

Interventional programme on HIV/AIDS awareness for adolescent girls of Agra district: a study of effectiveness

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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. For example, in sub-Saharan Africa, the region most severely affected by HIV, women represent 58 per cent 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 per cent 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. It is concluded from the study that the respondent's awareness regarding basic facts about HIV/AIDS, causes of HIV infection, prevention against HIV infection and government programme and policy against HIV/AIDS was high before the intervention programme. While regarding to the sexually transmitted infections, symptoms of HIV/AIDS, progression stages of HIV/AIDS and medical tests and treatment for HIV/AIDS, the awareness level in most cases was low. Overall level of awareness regarding HIV/AIDS of most of the respondents was at medium level. Intervention programme was highly effective in creating awareness regarding different aspects of HIV/AIDS. Significant differences were observed (0.1 level of probability) in awareness level of adolescent girls regarding different aspects of HIV/AIDS before and after the intervention programme.

KEY WORDS : Adolescent girls, HIV/AIDS, Intervention programme, Awareness

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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

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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 economics 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 per cent 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 per cent 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 per cent of adults were living with HIV in 2011 (UNAIDS, 2012).

The situation of AIDS in Asia is as a “ticking bomb” with scarce statistics and perspectives, considering the potential catastrophes of India and China. Unfortunately, India fails within the high-risk region of South Asia and South-East Asia, which is just next to Sub-Sahara African region as regards the number of HIV infected cases, are concerned.

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 per cent 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

per cent 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 per cent 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 socio-economic 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 it’s 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 co-ordinated 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.

Kharpade (1997) reported in his study that intervention brought increase in knowledge on reproduction, HIV/AIDS and STDs. Acceptance of condoms in premarital sex increased after the intervention.

Bhatia *et al.* (2001) reported in their study that overall AIDS awareness increased from 58.2 per cent in the pre-intervention phase to 70 per cent in post-intervention phases. The increase in awareness levels about the modes of transmission was good regarding blood transfusion (from 22.8% to 46 %) and unhygienic needles/syringes (from 35.6% to 51.8 %), but was low regarding mother to child transmission (from 10 % to 17 %). Awareness regarding multiple sex partners remained high at around 70 per cent in both phases. The major gain was noticed in males regarding blood transfusion and in females regarding unhygienic syringes and needles.

After the intervention the overall awareness about

prevention of AIDS improved. More persons knew about the benefits of condoms (from 42% to 61.2 %), having sex with a single partner (from 59% to 72.3 %), using safe blood (from 14.9% to 29 %) and using sterile needles and syringes (from 18.1% to 33.9 %). Over 90 per cent of the participants considered AIDS a dangerous disease, most commonly because no treatment is available (57.3 %), because there is no vaccine (20.1 %) or because patients die within a few years (26.9 %), according to the post-camp evaluation study.

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.

METHODOLOGY

The design adopted for the study entitled “Interventional Programme on HIV/AIDS Awareness for Adolescent Girls of Agra District: A Study of Effectiveness” 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.

The experiment was undertaken through four phases in the present study as given below :

- Phase – 1 : Administration of Baseline Questionnaire (Before Intervention)
- Phase – 2 : Preparation of Intervention Programme
- Phase – 3 : Administration of Intervention Programme
- Phase – 4 : Administration of baseline questionnaire (After intervention).

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. Mixed media approach was used for intervening. The following methods and tools were used for the presentation of intervention programme :

Methods :

- Lecture method
- Discussion method.

Tools :

- Computer presentation (Power Point presentation)
- Booklet for distribution.

For using the methods and tools the whole sample was divided into two experiment groups. These two experimental groups were provided information for creating awareness regarding HIV/AIDS by the following methods:

First experiment group :

In the first experiment group, lecture and discussion method was used for imparting awareness regarding HIV/AIDS to the adolescent girls. Lectures were given with the help of computer presentation (slide presentation on PowerPoint with the help of L.C.D. projector). At the end of intervention programme booklet was distributed to each of the students of this experiment group.

Second experiment group :

In the second experiment group, lecture and discussion method was used. Lectures were given with the help of computer presentation. The difference in first experiment group and second experiment group was that 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.

OBSERVATION AND ASSESSMENT

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

- Awareness regarding different aspects of HIV/AIDS.
- Level of awareness regarding HIV/AIDS.

Awareness regarding different aspects of HIV/AIDS :

The following table gives a clear picture regarding awareness about different aspects of HIV/AIDS. The findings have been presented showing the comparative results between before intervention period and after intervention period. They clearly show the effectiveness of intervention programme.

Table 1 reveals the awareness regarding different aspects

of HIV/AIDS. Awareness regarding basic facts about HIV/AIDS shows that before the intervention programme most of the respondents (66 %) had high level of awareness among both experiment groups separately. After the intervention programme 100 per cent of the respondents from first experiment group and 99 per cent respondents from second experiment group reached in high level of awareness.

The data related to the awareness about sexually

transmitted infections reported that before the intervention programme 66 per cent and 65 per cent had low level of awareness amongst first and second experiment groups respectively. While after the intervention programme a highly increased in awareness level was reported that 100 per cent of the respondents from first experiment group and 97 per cent respondents from second experiment group reached in high level of awareness.

