Awareness of HIV/AIDS among Secondary Students

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Abstract: HIV is one of the most threatening diseases of the world. It has infected men, women and children also. The main purpose of the study is to measure the awareness of AIDS among secondary school children and to see the effect of HIV/AIDS module. Pre and posttest design of single group is applied in this research. 200 students from four secondary school have been taken as sample. Purposive sampling technique was used for the selection of sample. Self developed tool for pre and post test was used for data collection. The result shows that the awareness level increased after implementation of module. It gives more correct and useful information to the students. So we can say that the module of HIV effect the knowledge of students.

Keywords: Awareness, HIV/AIDS, Secondary School Students

1. Introduction

AIDS is Acquired Immune Deficiency Syndrome has been one of the most threatening diseases of the 20th century. Even since it has been discovered in 1981, it has been constantly infecting men, women and adults, newly born children, homosexuals and heterosexual. It is an extremely serious disorder, which directly attacks the immune system of the person, leaving him or her vulnerable to many diseases, slowly and gradually the health condition deteriorates and many diseases infect the person at once, ending life painfully. Even though AIDS was born in an era of sophisticated medical and surgical developments, it still remains incurable.

India has had a sharp increase in the estimated number of HIV infections, from a few thousands in the early 1990’s to a working estimate of nearly 2.39 million according to NACO estimates at the end of 2009 with a population of over one billion, the HIV epidemics in India will have a major impact on the overall spread of HIV in Asia.

The spread of HIV within the country is as diverse as the societal patterns between its different regions, states and metropolitan areas. In fact India’s epidemic is made up of a number of epidemics and in some places they occur within the same state. The epidemics vary from states with mainly heterosexual transmission of HIV, to some states where infection is drug use is main route of HIV transmission. Both tracking the epidemic and implementing effecting programs poses a serious challenge to the authorities and communities in India.

India has a large population and population density, low literacy levels and consequently low levels of awareness and HIV/AIDS in one of the most challenging public health problems even faced by the country.

In India as elsewhere AIDS is perceived as a disease of others of people living on the margins of society whose life styles are considered prevented and sinful. Discrimination, stigmatization and denial are the outcomes of such values, affecting life in families, communities, workplaces, schools and health care settings. Because of HIV/AIDS related discrimination, appropriate policies and models of good practice remain undeveloped. People living with HIV and AIDS continue to be burdened by poor care and inadequate services, while those with the power to help do little to make the situation better.

Information about HIV/AIDS

Knowledge of HIV is particularly weak in rural areas and among women. It has been observed that the knowledge of AIDS is directly related to the level of education of an individual. The literacy rate is lower in rural India as compared to the urban regions, which adds up to lack of information on the disease as an increased risk. Literacy rates are higher for the urban areas but the gender disparities remain strong which make the situation grim. These problems are confounded by the masses being uninformed about the health services, their appropriateness and quality. The need of the hour is to take public education campaigns through to the masses and make them aware of the dangers.

Education and Aids

Quality of education has been jeopardized where teaches are affected by family trauma or AIDS – related illness themselves where families lose purchasing power fewer resources one available to support services and infrastructure. Equality of opportunity had moved further beyond reach as girls opportunities are disproportionately affected by HIV/AIDS. Equal opportunity is limited by girl’s vulnerability to infection particularly in high prevalence settings, and where of poverty and other stresses on society are exacerbated by the low status of girls and women. Only by managing the impact of HIV/AIDS on children young people and the education system itself can education realize its potential to decrease vulnerability to HIV/AIDS and reduce the risk of further infection.

Children from age 5 to 14 years are at least likely to be infected with AIDS. Education at this age leaves a strong impact and children can remain HIV free in their future. They may go for safer sex and infect control the transmission of HIV. The 15 to 24 years age group is the most dynamic and sexually active group and the most
affected one. Proper awareness programmes in this age group will lead to excellent results. Better educated girls tend to knowledge about different transmitted disease and proper health.

2. Need of the Study

So far many studies have been conducted relating to various aspects. These studies have been related to various factor leading to AIDS or studies concentrating on high risk groups particularly women sex worker. There have been studies relating to awareness and prevention methods but they have been either area specific or programme specific.

Another thing that is noticeable is that no study has been conducted to tackle the problem of lack of awareness among the secondary school student. Studies relating to youth are there but there is no study specifically dealing with secondary school students. Also none of the studies deal with the content of AIDS in secondary school.

India is contributing a large numbers of HIV infections every year. About 35% of this infection is contributed by young people, so its need of the time that studies should concentrate more on the younger generation and this should start from the secondary school. In order to fulfill some the above gaps the present study is being conducted. The study will focus mainly on the canalization of contents of the text books of secondary school students and development of a module for the secondary school students.

