

## **An interventional study on HIV/AIDS awareness among adolescent girls of Senior Secondary School of Agra district**

DOLLY RANI AND MANJU ARORA

*Deptt. of Home Science Extension Education, Institute of Home Science, Dr. B. R. Ambedkar University, Agra.*

### **Abstract**

*HIV/AIDS still remains a threat to development of people of all age and Nationalities. It is pandemic, now at the beginning of its third decade, is one of the most devastating diseases, currently. It deprives families, communities and entire nations of people at their most productive ages. Globally, 34.0 million [31.4 million–35.9 million] people were living with HIV at the end of 2011. HIV continues to profoundly affect women and girls across all regions. India was the second largest population infected with HIV/AIDS and over 29.23% of all reported AIDS cases were women (NACO 2005). The figures in India as well as all over the world show that HIV/AIDS victims amongst girls will increase faster than the boys. The vulnerability of HIV infection in adolescent girls increases due to the biological factors and due to the limited information on growing up and sexuality issues. At such age girls are not so much aware about contracting HIV/AIDS and its after effects, which creates the problem. This makes adolescence a crucial period in her life time. This calls for not only health education and health promotion in general, but also for HIV prevention and AIDS education specifically for which intervention programme should be organized. In this context, the author made a scientific attempt to intervene adolescent girls to protect themselves from AIDS and to find out the level of awareness and changes in the level of awareness about HIV/AIDS which occurred as a result of intervention programme. This study was conducted among two hundred adolescent girls of Agra district. For implementation of intervention programme the whole sample was divided into two experiment groups. In both of the experiment groups, lecture method was used for imparting awareness regarding HIV/AIDS. Lectures were given with the help of computer presentation. The difference between first and second experiment group was that at the end of intervention programme booklet was distributed only to each of the students of first experiment group. In second experiment group booklets were not distributed. The comparative analysis of gained awareness scores obtained by the both of the experiment groups shows that regarding the basic facts about HIV/AIDS, sexually transmitted infections, progression stages of HIV/AIDS, symptoms of HIV/AIDS, medical tests and treatment for HIV/AIDS, government programme and policy against HIV/AIDS and total level of awareness regarding HIV/AIDS, the average mean of the gained awareness scores were higher among first experiment group than the second experiment group. On the other hand the average mean of gained awareness scores regarding causes of HIV infection and prevention against HIV infection were higher in second experiment group than the first experiment group. Z analysis shows that except the symptoms and total level of awareness regarding HIV/AIDS, the differences between the two means regarding all other aspects were not found statistically significant. Regarding to the symptoms of HIV/AIDS and total level of awareness regarding HIV/AIDS, the z values were found to be significant at 0.5 level of probability. Overall level of awareness regarding HIV/AIDS of most of the respondents was at medium level. The 't' figure reveals that there were significant difference regarding total level of awareness regarding HIV/AIDS between before and after the intervention programme among both experiment groups.*

**Keywords:** Adolescent girls, HIV/AIDS, Intervention programme, Awareness.

### **Introduction**

Acquired Immune Deficiency Syndrome or AIDS, as it is popularly known as, is the new scourge of the last two decades of the twentieth century. AIDS is a disease caused by a virus named HIV (Human Immuno deficiency Virus). HIV weakens the immune system or the bodies own defence system but this

process is slow. It takes years after being infected for a person to notice that he/she has been infected. HIV+ve means that the person has the virus and is harboring HIV infection. Specialists have identified four major mediums of HIV/AIDS transmission viz. intimate sexual contact, exposure of infected blood, shared uses of infected needles/syringes and transmission from an infected pregnant woman to her fetus.

HIV/AIDS still remains a threat to development of people of all age and Nationalities. It is pandemic, now at the beginning of its third decade, is one of the most devastating diseases, currently. It deprives families, communities and entire nations of people at their most productive ages. This epidemic is deepening poverty, affecting human development achievements, worsening gender inequalities, and eroding the ability of governments to maintain essential services, reducing labour productivity, supply, and hampering economic growth in the Countries worst affected for decades to come (UNAIDS, 2005).

Globally, 34.0 million [31.4 million–35.9 million] people were living with HIV at the end of 2011. An estimated 0.8% of adults aged 15-49 years worldwide are living with HIV, although the burden of the epidemic continues to vary considerably between countries and regions. Sub-Saharan Africa remains most severely affected, with nearly 1 in every 20 adults (4.9%) living with HIV and accounting for 69% of the people living with HIV worldwide. After sub-Saharan Africa, the regions most heavily affected are the Caribbean and Eastern Europe and Central Asia, where 1.0% of adults were living with HIV in 2011 (UNAIDS, 2012).

India's socio-economic status, traditional social ill, cultural myths on sex and sexuality and a huge population of marginalized people make it extremely vulnerable to the HIV epidemic. Thus the epidemic has become the most serious public health problem faced by the country since independence.

