

## **EFFECTIVENESS OF PLANNED TEACHING PROGRAM USING EXHIBITION METHOD ON KNOWLEDGE OF HIV/AIDS AMONG ADOLESCENT GIRLS**

**Author's Name:** Asma Khatun<sup>1</sup>, Prof. (Dr.) Alpanamayee Bera<sup>2</sup>

**Affiliation:**

1. Deputy Nursing Superintendent, Jangipur Superspeciality Hospital, Murshidabad, West Bengal. India. asmaasmi1987@gmail.com
2. Professor cum Principal, Govt. College of Nursing. Murshidabad Medical College & Hospital. Berhampore. Murshidabad, West Bengal. India. alpanamayi@gmail.com

**Corresponding Author Name:** Asma Khatun, asmaasmi1987@gmail.com

### **ABSTRACT**

*Youth and adolescents are at an increased risk of HIV infection because of their sexual curiosity, drug experimentation and lack of knowledge. An interventional study conducted to evaluate effectiveness of planned teaching programme using exhibition method on knowledge of HIV/AIDS among adolescent girls in selected school of West Bengal. Total enumeration of sampling was done. The pre testing was done then Planned Teaching Programme was administered using exhibition method in 3 rounds dividing total students in three groups and after completion of teaching programme they have given to fill up the opinionnaire on acceptability of the planned teaching program using exhibition method. The post test was carried out on the 7th day of intervention. the number of students participated completely in the study was 50. Results: Study result revealed that the students identified television as their most important source of information about AIDS. There is significant difference between mean pretest(10.94) and mean post test(20.4) knowledge scores as evident from paired 't'(24.1062) test, showing effectiveness of teaching programme using exhibition method. Computed chi square values(1.467) showed there is no association between pre test knowledge score and selected variable*



*i.e. exposure to mass media. Behavioral Change Communication programs may be undertaken with regard to HIV/ AIDS, in schools to increase the awareness.*

**Keywords: Effectiveness, Planned Teaching Program, exhibition method, knowledge, adolescent girls.**

## INTRODUCTION

The existence and rapid spread of HIV and AIDS poses a serious challenge to every nation across the globe. HIV and AIDS have the potential to undermine the massive improvement that have been made in global health over the years. Apart from being a serious health problem, the multilayered effects of the epidemic on the socio-economic fabric of whole nations, makes HIV and AIDS a potential development threat worldwide.

Adolescent is a transitional stage from childhood to adulthood. It is a period of life extending from 10-19 years. Globally adolescents account for one fifth of the population. It is estimated that there are almost 200 million adolescents in India.<sup>1</sup> Adolescent is a period of relatively good health inspite of the storms and stresses of rapid physical growth, psychological changes, sexual and emotional growth and developments. The adolescents who are properly prepared for the physical and emotional changes, who are secure in their feelings of self esteem will be more likely to have developments in a constructive way and can achieve mature identity<sup>2</sup>.

It is a burning problem worldwide with broad implications of social, cultural, economical, political, ethical and legal entities. It is threat to entire human culture and population.<sup>3</sup>

Young people are at the centre of the global HIV/AIDS pandemic. An estimated 11.8 million young people aged 15 to 24 are living with HIV/AIDS. Each day, nearly 6,000 young people between the ages of 15 and 24 become infected with HIV. Yet only a fraction of them know they are infected. More than two decades into the epidemic, the vast majority of young people remain uninformed about sex and sexually transmitted infections (STIs). Although a majority have heard of AIDS, many do not know how HIV is spread and do not believe they are at risk. Those young people who do know something about HIV often do not protect themselves because they lack the skills, the support or the means to adopt safe behaviours.<sup>4</sup>

There is growing evidence of early onset of sexual activity among young people in India. Studies in different cities showed that almost 10% of young girls indulged in premarital sex. Research suggests that young people who become sexually active during adolescence are more likely to have sex with high risk partners or multiple partners. An increasing number of young people are also experiencing forced sexual activity.<sup>5</sup>The Behavioural Surveillance Survey (2001) revealed that awareness among rural females especially in Jharkhand, Gujarat, Chhattisgarh, Uttar

