowledge and thus to reduce the incidence.

Keywords: HIV/ AIDS, Knowledge, Students.

Background

HIV/ AIDS emerged as one of the most important public health issues of the late 20th and early 21st centuries and is now one of the leading causes of global morbidity and mortality. In the current situation, where a cure continues to elude researchers and where infection results in death, curbing the spread of HIV/ AIDS through prevention has been the focus of efforts all over the world.¹

According to the Global AIDS Epidemic report by UNAIDS (2014),² in 2014, the total number of people living with HIV was 31.4-35.3 million while total number of AIDS deaths was 1.6-2.1 million. AIDS is affecting mainly the young people in sexually active age group. Majority of the HIV infections (88.55%) are in the age group of 15-49 years, out of which 31.8% are in the age group of 15-29 years. Impoverished, unemployed, under-employed, mobile and migrant youth and street children are also particularly vulnerable to HIV, as they are less likely to have information about HIV or access to preventive measures, and they may face repeated risks of HIV infection.³

In India, young adults aged 15-29 years, account for 32% of AIDS cases reported. A cross-sectional survey of urban adolescent school girls in South Delhi, revealed that more than one third of students in this study had no accurate understanding about the signs and symptoms of STIs other than HIV/ AIDS.

About 30% of respondents considered HIV/ AIDS could be cured, 49% felt that condoms should not be available to youth, 41% were confused about whether the contraceptive pill could protect against HIV infection and 32% thought it should only be taken by married women.⁴ Therefore, there exists a gap in knowledge among school students.

Education is currently the only means of preventing the spread of HIV/ AIDS. The education which is needed to protect adolescents from the virus and subsequent disease involves changes at many levels. Individuals and systems have to make changes in their thinking, behavior and attitudes.⁵

Rajamouli et al.² conducted a study to examine knowledge regarding HIV/ AIDS in secondary school students in Khammam town, Andhra Pradesh. It was concluded that the study groups lack knowledge. Whereas Gupta et al.³ conducted a study to determine the knowledge among secondary school students regarding HIV/ AIDS in Lucknow, Uttar Pradesh. It was observed that the knowledge of the school students was quite satisfactory for most of the variables like modes of transmission, including mother-to-child transmission of the disease. Similar were the findings of Muthuraja et al.⁴ who conducted a study on assessment of knowledge among adolescents regarding HIV/ AIDS in Chennai, southern India. Results showed that a majority of the adolescents (83%) knew that AIDS was a deadly disease and awareness regarding general aspects of AIDS was 64%. Similarly Wong et al.⁵ also concluded high levels of knowledge toward HIV/ AIDS. Despite high levels of knowledge, studies have suggested that schools should come forward to design awareness campaigns for the benefit of the students.

Lal et al.⁶ conducted a study to assess the awareness about HIV/ AIDS among senior secondary school children of 60 schools of Delhi. They found a low level of awareness about general aspects and transmission of HIV/ AIDS among school students. Similarly, another study conducted by Pramanik et al.⁷ emphasized upon the need for greater HIV education and awareness among school students of Delhi.

Hence in view of the importance of education and knowledge levels among school students to curb the spread of HIV/ AIDS, this study aimed to assess the knowledge levels related to HIV/ AIDS among school students.

Aim

The aim of the study was to assess the knowledge of

class 12 students related to HIV/ AIDS prevention and to disseminate information on HIV/ AIDS through self-made booklets.

Materials And Methods

Quantitative research approach was adopted for the study. The research design was descriptive survey design as the study intended to assess the knowledge of the students. The study was conducted in Hamdard Public School, Hamdard Nagar, New Delhi.

The population for the study comprised of 12th standard students with science and non-science streams. Using purposive sampling technique, 50 students were selected as study sample. All students were contacted and explained the study purpose and its importance. All the willing students were given questionnaire at one single point of time to avoid any contamination.

A structured questionnaire was developed to assess the knowledge of 12th standard students regarding HIV/ AIDS and its prevention. The selection of content was based on review of literature, opinions of experts, and informal discussions with peers and investigators. It included three parts: Section 1 included 5 items of demographic data: age, gender, religion, family type and source of information. Section 2 included 13 multiple choice questions with one correct response. Section 3 consisted of 12 true or false items. There are 6 true and 6 false items. The questionnaire included questions on causes, risk factors, mode of transmission, preventive measures for HIV/ AIDS. Each correct response is given 1 score and incorrect answer is given zero score. The tool was validated by giving it to 5 experts in nursing. Tool tryout was done on 5 students (not under study) and was found to be feasible.

For the collection of data, a formal administrative permission was sought from the principal of Hamdard Public School, New Delhi, for conducting the study. The respondents were explained about the purpose of the study and assured the confidentiality of their responses. After obtaining the permission, the structured questionnaire was administered to the sample.

The average time taken for completing the questionnaire was 30 minutes. The data was collected on one day that is on 8th April 2016.

After collecting the questionnaires, all the participants were given an information booklet that was developed by the researcher after an extensive review of literature. The content of the booklet included definition of HIV/ AIDS, its incidence and prevalence, risk factors, causes, mode of

transmission, prevention and treatment available.

The data was coded and analyzed using descriptive statistics. The demographic variables of the subjects were described using frequencies and percentages. Knowledge scores were assessed using mean, median, mode and standard deviation.

The knowledge scores were used to categorize the knowledge as adequate and inadequate. Those who scored 75% or >75% had adequate knowledge while

those who scored <75% were categorized as having inadequate knowledge.