The first AIDS case in India was detected in 1986 and since then HIV infection has been reported in all states and union territories. Now India has the third largest number of people living with HIV/AIDS. As per the 2008-09 HIV estimates, there are an estimated 23.9 lakh people currently living with HIV/AIDS in India with an adult prevalence of 0.31 percent in 2009 (NACO 2011-12).

HIV continues to profoundly affect women and girls across all regions. For example, in sub-Saharan Africa, the region most severely affected by HIV, women represent 58% of the people living with HIV and bear the greatest burden of care (UNAIDS, 2012). India was the second largest population infected with HIV/AIDS and over 29.23 percent of all reported

AIDS cases were women (NACO 2005). The figures in India as well as all over the world show that HIV/AIDS victims amongst girls will increase faster than the boys

The lower socioeconomic and political status of female are assigned, including unequal access to education and employment, and fear or experience of violence compound women's greater physiological vulnerability to HIV. Because of social and economic power imbalances between men and women and the associated limitations in access to services, many women and girls have little capacity to negotiate sex, insist on condom use or otherwise take steps to protect themselves from HIV.

The vulnerability of HIV infection in adolescent girls also increases due to the biological factors and due to the limited information on growing up and sexuality issues. At such age girls are not so much aware about contracting HIV/AIDS and its after effects, which creates the problem. This makes adolescence a crucial period in her life time. This calls for not only health education and health promotion in general, but also for HIV prevention and AIDS education specifically for which intervention programme should be organized. Intervention approach is very useful in carrying out educated functions. It is a coordinated communication and educational effort, which focuses attention on the problem of HIV/AIDS. As quoted the World Bank (2004) by the author, it is necessary to reinforce that "AIDS education is a social vaccine to protect people from getting infected. Education is one of the most effective and cost effective HIV preventive strategies. Education has strong potential to make a difference sight against HIV/AIDS". It has been observed from various studies relating to HIV/AIDS and related aspects that mass media campaigns and intervention programme have succeeded in raising the level of awareness in the general population.

It is in this context, the author made a scientific attempt to intervene adolescent girls to protect themselves from AIDS and to find out the level of awareness and changes in the level of awareness about HIV/AIDS which occurred as a result of intervention programme.

### **Research Methodology**

The design adopted for the study entitled "An Interventional Study on HIV/AIDS Awareness among Adolescent Girls of Senior Secondary School of Agra District" was "before and after without control experimental design".

In such a design a single test group or area is selected and the dependent variables are measured before the introduction of the experiment. Then the

experiment is introduced and the dependent variables are measured again after the experiment.

A multistage sampling technique was used to select the ultimate unit of the sample with a view to get a representative sample of the area. The present study was conducted in Agra district. Agra district is divided into two areas as Agra rural and Agra urban. The research was conducted in Agra urban. Agra urban comprises of Nagar Nigam, Nagar Palika and Nagar Panchayat. Agra city comes under Nagar Nigam. Thus Agra city (Nagar Nigam) was selected purposively for present study.

List of Intermediate colleges of Agra city were collected from D.I.O.S. office, Panchkuiya, Agra. According to this list there were total 117 Hindi medium colleges and 23 English medium colleges. Out of these colleges two Hindi medium colleges namely "Tulsi Devi Girls Inter College" and "K.G. Inter College" and two English medium Colleges namely "Agra Public School" and "St. Anthony Junior College" were selected randomly for the study. Fifty adolescent girls of 11th and 12th class from each Intermediate college were selected for the present study randomly. Thus total 200 respondents were taken as a sample.

For the present study HIV/AIDS education was given through a well prepared intervention programme. For implementation of intervention programme the whole sample was divided into two experiment groups. In both of the experiment groups, lecture method was used for imparting awareness regarding HIV/AIDS. Lectures were given with the help of computer presentation. The difference between first and second experiment group was that at the end of intervention programme booklet was distributed only to each of the students of first experiment group. In second

experiment group booklets were not distributed.

The data was collected from primary as well as secondary sources. Secondary data was collected from different libraries, organization, agencies and Internet etc. Primary data was collected through a well constructed questionnaire.

### Results and Discussion

The results obtained were thoroughly examined, interpreted and discussed with all care. After statistical analysis the results have been presented under the following heads.

Ø Gain in awareness regarding different aspects of HIV/AIDS.\

Ø Level of awareness regarding HIV/AIDS.

Gain in Awareness Regarding Different Aspects of HIV/AIDS

Gain in awareness regarding different aspects of HIV/AIDS has been presented in Table 1.