Pradesh and West Bengal was low. Although a significant proportion of young people were aware of HIV/AIDS, their knowledge on prevention modalities was low.<sup>6</sup>

Moreover, HIV rapidly destroys the immune system and invites opportunistic infections. Some drugs have been found to inhibit viral replication in the patient but so far no AIDS patient has been completely cured of the disease. So ultimate fate of a AIDS patient is death.<sup>7</sup>

The spread of HIV and AIDS has affected millions of people worldwide; According to the “2006 AIDS Epidemic Updates”, published by the UNAIDS/World Health Organization, there were an estimated 39.5 million people around world living with HIV, with 4.3 million new HIV infections and 2.9 million deaths from AIDS-related illnesses in 2006<sup>8</sup>.

It is now thought that around **2.3 million** people in India are living with HIV. Of these, an estimated **39%** are female and **3.5%** are children. Back-calculation suggests that HIV prevalence in India may have declined slightly in recent years, though the epidemic is still growing in some regions and population groups. The annual sentinel surveillance estimated the number of adults (15-49 year age range) living with HIV/AIDS in 2005 to be 5.2 million. Almost 57% of these infection are in rural areas. The overall HIV prevalence among the adult population was observed to be 0.91%<sup>9</sup>.

While HIV continues to spread predominantly amongst the poor and marginalized sections of society in India, including sex workers, injecting drug users men who have sex with men and migrant labourers, infections are spreading among other groups as well. One in every four AIDS cases reported in India is a woman. Furthermore, the number of women being newly infected with HIV is steadily rising. Almost 38% of all Indians living with HIV currently are women. The HIV prevalence rates for young women also exceed those for young men. According to the WHO health indicators, the HIV prevalence was 0.46% for 15-24 year old females while it was 0.22% for men in the same age group.<sup>10</sup>

There are number of myths and misconceptions which people hold against HIV infection and AIDS. So to give better understanding, to dispel those misconceptions health education is necessary. Behavioral change communications is the only the preventive measure, we presently have at our disposal for prevention of this fatal disease.

According to UNSAIDS 2006, worldwide the number of women living with HIV is the highest it has been in the history of the epidemic. But there is a way to halt the spread of HIV/AIDS on focusing young people as more than half of those newly infected with HIV today are between 15 and 24 years old.<sup>9</sup>

*Hanmanta V et al(2010)* conducted community based study among 400 adolescent girls of Solapur (Western Maharashtra) and found emerging need to formulate the information, education, and communication (IEC) strategies focusing on individual level, family level, and community level on HIV/AIDS.<sup>11</sup>

Study result of *Pramanik S et.al.(2006)* on HIV/AIDS stigma and knowledge among predominantly middle-class high school students in New Delhi. The result suggested a need for greater HIV/AIDS education and awareness of health resources especially among female adolescents.<sup>12</sup>

The study on awareness of Reproductive Health and HIV/AIDS among school going and school dropout adolescent girls of Jammu city and study result revealed that the school going girls had less scientific information of HIV/AIDS and misconception of transmission due to the less awareness programme on HIV/AIDS in schools.<sup>13</sup>

Early adolescence, from the ages of 10 to 14, is a time when enduring patterns of healthy behaviour can be established, including postponing the onset of sexual activity, which can quell the spread of HIV/AIDS. Establishing healthy patterns from the start is easier than changing risky behaviours already entrenched. Parents, extended families, communities, schools and peers are critical in guiding and supporting young people to make safe choices about their health and well-being. Studies have shown that consistent, positive, emotional connections with a caring adult help young people feel safe and secure, allowing them to develop the resiliency needed to manage the challenges in their lives. Young people are at the centre of the global HIV/AIDS pandemic. They also are the world's greatest hope in the struggle against this fatal disease.<sup>6</sup>

Since HIV and AIDS is a global problem, it requires global response. To find solutions to questions pertaining to HIV and AIDS, it is important to understand the dynamic of the disease

profile in its true sense, thereby unfolding the myths and misconceptions related to HIV & AIDS. In absence of effective cure to this disease, it can very easily prevented by BCC activities regarding behavior changes. In order to prevent becoming infected with HIV, young people need comprehensive information about how HIV is transmitted and what they can do to stop themselves from becoming infected. Schools play a pivotal role in providing AIDS education for young people. Not only do schools have the capacity to reach a large number of young people, but school students are particularly receptive to learning new information. Therefore schools are a well-established point of contact through which young people can receive AIDS education.<sup>14</sup>