Results

The following results were interpreted by the analysis of the data.

Part 1.

Presents the description of demographic characteristics of study subjects (Table 1).

Table 1. Description of Demographic Characteristic of Subjects by Age, Gender, Religion, Family Type and Source of Information

Demographic Characteristics	Frequency	Percentage (%)
Age (In years)		
15	04	08
16	27	54
17	17	34
18 and above	02	04
Gender		
Male	17	34
Female	33	66
Religion		
Hindu	13	26
Muslim	36	72
Christian	00	00
Sikh	01	02
Family Type		
Nuclear	28	56
Joint	21	42
Extended	01	02
Source of Information		
Family	02	04
Teachers	12	24
Friend	06	12
Relatives	01	02
Health personnel	05	10
Mass media	24	48

n=50

Table 1 depicts major role played by mass media in spreading the awareness of HIV/ AIDS among students followed by the teachers.

Part 2

The mean, median, mode and standard deviation of the

Table 2. Mean, Median, Mode and Standard Deviation of Knowledge Scores of Subjects regarding HIV/ AIDS

Variable	Possible Range of Score	Obtained Range of Score	Mean	Median	Mode	Standard Deviation ± Standard Error
Knowledge score	0-25	14-24	18.6	16.5	18	8.00±1.13

n=50

knowledge scores were computed (Table 2).

Percentage of knowledge score was computed and the knowledge scores were categorized as adequate and inadequate knowledge levels (Table 3) (Fig. 1).

Table 3. Frequency and Percentage Distribution of Knowledge Score of Subjects

S. No.	Knowledge Score (%)	Level of Knowledge	Frequency (N)	Percentage (%)
1.	≥ 75	Adequate	25	50
2.	< 75	Inadequate	25	50

n=50

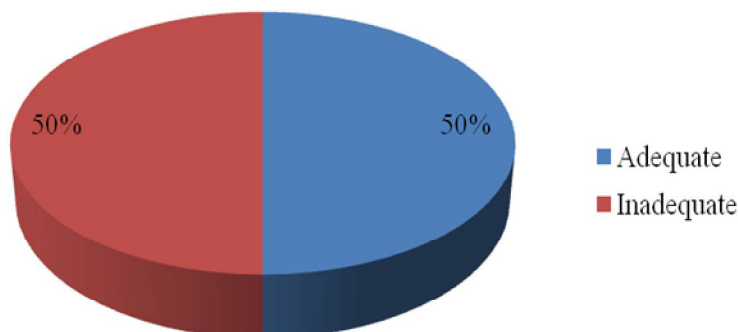


Figure 1. Percentage Distribution of Subjects according to Their Knowledge Level

Figure 1 shows that equal percentage (50%) of students had adequate and inadequate knowledge levels.

Discussion And Conclusion

The present study revealed that there was adequate knowledge among 50% of the students and on the other hand, 50% had inadequate knowledge levels. Moreover, none of the study subjects had knowledge score less than 50%. These findings are supported by a study done by Goswamee et al.⁸ who conducted a study to assess the knowledge toward HIV/ AIDS among the adolescents of Kamrup district of Assam. The findings revealed that in Kamrup district, urban adolescents had higher level of knowledge toward HIV/ AIDS than their rural counterparts. Similar were the findings of a study done by Gupta et al. (2013).³

A similar study was conducted by Bharati et al.⁹ at Jajarkot district of Nepal to assess the knowledge of HIV/ AIDS among adolescents of higher secondary school. They concluded that knowledge among the respondents was quite satisfactory for most of the aspects like modes of transmission, sexual and behavioral practices and common symptoms and preventive measures of the disease.

Wong et al.⁵ conducted a nationwide cross-sectional survey to assess the knowledge about HIV/ AIDS among the Malaysian young adults. A total of 1075 young adult respondents aged 15-24 years participated in this survey. The data indicated that HIV/ AIDS knowledge among the respondents was moderate, with a mean knowledge score of 20.1 out of 32 points.

Therefore, the findings of the present study related to the

knowledge levels among the school students were in congruence with the existing similar studies.

The present study also highlights the major role played by mass media creating awareness among students. Forty-eight percent of the subjects quoted mass media as source of information followed by the teachers (24%). Also family members (4%) and health personnel (10%) were not found to be a significant source of information for students. These findings were consistent to the studies done by Li et al.,¹⁰ Tavoosi et al.¹¹ and Wong et al.⁵ whose findings suggest that future education campaigns on HIV/ AIDS would best be conducted via mass media (specifically television, newspapers, and radio).

The study concluded that despite having adequate knowledge among half of the students, there exist misconceptions and gaps in knowledge which might lead to inadequate knowledge among students. Education and intervention programs are needed to increase the level of knowledge and awareness of HIV/ AIDS. Reaching youngsters at an impressionable age before they become sexually active can lay the foundation of a responsible lifestyle, including healthy relationships and safe sex habits.³ Modes of mass media and schools can play a major role in disseminating the knowledge about HIV/ AIDS and its preventive measures among adolescents.

Limitations And Recommendations

The present study was conducted in a single school. Also the sample size was very small that limits its generalizability. Similar studies can be conducted on a larger sample covering the entire student population of

Delhi and other geographical areas to assess the existing misconceptions. Further studies can be conducted to find the factors affecting knowledge levels among school students.

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Conflict of Interest: None

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