Table 1 : Awareness regarding different aspects of HIV/AIDS

Different aspects of HIV/AIDS	Level of Awareness	First experiment group (n=100)				Second experiment group (n = 100)			
		Before		After		Before		After	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Basic facts about HIV/AIDS	High	66	66	100	100	66	66	99	99
	Medium	30	30	0	0	31	31	1	1
	Low	4	4	0	0	3	3	0	0
	Total	100	100	100	100	100	100	100	100
	t – value	9.26**				10.54**			
Sexually transmitted infections	High	6	6	100	100	7	7	97	97
	Medium	28	28	0	0	28	28	3	3
	Low	66	66	0	0	65	65	0	0
	Total	100	100	100	100	100	100	100	100
	t – value	34.64**				25.17**			
Causes of HIV infection	High	63	63	97	97	51	51	95	95
	Medium	28	28	3	3	36	36	5	5
	Low	9	9	0	0	13	13	0	0
	Total	100	100	100	100	100	100	100	100
	t – value	11.98**				11.29**			
Symptoms of HIV/ AIDS	High	0	0	85	85	3	3	50	50
	Medium	15	15	15	15	17	17	33	33
	Low	85	85	0	0	80	80	17	17
	Total	100	100	100	100	100	100	100	100
	t – value	29.32**				16.49**			
Progression stages of HIV/ AIDS	High	1	1	93	93	0	0	93	93
	Medium	22	22	7	7	9	9	7	7
	Low	77	77	0	0	91	91	0	0
	Total	100	100	100	100	100	100	100	100
	t-value	32.23**				36.79**			
Prevention against HIV infection	High	53	53	96	96	51	51	97	97
	Medium	38	38	04	04	27	27	2	2
	Low	09	09	0	0	22	22	1	1
	Total	100	100	100	100	100	100	100	100
	t-value	13.81**				11.17**			
Medical Tests and Treatment for HIV/ Aids	High	02	02	92	92	0	0	75	75
	Medium	16	16	08	08	3	3	19	19
	Low	82	82	0	0	97	97	06	06
	Total	100	100	100	100	100	100	100	100
	t-value	35.90**				30.09**			
Government Programme and Policies against HIV/Aids	High	56	56	99	99	67	67	83	83
	Medium	33	33	1	1	22	22	14	14
	Low	11	11	0	0	11	11	3	3
	Total	100	100	100	100	100	100	100	100
	t-value	11.72**				7.66**			

** indicates of significance of avlues at P=0.01

Regarding awareness about causes of HIV infection, most of the respondents 63 per cent and 51 per cent had high level of awareness among first and second experiment group, respectively before the intervention programme. After the intervention programme respondent's level of awareness have improved from 63 per cent to 97 per cent among first experiment group and 51 per cent to 95 per cent among second experiment group.

Regarding awareness about symptoms of HIV/AIDS maximum number of the respondents (85 % and 80 %) had low level of awareness among first and second experiment groups respectively before the intervention programme. After the intervention programme high level of awareness was scored by 85 per cent of the respondents among first experiment group and 50 per cent respondents among second experiment group.

Related to the progression stages of HIV/AIDS, 77 per cent and 91 per cent respondents had low level of awareness among first and second experiment group, respectively before the intervention programme. After the intervention programme most of the respondents 93 per cent scored high level of awareness score among both experiment groups separately.

Regarding to the prevention against HIV infection, the findings show that before the intervention programme high level of awareness reported by 53 per cent of the respondents from first experiment group and by 51 per cent of the respondents from second experiment group. After the intervention programme an improvement was reported from 53 per cent to 96 per cent among first experiment group and 51 per cent to 97 per cent among second experiment group.

Regarding to the awareness about medical tests and treatment for HIV/AIDS, it is clearly shows that before the intervention programme most of the respondents (82 % from first experiment group and 97 % from second experiment group) reported low level of awareness. After the intervention programme 92 per cent of the respondents from first experiment group and 75 per cent respondents from second experiment group reached at high level of awareness.

As regards to the awareness about government programme and policy against HIV/AIDS the result indicates that before the intervention programme 56 per cent and 67 per cent of the respondents had high level of awareness among first and second experiment groups respectively. After the

intervention programme 99 per cent respondents from first experiment group and 83 per cent respondents from second experiment group shifted at high level of awareness.

Significant differences were seen in awareness level between before and after intervention programme among both experiment groups regarding different aspects of HIV/AIDS.

Total level of awareness regarding HIV/AIDS :

Till now the researcher has discussed the awareness regarding various aspects of HIV AIDS. The following table shows the total level of awareness (all aspects included) achieved by the respondents regarding HIV/AIDS. The results are being presented for the both experiment groups before and after the intervention programme.

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

First experiment group :

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

Second experiment group :

More than half of the respondents (67 %) had medium level of awareness, 28 per cent low level of awareness and 4 per cent 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 per cent (before intervention programme) to 97 per cent (after intervention programme). Only 3 per cent 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/AIDS. Similar work related to the present

Table 2 : Total level of awareness regarding HIV/AIDS

Level of awareness	First experiment group (n = 100)				Second experiment group (n = 100)			
	Before		After		Before		After	
	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
t-value	42.49**				30.31**			

** indicate significance of value at P=0.01

investigation was also carried out by Goyal and Bhardwaj (2003); MalleshappaKumarshashi (2012); Lal *et al.* (2008); Yadav *et al.* (2011); Sunder *et al.* (1997); Srivastava *et al.* (2011) and Singh and Jain (2009).

Summary and conclusion :

It is concluded from the study that socio-economic status of maximum number of the respondent was high. In context to the awareness regarding different aspects of HIV/ AIDS, it is concluded from the study that the respondent's awareness regarding basic facts about HIV/ AIDS, causes of HIV infection, prevention against HIV infection and government programme and policy against HIV/ AIDS was high before the intervention programme. While regarding to the sexually transmitted infections, symptoms of HIV/ AIDS, progression stages of HIV/AIDS and medical tests and treatment for HIV/ AIDS, the awareness level in most cases was low. Overall level of awareness regarding HIV/AIDS of the most of the respondents was at medium level. Intervention programme was highly effective in creating awareness regarding different aspects of HIV/AIDS.

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