In schools the life style education is already included in the course study but emphasis is needed on knowledge of HIV/AIDS to reduce the important gaps exists, especially about transmission. A literature review as a guide for curriculum planning on AIDS education in the schools by Brown LK, Fritz GK suggests that educational efforts can have a positive effect on reducing dangerous sexual and even drug use practices. This finding provides justification for larger school-based projects, particularly if the AIDS crisis can be made relevant to typical adolescent concerns.<sup>15</sup> So investigator felt the need for conducting study on knowledge of HIV and AIDS among adolescent schools students.

## MATERIAL AND METHODS

An interventional study was conducted to evaluate effectiveness of planned teaching programme using exhibition method on knowledge of HIV/AIDS among adolescents girls students of class IX. The study protocol was approved by the Institutional Ethical Committee and authoritative permission was sought form the respective authority.

Informed consent was obtained from parents and assent was taken The consecutive sampling done(total enumeration)..The questionnaire was administered to total 55 students and time taken approximately 20-30 minutes to complete the pretest

The Planned teaching programme was administered using exhibition method in dividing total students in three groups . The time taken for teaching nearly 30 minutes.

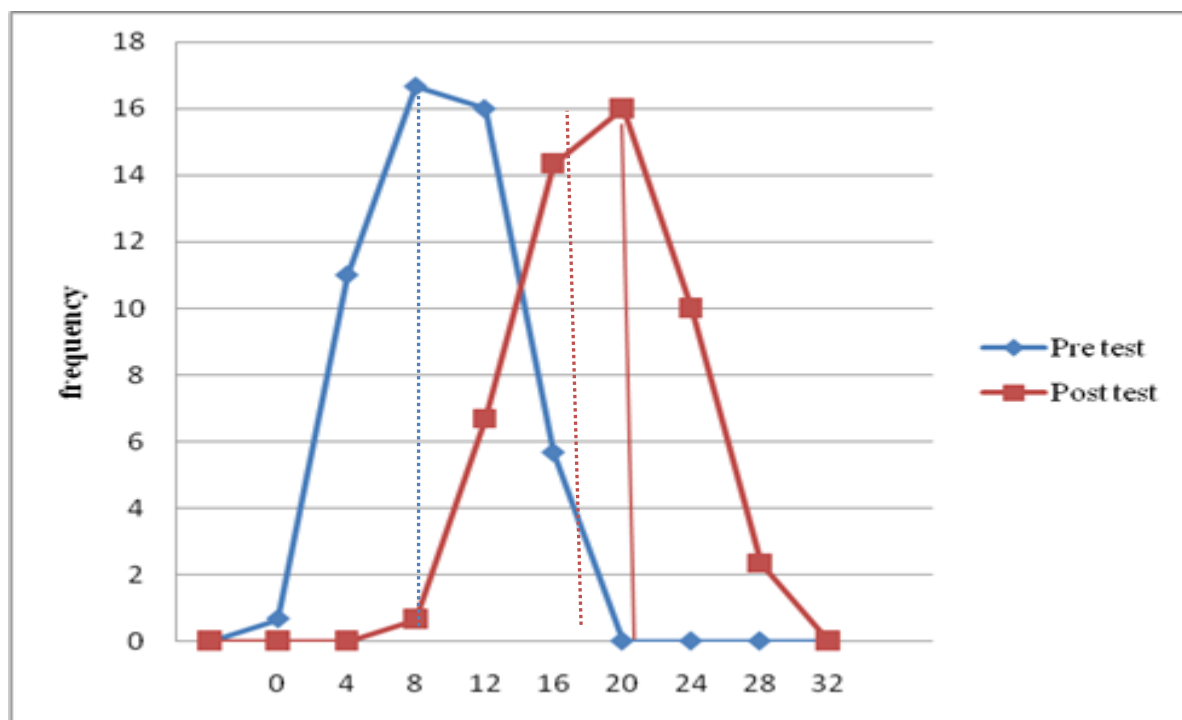
After completion of teaching programme they have given to fill up the opinionnaire on acceptability of the planned teaching program using exhibition method .