3. Objectives of the Study

To study the awareness of HIV/AIDS among secondary school students, the following objectives have been framed.
- To check the effectiveness of HIV/AIDS Module among Secondary School Students.
- To see the difference of effectiveness of HIV/AIDS module in Private and Government college students.
- To analyze the effectiveness of HIV pre and post test among secondary school students.
- To compare the effectiveness of pre and post test of HIV/AIDS module among male and female students.

Hypotheses

To achieve the above objectives of study, the following null hypotheses are formulated.

1) There is no significant difference between the Pre test and Post test scores of students on HIV awareness.
2) There is no significant difference between Pre test and Post test score of Private school students on HIV awareness.
3) There is no significant difference between Pre test and Post test score of Government school students on HIV awareness.
4) There is no significant difference between the Pre test HIV awareness score in Private and Government School.
5) There is no significant difference between the Post test HIV awareness score in Private and Government School.
6) There is no significant difference between the Pre test and Post test awareness score of male Students.
7) There is no significant difference between the Pre test and Post test awareness score of female Students.

4. Review of Related Literature

Yadav, et al. (2011) conducted a study on Awareness of HIV/AIDS among rural youth in India: A community based cross-sectional. This study aimed to assess the knowledge of rural youth regarding HIV/AIDS and to explore the epidemiological determinants of awareness among them. It was conducted among youths aged 15-24 years in rural areas of the Saurashtra region of Gujarat, India. A cluster sampling design was used, surveying 50 subjects from each of 30 clusters. Data was collected through house-to-house visits using a semi-structured questionnaire. Proportions and logistic regression were used for analysis. Out of a total of 1,237 subjects who participated in survey, 60% knew something about HIV. Of those who had heard of HIV, more than 90% subjects knew the modes of transmission and more than 80% were aware of modes of prevention of HIV/AIDS. One fifth of the subjects had misconceptions in relation to HIV/AIDS. On applying multiple logistic regression, age, education, occupation and mass media exposure were found to be the major determinants of their knowledge with regard to HIV/AIDS.

Trivedi, Shikha (2014) studied on HIV/AIDS Awareness level in Secondary Schools of India after Twenty Seven Years. Objective of the study was to find out the extent of HIV/AIDS awareness among secondary school students in India after twenty seven years of its existence. The school and Education system in all over the world play a major role in shaping the attitudes, opinions and the behavior of young people. This implies that school curriculum should be such that increases the awareness of HIV/AIDS that equip the students with proper skills to combat this pandemic. Questionnaire was used to collect quantitative data. Data was analyzed using SPSS and findings of the study revealed that students were still lacking in basic knowledge regarding HIV/AIDS, There is a need to provide additional resources and conduct workshops to the students. Parents’ involvement on HIV/AIDS issues can really backup the understanding of HIV/AIDS among children.

Research Design and Methodology

It is quantitative research in nature. In this study single group pre-test, post-test method has used to achieve the objectives. Population covers all the students of class $X^{th}$. A sample of 200 students of $X^{th}$ standard from four schools in Lucknow districts of CBSE Board has taken for the present study. Purposive sampling was used for the selection of students.

Tool Used

Researcher developed pre and post test tool for data collection on awareness of HIV. These tools are parallel in nature. The pretest questionnaire aims to evaluate the present knowledge and awareness of HIV/AIDS while post test aims to measure the enhanced knowledge and awareness as an effect of the developed module. Researcher personally...
went to the classes with the permission of authority of school, established rapport with the students, asked them to provide free and honest answer without hesitation. The researcher assured that the answers would be kept strictly confidential. Then the pretest with proper instructions was provided for specified time duration. After completion of the test, the respective booklets were collected from the students. Then at the next step the module was given to the students for one week and then on the 8th day a post test was conducted in the same way as pre test.

Scoring of Data
After collection of data, the scoring of data was done. One mark was given for right answer in both pre and posttest. No mark was deducted for wrong answers. Total number of right answer were counted and total marks obtains by a student’s was calculated.

Analysis and Interpretation
After scoring, the data was tabulated and analyzed according to the hypothesis. The tables and graphs are self-explanatory to understand the nature of awareness about HIV/AIDS of secondary school students.

Hypothesis-1 There is no significant difference between the Pre test and Post test scores of students on HIV awareness.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>Correlation</th>
<th>t-value (df-199)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>200</td>
<td>13.45</td>
<td>3.47</td>
<td>.867</td>
<td>18.85</td>
<td>Significant at both levels</td>
</tr>
<tr>
<td>Post-test</td>
<td>200</td>
<td>15.75</td>
<td>3.25</td>
<td>.867</td>
<td>18.85</td>
<td>Significant at both levels</td>
</tr>
</tbody>
</table>

The above table shows that the total number of students in Pre test is 200, the mean score on HIV awareness is 13.45 and S.D. is 3.47. The total number of students in post test is 200, mean score on HIV/AIDS is 15.75 and S.D is 3.25. The correlation between pre and post test is .867. The calculated value of t is 18.85 at 199 degree of freedom. The table value is 1.97 and 2.60 at .05 and .01 level of significance. Here calculated value of t is greater than the table value at both levels so the hypothesis is rejected. It means the significant difference between pre-test and post test on AIDS awareness.

