Original Research Article

## **Evaluation of Implementation Process and Outcome of School Aids Education Programme in Secondary Schools**

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## **ABSTRACT**

**Background:** The School AIDS Education Programme/Adolescent Education Programme one of the key policy initiatives of NACP II, Ministry of HRD and NACO was implemented in secondary schools as a strategy to raise awareness level and develop a safe and responsible lifestyle among the school going young people in India. This study was undertaken to evaluate the implementation process as well as the outcome of the school AIDS education program. **Objectives:** 1. To study the implementation process of SAEP in secondary schools. 2. To evaluate the outcome of the intervention in terms of knowledge and attitudes of learners in these schools. Materials and methods: A longitudinal descriptive study was undertaken to study the implementation of the SAEP according to the resource material from NACO/NCERT module was evaluated in 9 high schools located in three PHC area attached to a medical college. A multimethod approach (qualitative and quantitative methods) was employed. Data about the implementation was obtained through individual interviews, focus group interviews (school principals, teachers and learners), observations of the group and activity logs. The outcome of the intervention in terms of knowledge and attitude in a sample of 580 learners were studied using a pre and post test structured questionnaire. Results and conclusions: The study showed that the programme was not implemented as it was planned due to organizational problems in schools. In the outcome level the learner's knowledge of HIV/AIDS increased and their attitudes were more positive. However a few valuable lessons were learned which could be useful in the implementation of various other HIV/AIDS interventions in the country.

*Key Words:* School AIDS education programme (SAEP), HIV/AIDS, Implementation, out come, knowledge, attitude, adolescents.

## INTRODUCTION

"AIDS" is the acronym of "Acquired Immuno-Deficiency Syndrome" which is a fatal disease described variously as modern plague, modern scourge, devastating disease, insidious microbiological bomb,

biological disaster and so-on. It has emerged as an unprecedented pandemic cutting across all boundaries - International, Socioeconomic, Age, Sex and Race. At the end of 2010 an estimated: 34 million people are globally living with HIV with 2.7 million new HIV infections in 2010.As per HIV estimates 2008-09, there are an estimated 23.9 lakh people living with HIV/AIDS in India with an adult prevalence of 0.31 percent in 2009. (1)

Adolescents constitute a India's considerable proportion of population (22%). Over 35% of all reported AIDS cases in India occur among young people in the age group of 15-24 years. (2) Majority of the adolescents is infected through unprotected sex and misconceptions about HIV/AIDS are widespread. According to surveys, in no country were more than half of youth fully educated about transmission and prevention. UNICEF statistics (2003-2008) show that only 36% of adolescent males in India have comprehensive knowledge of HIV, while their female counterparts lag behind with just 20% of them having complete and accurate HIV information.

Given the lack of a vaccine or cure. prevention of the spread of the virus is the only way to combat the disease (Lamptey, 2000). According to UN-AIDS review of 53 studies; a) educating on sexual health or HIV/AIDS does not encourage sexual activity; b) good-quality programs help delay first intercourse and provide the means to protect adolescents form HIV, STIs and unwanted pregnancy; c) adolescents learn about sexual health from multiple sources; d) adolescents can learn responsible safe sex behaviour; e) sexual health education activity should begin before the inset of sexual activity; f) education should be gender sensitive and g) adolescents are a heterogeneous group-multiple strategies are needed to reach them. (6)

SCHOOL AIDS EDUCATION
PROGRAMME: The School AIDS
Education Programme/Adolescent
Education Programme is one of the key
policy initiatives of NACP II. Ministry of

HRD and NACO which collaborated to develop this school-based programme that is implemented across 144,409 secondary and senior secondary schools with the objective of reaching out to about 33 million students within two years focusing the student youth to raise awareness level and develop a safe and responsible life-style. Under programme, teachers and peer educators are who, in turn, conduct programme amongst the student community. They have been provided reference material, which has been developed by NACO in collaboration with Ministry of HRD and vetted by NCERT. School AIDS Education Programme was being implemented in Karnataka from 2003-2004 where in all the high schools of Karnataka were covered in a phased manner. (7) In view of this, a study of implementation and outcome of the school AIDS education programme was undertaken for this study.

## **MATERIALS AND METHODS**

This longitudinal descriptive study was undertaken in secondary schools located in three primary health care centers attached to Bangalore medical college and research institute.

Permission was obtained from the Deputy Director Of Public Institutions (DDPI), Bangalore to carry out the study. The Block Extension officer was consulted of the respected areas for information regarding number of schools, type of schools and location; he issued letters to all the schools for the cooperation.