The post test was carried out on the 7<sup>th</sup> day of intervention and the number of students participated completely in the study was 50.

## RESULTS

Response of each student are coded, tabulated, analyzed and interpreted by using descriptive and inferential statistics. The maximum number 36(72%) students belongs to in the age group of 13-14 years. Data on type of religion show that majority 27(54%) are Hindu and 22(44%) are Muslim. Out of 50, maximum girls 28(56%) belong to nuclear family. The maximum students, 23(46%) are having total family members 3-4, 22(44%) are having total family members 5-6 and 5(10%) are having total family member more than 6.

32% father and 38% mother having level of secondary education.. The maximum 22(44%) of the student's father are serviceman and maximum 45(90%) mother are housewife. The per capita monthly family income maximum 16(32%) lies above Rs.3653 i.e. upper middle class (according to BG Prasad classification). Only 2(4%) of them know HIV positive patient in their surrounding and they are neighbor and 41(82%) students are exposed to mass-media whereas 9(18%) are not exposed. No one attended any short-term training on HIV/AIDS but 100% attended life-style class.

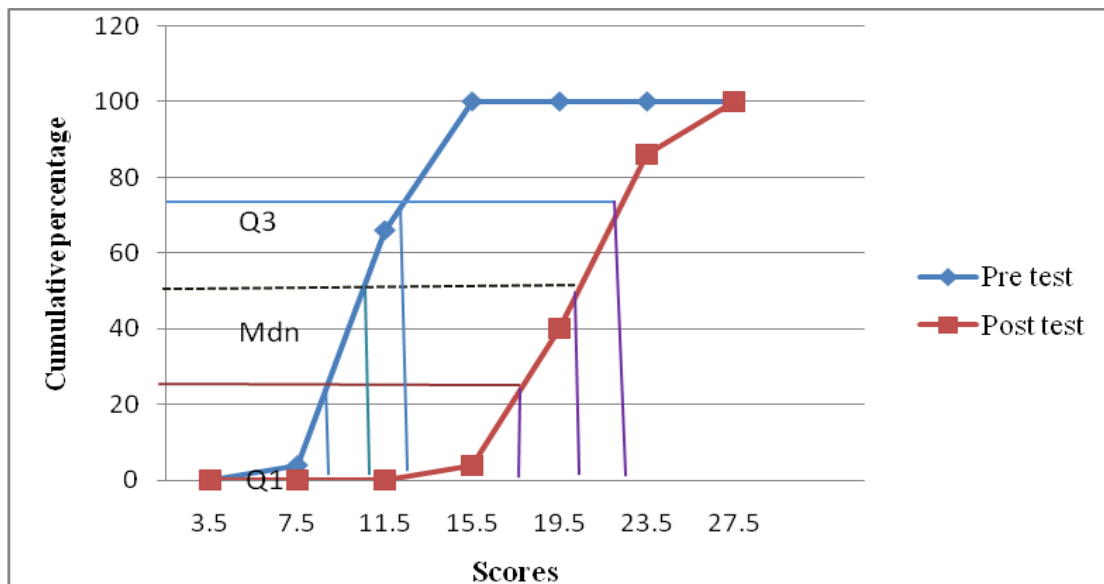


### Knowledge score-

**Figure-1: Showing comparison of frequency polygon between pre test and post test knowledge score of adolescent girls on HIV/AIDS**



Frequency shows that the maximum frequency of students scored in pre test within the class interval of 8-11 whereas in post test maximum frequency of students scored within the class interval of 20-23. The mean and median of pre test and post test lie close to each other in both the test. The skewness of the frequency polygon is computed and is found -0.085 and -0.65 for pre test and post test respectively. The distribution are negatively skewed. However Sk value of two distribution show that frequency polygons have nearly normal distribution as the values are closer to zero. It is evident from the graph that post test scores of most of the subjects fell beyond the pre test scores, which indicate that there is a considerable gain in knowledge score suggesting effectiveness of planned teaching program.