Before the administration of module, level of awareness about HIV/AIDS was low, after the module was given to students, the mean score of the class increased. It clearly shows that the level of awareness of student has increased and module has been successful in converging and uplifting the awareness to a certain level. There is a positive correlation between pre and post test, it shows the previous knowledge of the student were helpful in conducting the post test with the help of module.

Hypothesis-2 There is no significant difference between Pre test and Post test score of Private school students on HIV awareness.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>Correlation</th>
<th>t-value (df-199)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>100</td>
<td>13.81</td>
<td>3.12</td>
<td>.910</td>
<td>15.61</td>
<td>Significant at both levels</td>
</tr>
<tr>
<td>Posttest</td>
<td>100</td>
<td>15.73</td>
<td>3.41</td>
<td>.910</td>
<td>15.61</td>
<td>Significant at both levels</td>
</tr>
</tbody>
</table>

The above table shows that the total number of private school students in Pre test is 100, the mean score is 13.81 and S.D. is 3.12. The number of student in post test is 100, mean score is 15.73 and S.D. is 3.41. The correlation is reported .91. The calculated t value is 13.61 and degree of freedom is 99. Here calculated value of t is greater than the table value at both levels of significance so the hypothesis is rejected. It means there is significant difference between pretest and posttest score on HIV awareness of private school students.

The reason behind this is the module administered in class in very useful and informative for students and help in understanding about the real causes of HIV/AIDS. There is a positive correlation between pre and post test of private school students that shows the previous knowledge of the student is helpful in adding the new concept and knowledge with the help of module.

Hypothesis-3 There is no significant difference between Pre test and Post test score of Government school students on HIV awareness.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>Correlation</th>
<th>t-value (df-99)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>100</td>
<td>10.52</td>
<td>3.25</td>
<td>.825</td>
<td>24.5</td>
<td>Significant at both levels</td>
</tr>
<tr>
<td>Posttest</td>
<td>100</td>
<td>15.15</td>
<td>3.27</td>
<td>.867</td>
<td>24.5</td>
<td>Significant at both levels</td>
</tr>
</tbody>
</table>

The above table reveals that the total number of government school students in Pre test is 100, the mean score is 10.52 and S.D. is 3.25. The number of student in post test is 100, mean score is 15.15 and S.D. is 3.27. The correlation is reported .825. The calculated t value is 24.5 and degree of freedom is 99. Here calculated value of t is greater than the table value at both levels of significance so the hypothesis is rejected. It means there is significant difference between pretest and posttest score on HIV awareness of government school students.

The reason behind this, the module administered in government school is very useful and informative for students and help in understanding about the real causes of HIV/AIDS. There is a positive correlation between pre and post test of government school students that shows the previous knowledge of the student is helpful in adding the new concept and knowledge with the help of module.

Hypothesis-4 There is no significant difference between the Pre test HIV awareness score in Private and Government School.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value (df-198)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private School</td>
<td>100</td>
<td>12.58</td>
<td>3.53</td>
<td>6.38</td>
<td>Significant at both levels</td>
</tr>
<tr>
<td>Government School</td>
<td>100</td>
<td>9.51</td>
<td>3.29</td>
<td>6.38</td>
<td>Significant at both levels</td>
</tr>
</tbody>
</table>

The table shows that the total number of students in private and government school is 100 each. The mean score on pre test of private school students is 12.58 and S.D. is 3.53. The mean score on pre test of government school students is 9.51 and S.D. is 3.29. The calculated t value is 6.38 and degree of freedom is 198. Here calculated value of t is greater than table value at 0.05 and 0.01 levels of significance. So the hypothesis is not accepted at both levels of significance. It means there is significant difference between pretest scores of HIV awareness of private and government school.
students. The mean score of private school students is greater than the mean score of government school students. It means that the awareness about HIV/AIDS was high in the student of private school as compare to government school students. It also shows that the previous knowledge of private school students about HIV was better in comparison to the students of government school.