Total secondary schools listed was 42.All the schools were interviewed regarding the status of implementation of SAEP only principals of 9 schools agreed that they would implement SAEP soon after the admission process as per the module. All the 9 schools were included for the study.

SAEP implementation was to be done in four sessions spread over 6 months:

Session 1: Population education.

Session 2: Reproductive Physiology.

Session 3: Basic medical facts about HIV/AIDS.

Session 4: Life skills education

Α multi method approach (qualitative and quantitative methods) was used for data collection. (8) A systematic collection of information about the activities and characteristics to study the internal kinetics was done as a external evaluator through individual interviews(two trained teachers, principal) and one focus group interview(10 learners, all the school teachers)in each of the nine schools was done for the process of programme implementation. Interviews were done with principals of 10 other schools (simple random sampling) where SAEP was not being implemented. The observations of individuals or group behavior, and activity logs were also used to study the programme implementation.

A pre- and post-test structured questionnaire was used to investigate possible changes in knowledge and attitudes of the learners. The pre-test was done at the beginning of the implementation and the post-test at the end. In all the 9 schools 580 learners of grade 9<sup>th</sup> and 10<sup>th</sup> completed the questionnaire. The pre- and post-test questionnaires of 580 learners could be matched, using a numbering system that assured confidentiality. The questionnaire consisted of demographic questions such as gender, age, as well as scales assessing HIV/AIDS knowledge, knowledge protective behavior, attitudes regarding HIV/AIDS.

## Statistical Analysis

A paired t –Test was used to compare the Means of the scores of the study population.

#### RESULTS

## 1. Observations regarding the process of implementation of the programme

It was observed that only two schools had implemented the School AIDS Education Programme strictly adhering to the curriculum by allocating separate time for the programme in the school time table. Other schools covered the topic contents in the biology class on HIV/AIDS which is included as a chapter in their text book

The various teaching aids like flip charts, role playing, and debate were not used during the sessions as recommended in the module. Only lecture method was used by all Teachers.

The question boxes were not kept during the Programme for the feedback from the learners.

Among the twenty teachers 7 of them experienced difficulty in teaching the topic Reproductive Physiology. All the Teachers felt that the programme had a positive effect on academic schedules and had a good impact on attitudes of students. All the Teachers attended the training out of self-interest and felt that the training given to them was of adequate quality, good adequate duration methodology, contained good training materials. Teachers said that the programme was useful for students and school staff and said that they would recommend similar programme for other schools

Most of the Teachers felt that road safety, sanitation, and health education can also be conducted as a programme for High School Students on similar basis.

In the ten schools that were able to implement the programme, the following processes supported the implementation of the intervention:

- The teacher was highly motivated and had faith in the value of the intervention.
- Time was allocated on the timetable for HIV/AIDS education.
- The teacher experienced support from the principal and other teachers for implementing HIV/AIDS education.

## In the other 10 schools that could not implement the programme, the following were identified as the main obstacles:

- There was no time on the timetable to present the programme to the learners since all the periods were allocated to examination subjects.
- There were only two trained teachers per school and they were either transferred/left the school.
- The teachers did not have relationships of trust and openness with learners.
- The trained teachers experienced a lack of support from other teachers and the principals.

# The majority of teachers other than the trained nodal teachers did not want to become involved in the implementation of the programme because,

- They were uninformed about the seriousness of the HIV/AIDS epidemic and the necessity of the intervention.
- They did not regard their relationship with the learners as appropriate to deal with intimate issues.
- Teachers did not conceptualise sex education and emotional involvement with learners as part of the teachers' role: their role was to provide academic input.

From the interviews with school principals it could be seen that some of them did not see the implementation of the programme as a priority and did not see it as the responsibility of the school. From the interviews with school principals who understood the urgency of the programme, experienced conflict of interests.

- Teaching of examination subjects had a high priority.
- The nodal trained teachers had left the school and no other resource full teachers were available.
- That they experienced conflict of interest from the parents.

## 2. Results regarding the outcome of the SAEP programme:

580 students completed both the pre and post test questionnaire which included 38.8% males and 61.2% females,

30 Teachers i.e., in every school one trained teacher (trained nodal teacher) and two untrained teachers completed the questionnaire. Trained teachers had better knowledge (62%) about HIV/AIDS compared to untrained teachers. (Table: 1)

Among the student population, there was a statistically significant increase in knowledge about HIV/AIDS after the SAEP and their attitudes were more positive. (Table: 2,3)

Table: 1 Comparison of Knowledge about HIV/AIDS in trained and untrained teachers

	Number	Mean	SD
Trained teacher	10	99.25	1.09
Untrained teacher	20	37.96	2.85
t=32.33	p<0.001		

Above table suggests that there was a significant difference in the mean scoring of the trained teachers (62%) compared to untrained teachers with trained teachers having good knowledge about the subject taught in school AIDS education programme compared to untrained teachers.