**Figure 2: comparison of ogive between pre test and post test knowledge score**

The post test ogive lies to the right of the pretest ogive over the entire range, indicating that post test knowledge scores are consistently higher than that of pre test scores. Thus the gain in knowledge of adolescent girls after planned teaching programme is obvious by the distance in the pre test and post test ogive at various levels. The pre test and post test 25<sup>th</sup> percentile ( $Q_1$ ) is 8.85 and 17.83, 50<sup>th</sup> percentile ( $Q_2$ ) is 11 and 21 and 75<sup>th</sup> percentile ( $Q_3$ ) is 12.56 and 22.54 respectively. It is found that the post test  $Q_1$ ,  $Q_2$  and  $Q_3$  are higher than pre test  $Q_1$ ,  $Q_2$  and  $Q_3$ .



**Table 1: mean, median, mean difference, standard deviation and paired ‘t’ value of pre test and post test knowledge score**

n=50

group	test	mean	Mean difference	Median	SD	Paired t value
Adolescent girls	Pre test	10.94	9.46	11	2.123	** 24.1062
	Post test	20.4		21	2.763	

‘t’ df(49)=2.01;p<0.05

The data presented in table show that the mean post test knowledge score(20.4)of the adolescent girls students is higher than the mean pre test knowledge score (10.94) with a mean difference 9.46 which is found statistically significant as evident from ‘t’ value of 24.1062 which is higher than the table value for df(49) at 0.05 level of significance. This shows that the obtained mean difference was a true difference and not by chance. So the planned teaching program, using exhibition method is found effective.

In comparison, there is highest actual gain score (66%) in content area of diagnosis of HIV and in lowest actual gain score(20%) in epidemiological overview of HIV/AIDS. In case of modified gain score, Epidemiological overview of HIV/AIDS has the highest(0.833) while lowest score(0.355%) in treatment of HIV/AIDS. There is 100% agreement in the statement of information is given in simple language, beneficial, explanation through TV roll sheet and overall teaching programme is interesting.

**Table 2: association between pre test knowledge score and exposure to mass media**

n=50

Exposure to mass-media	Knowledge score		Total	Chi <sup>2</sup> value
	below media	above median		
Exposed	20	21	41	1.467
Not exposed	7	2	9	Not Significant

df(1) 3.841 p>0.05

It shows that the computed  $\text{Chi}^2$  value(1.467),using Yate's correction formula, for exposure to mass media of adolescent girls students and pre test knowledge score is not significant at  $df(1)$  at 0.05 level of significance. So there is no association between pre test knowledge score and exposure to mass media.It is therefore concluded that pre test knowledge score is not associated with these selected variables.

## DISCUSSION IN RELATION TO OTHER STUDIES

In the present study, all the students had heard of HIV/AIDS and responded that it is caused by a virus although only 66% responded the full form of AIDS. Similar findings observed among senior secondary school children of Delhi <sup>16</sup> and in the study among the female senior secondary students in Srinagar district of Kashmir found that only 24% of the adolescents had never heard of HIV/AIDS. Among those who were aware, only about a half of the adolescents (48.44%) attributed the cause to a germ or a virus.<sup>17</sup>

In this study, 74% answered the route of transmission but gaps were seen in the awareness about other modes of transmission wherein only 20% could able to say the activities by which HIV not transmits. Low levels of knowledge about general aspects and transmission of HIV/AIDS have also been observed in another study amongst secondary school students in Kolkata<sup>18</sup>

In the present study, the mean difference was 9.46 which was found statistically significant as evident from 't' value of 24.1062. It is also supported by the study finding that is the knowledge of HIV/AIDS was significantly correlated with exposure to HIV/AIDS education, among the middle class high school students in New Delhi<sup>19</sup> and among adolescent girls students of the selected schools of Sri Muktsar, Punjab<sup>20</sup>.

## CONCLUSION

The planned teaching programme, using exhibition method was found to be an effective teaching method for improving the knowledge of adolescent girls students on HIV/AIDS.