**Hypothesis-5** There is no significant difference between the Post test HIV awareness score in Private and Government School.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value (df-198)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private School</td>
<td>100</td>
<td>15.91</td>
<td>3.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government School</td>
<td>100</td>
<td>12.56</td>
<td>3.25</td>
<td>6.67</td>
<td>Significant at both levels</td>
</tr>
</tbody>
</table>

The table clears that the total number of students in private and government school is 100 each. The mean score on post test of private school students is 15.91 and S.D. is 3.86. The mean score on post test of government school students is 12.56 and S.D. is 3.25. The calculated t value is 6.67 and degree of freedom is 198. Here calculated value of t is greater than table value at 0.05 and 0.01 levels of significance. So the hypothesis is rejected at both levels of significance. It means there is significant difference between post test scores of HIV awareness of private and government school students. The mean score of private school students is greater than the mean score of government school students. It means that the awareness about HIV/AIDS was high in the student of private school as compare to government school students. It also shows that the previous knowledge of private school students about HIV was better in comparison to the students of government school. The effectiveness of module is also justified with the better scores in post test in both types of school students.

**Hypothesis-6** There is no significant difference between the Pre test and Post test awareness score of male students.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>Correlation</th>
<th>t-value (df-99)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>100</td>
<td>15.74</td>
<td>2.75</td>
<td>.89</td>
<td>13.19</td>
<td>Significant at both levels</td>
</tr>
<tr>
<td>Post</td>
<td>100</td>
<td>17.35</td>
<td>2.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table reveals that the total number of male students in Pre and post test is 100 each. The mean score in pre test is 15.74 and S.D. is 2.75. Mean and S.D. score in post test is 17.35 and 2.35 respectively. The correlation is reported .89. The calculated t value is 13.19 and degree of freedom is 99. Here calculated value of t is greater than the table value at both levels of significance so the hypothesis is rejected. It means there is significant difference between pretest and posttest score on HIV awareness of male school students.

The reason behind this, the module administered in both school is very useful and informative for male students and help in understanding about the causes of HIV/AIDS. There is a positive correlation between pre and post test of male students that shows the previous knowledge of the student is helpful in adding the new knowledge with the help of module.

**Hypothesis-7** There is no significant difference between the Pre test and Post test awareness score of female students.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>Correlation</th>
<th>t-value (df-99)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>100</td>
<td>10.54</td>
<td>2.56</td>
<td></td>
<td>12.89</td>
<td>Significant at both levels</td>
</tr>
<tr>
<td>Post</td>
<td>100</td>
<td>12.89</td>
<td>2.73</td>
<td>.87</td>
<td>17.54</td>
<td>Significant at both levels</td>
</tr>
</tbody>
</table>

The above table reveals that the total number of female students in Pre and post test is 100 each. The mean score in pre test is 10.54 and S.D. is 2.56. Mean and S.D. score in post test is 12.89 and 2.73 respectively. The correlation is observed .87. The calculated t value is 17.54 and degree of freedom is 99. Here calculated value of t is greater than the table value at both levels of significance so the hypothesis is rejected. It means there is significant difference between pretest and posttest score on HIV awareness of female school students.

The reason behind this, the module administered in both school is very useful and informative for female students and help in understanding different dimensions of HIV/AIDS. There is a positive correlation between pre and post test of female students that shows the previous knowledge is helpful through the module administered.

5. Result and Findings

1) The result shows that a significant difference between the awareness of pretest group and post test score of secondary students. The mean score of post test increased also, it means that the awareness level increased after the module used.

2) Same result is observed in Private school students. Before implication of module the knowledge and awareness level about HIV was less. Students were benefited by using module in increasing knowledge.

3) Government school students were less aware in comparison to private school because of content which is taught in class. One more reason is that the information receiving related to AIDS in school and home. After using module, they become more aware.

4) Significant difference was found between the Private and Government School students on Pre test HIV awareness score. It seems that knowledge about HIV is more in private school students in comparison to government school. It is because of information seeking behavior by private school students.

5) Same result was found on post test score of HIV awareness. The private school students do better in comparison to government school students. The mean score of awareness level was more in private school students.

6) Significant difference was found in Pre test and Post test awareness score of male students. This result shows that the module of HIV awareness creates more interest in knowing the information and facts.

7) Significant difference was found in Pre test and Post test awareness score of female students also. This result revealed that the HIV module of awareness is more important in understanding the problems, causes and prevention of AIDS in female students.
6. Educational Implications of the Study

Present study is relevant and importance to all for information about AIDS/HIV. The findings of the study reveal a true picture of awareness level in youth especially secondary level students. Every individual has a great responsibility to aware youth and all of us about deteriorating conditions of health. It helps the policy makers to decide future rules and instructions. Several special programs, seminars, awareness courses can be organized by schools, colleges and NGOs. It will help students to increase their awareness about this emerging problem of society. This will help the persons to increase their awareness about the HIV/AIDS to help other to give knowledge. It will also help the teachers and students to know about the prevention of this dangerous disease. This knowledge will enhance the interest of the students as well as teachers about HIV/AIDS. Student will learn how to prevent themselves and others through the study of module of HIV/AIDS awareness.

References

[7] www.naco.org.in