The comparative analysis of gained awareness scores obtained by the both experiment groups of respondents on different aspects of awareness regarding HIV/AIDS presented in Table 4.2. appears to be quite interesting. As evident from the data it can be observed that the average mean of the gained awareness scores were higher among first experiment group than the second experiment group in the following aspects:- basic facts about HIV/AIDS (1.68 against 1.55), sexually transmitted infections (12.09 against 12.03), symptoms of HIV/AIDS (11.86 against 7.96), progression stages of HIV/AIDS (6.11 against 5.96), medical tests and treatment for HIV/AIDS (9.37 against 9.13), government programme and policy against HIV/AIDS (4.09 against 3.00) and total level of awareness regarding HIV/AIDS (53.90 against

Table 1: Gain in awareness regarding different aspects of HIV/AIDS among first and second experiment groups.

S.No.	Aspects	Gained Awareness Score	First experiment group (N = 100)	Second experiment group (N = 100)	'Z' value
1.	Basic facts about HIV/AIDS	MeanS.D.	1.681.81	1.551.46	0.56
2.	Sexually transmitted infections	MeanS.D.	12.093.47	12.034.76	0.10
3.	Causes of HIV infection	MeanS.D.	3.813.17	3.933.46	0.26
4.	Symptoms of HIV/AIDS	MeanS.D.	11.864.03	7.964.80	6.22*
5.	Progression stages of HIV/AIDS	MeanS.D.	6.111.89	5.961.61	0.60
6.	Prevention against HIV infection	MeanS.D.	5.103.68	5.174.61	0.12
7.	Medical tests and treatment for HIV/AIDS	MeanS.D.	9.372.60	9.133.02	0.60
8.	Government programme and policy against HIV/AIDS	MeanS.D.	4.093.47	3.002.59	0.43
	Total level of awareness regarding HIV/AIDS	MeanS.D.	53.9012.62	47.1215.53	3.31*

\* Significant at 5 percent level of significance

47.12).

On the other hand the average mean gained awareness scores regarding causes of HIV infection and prevention against HIV infection were higher in second experiment group than the first experiment group (3.93 against 3.81 and 5.17 against 5.10 respectively).

Z-analysis shows that except the symptoms of HIV/AIDS and total level of awareness, the differences between the two means regarding all other aspects were not found statistically significant. When the means of gained scores were compared regarding symptoms of HIV/AIDS and total level of awareness regarding HIV/AIDS, Z-values were found to be significant at 0.5 levels of probabilities. The mean of gained score regarding symptoms of HIV/AIDS and total level of awareness regarding HIV/AIDS obtained by the first experiment group were much higher than the second experiment group. The reason for such type of findings could be the use of different combination of method for intervention programme among each experiment group. The researcher found that the respondents of first experiment group got better understanding regarding major and minor symptoms of HIV/AIDS than the second experiment group. They could differentiate the major and minor symptoms of HIV/AIDS perfectly. This may have been because the first experiment group's respondents were distributed booklet to take home, from which they cleared the concept better with what they had listened

selected adolescent girls of the senior secondary school has been presented in the following table.

The analysis carried out with the data obtained by both experiment groups of respondents on level of awareness regarding HIV/AIDS before and after the intervention programme presented in Table 2. appears to be quite interesting.

First experiment group - Results reveal that 80 percent of the respondents possessed medium level of awareness, while 17 percent and 3 percent of the respondents possessed low and high level of awareness respectively. But after the intervention programme all the respondents (100 percent) shifted at high level of awareness from medium and low levels.

Second experiment group - More than half of the respondents (67 percent) had medium level of awareness, 28 percent low level of awareness and 4 percent of the respondents remained in high level of awareness before the intervention programme. After the intervention programme its impact reveals an improvement of awareness level from 4 percent (before intervention programme) to 97 percent (after intervention programme). Only 3 percent of the respondents remained in medium level of awareness.

The 't' value were found to be significant at 0.1 level of probability among both experiment groups before and after the intervention programme. Thus it was seen that the intervention programme had an impact on the respondents as it was successful in creating awareness regarding different aspects of HIV/

Table 2: Level of awareness regarding HIV/AIDS

Level of Awareness	First Experiment Group (N = 100)				Second Experiment Group (N = 100)			
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
High	3	3	100	100	4	4	97	97
Medium	80	80	0	0	68	68	3	3
Low	17	17	0	0	28	28	0	0
Total	100	100	100	100	100	100	100	100
<b>t-value</b>			42.49**				30.31**	

\*\*Significant at 1 percent level of significance

to in the morning through lecture and computer presentation (PowerPoint presentation).

On the whole it can be seen that due to the variations in the score relating to symptoms of HIV/AIDS differences can be observed in total level of awareness also. It shows that only this aspect was affected by the change brought in intervention method into two experiment groups and non-other aspects were affected.

*Level of Awareness Regarding HIV/AIDS*

Level of awareness regarding HIV/AIDS of the

AIDS.

## References

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