## REFERENCES

1. Bhatia, BD.(1993).Adolescent Mother: An Unprepared Child, Guest Editorial.” Indian Journal of Maternal and Child Health ,4(3).
2. Khomdan L.(2004) HIV/AIDS and you, 1<sup>st</sup> ed. Manipur. Indian AIDS consortium, Feb,5-12
3. Francis CM. (1995).‘AIDS and women’, Health action, March; 8(9): 16
4. Young people and HIV/AIDS: opportunity in crisis. Geneva: WHO / UNICEF / UNAIDS, 2002. Retrieved from: [http://data.unaids.org/topics/young-people/youngpeoplehivaids\\_en.pdf](http://data.unaids.org/topics/young-people/youngpeoplehivaids_en.pdf). Accessed January 22, 2012.
5. Jejeebhoy, SJ. (2004). Looking back looking forward: a profile of sexual and reproductive health in India. New Delhi: Population Council.
6. HIV/AIDS epidemiological surveillance & estimation report 2005. New Delhi: National AIDS Control Organization, Ministry of Health and Family Welfare, April 2006
7. UNAIDS, World Health Organization. 2009. 2009 AIDS epidemic Update . Retrieved from: [http://data.unaids.org/pub/Report/2009/2009\\_epidemic\\_update\\_en.pdf](http://data.unaids.org/pub/Report/2009/2009_epidemic_update_en.pdf)
8. NACO (2007) 'HIV sentinel surveillance and HIV estimation in India 2007: A technical brief'.2007; Retrieved from: [http://www.nacoonline.org/Quick link/HIV Data](http://www.nacoonline.org/Quick_link/HIV_Data).Accessed Oct 1,2010.
9. Young people and HIV/AIDS: opportunity in crisis. Geneva: WHO / UNICEF / UNAIDS, 2002. Retrieved from: [http://data.unaids.org/topics/young-people/youngpeoplehivaids\\_en.pdf](http://data.unaids.org/topics/young-people/youngpeoplehivaids_en.pdf). Accessed January 22, 2012.
10. 2004 report on the global AIDS epidemic. 4th global report. Geneva: UNAIDS, 2004. Retrieved from:[http://www.unaids.org/bangkok2004/GAR2004\\_html/GAR2004\\_00\\_en.htm](http://www.unaids.org/bangkok2004/GAR2004_html/GAR2004_00_en.htm). Accessed January 22, 2012.
11. Hanmanta V, Wadgave.(2010). Knowledge of HIV/AIDS transmission among the adolescent girls in slum areas. Indian Journal of Sexually Transmitted Diseases. Dec; 31(2):69-131.
12. Pramanik S, Chartier M, Koopman C.(2006).HIV/AIDS stigma and knowledge among predominantly middle-class high school students in New Delhi, India. J Commun Dis. Mar;38(1):57-69.

13. Kotwal N, Gupta N, Gupta R. (2008) Awareness of Reproductive Health among Rural Adolescent Girls (A Comparative Study of School Going Girls and Dropout Girls of Jammu). *Stud Home Comm Sci.* 2(2):149-154.
14. AIDS education and young people. Retrieved from: <http://www.avert.org/aids-hiv-education.htm>.
15. Brown LK, Fritz GK. AIDS education in the schools: a literature review as a guide for curriculum planning. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed>.
16. Lal P, Nath A, Bandhan S, Ingle GK. A study of awareness about HIV/AIDS among senior secondary school children of Delhi. *Indian J Community Med* 2008 July;33(3): 190-192. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/20584296>. Accessed January 15, 2012.
17. Gaash B, Ahmad M, Kasur R, Bashir S. (2003). Knowledge, attitude and belief on HIV/AIDS among the female senior secondary students in Srinagar district of Kashmir. *Health and Population – Perspectives*, 26 (3):101 – 109. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/20584296>. Accessed February 1, 2012.
18. Chatterjee C, Baur B, Ram R, Dhar G, Sandhukhan S, Dan A. (2001). A study on awareness of AIDS among school students and teachers of higher secondary schools in north Calcutta. *Indian J Public Health*; 45:27–30. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/20584296>
19. Pramanik S, Chartier M, Koopman C. (2006) HIV/AIDS stigma and knowledge among predominantly middle class high school students in New Delhi. *J commun. Dis*;38(1): 57-69
20. Kaur A (2018) A study to assess the effectiveness of structured teaching program on the prevention and control of HIV/AIDS among the adolescent girl students of the selected schools of Sri Muktsar Sahib, Punjab. *IJNR*, 6(1), Retrieved from <https://ijneronline.com>