Table: 2 Differences observed between variables regarding knowledge about HIV/AIDS in pre and post test measurement.

	Pre test Mean(SD)	Post test Mean(SD)	t-value	P value
Are HIV and AIDS both same	4.1(4.9)	6.6(4.6)	3.1	0.002
Is AIDS curable	2.3(4.1)	7.9(4.0)	14.8	0.000
Use of condoms can prevent HIV/AIDS	5.0(5.0)	6.7(4.2)	6.1	0.000
HIV can spread through unprotected sex with infected person.	5.9(4.9)	6.7(4.7)	2.6	0.007
HIV can spread through hugging and shaking hands with infected persons	4.0(4.9)	6.8(4.6)	10.2	0.000
HIV can spread through mosquitoes, bed bugs or other insects	3.2(4.6)	6.1(4.8)	7.5	0.000
Using public toilets leads to HIV/AIDS	4.0(4.9)	5.6(4.9)	8.6	0.000
Painful boils, wounds near sex organs are signs of sexually transmitted diseases	3.9(4.8)	4.5(4.9)	4.6	0.000
HIV/AIDS can be detected by blood tests only	3.2(4.6)	4.2(4.9)	4.8	0.000

Table: 3 Differences observed between variables regarding attitude towards HIV/AIDS in pre and post test measurement.

	Pre test Mean(SD)	Post test Mean(SD)	t-value	P value
I should not discriminate a HIV infected person	6.4(4.8)	8(3.9)	6.2	.000
I should keep another person's HIV status confidential	3.3(4.7)	5.5(4.9)	7.7	.000
A person with HIV should not be allowed to attend school.	3.7(4.8)	5.2(5.0)	5.2	.000
I have to take care of my friends health if he/she is HIV positive	7.3(4.4)	8.4(3.6)	4.7	.000
Blood test for HIV can be done without any consent.	2.6(4.3)	3.3(4.7)	2.7	.005
HIV/AIDS is a punishment by god for immoral behaviour	3.6(4.8)	5.7(4.9)	6.3	.000

Both table 2 and 3 demonstrated statistically significant change in knowledge (increase) and attitude (favorable) of the students towards HIV/AIDS after the SAEP.

#### **DISCUSSION**

The aim of the programme was to implement SAEP in secondary schools so as to reduce high-risk sexual behaviour and to prevent HIV infection among adolescents.

HIV prevention programs should be evaluated systematically so that program managers and policy makers can make program decisions based on the empirical findings rather than subjective impressions, and program utility and quality can be ensured. (9)

This longitudinal descriptive study interesting issues identified in implementation process of SAEP that the skills and HIV/AIDS education programme was not implemented as planned in most of the schools, and where it was implemented only parts of the programme were used. Various processes on all levels of system obstructed school the implementation of the programme. It was found that organizational problems in the schools, such as allocation of time and human resources. relationships learners, lack of communication in schools and attitudes of teachers, contributed mainly to the ineffective implementation of the life skills and HIV/AIDS education programme in these schools.

Because of the enormity of the HIV-AIDS epidemic and the urgency for preventing transmission, HIV prevention programs are a high priority for careful and timely evaluations. Information on program effectiveness and efficiency is needed for decision making about future HIV prevention priorities. (10)

The outcome evaluation revealed significant changes in awareness and attitude towards HIVAIDS among the students though it cannot be concluded that the changes can be attributed to the intervention alone. School AIDS Education Programme carried in nearly 100 schools as a Community based educational programme

and capacity building interventions have resulted in making a good progress in creating HIV awareness in Chandigarh, India. (11) Other studies also have revealed similar findings. (12-16)

Also evaluations of more than 150 programs around the world have shown that no increase in sexual risk-taking is providing associated with complete information about sexuality (including abstinence, contraception and condoms) to young people. (17) Many countries in the region are just beginning to explore the concept of life skills and how to advocate for it to be accepted and adopted into the education system. Working together with non-governmental governments and organizations, UNICEF needs to advocate for life skills programmes to be understood and accepted as a national strategy and component of all children and adolescent reproductive health programmes, for in school children and out of school youth. This calls for a concerted effort to create an enabling environment and to strengthen human resources. The time to act is now. (18)

## **CONCLUSIONS**

Global and Indian experiences have that educational interventions shown focused on life skills development have proven very effective in empowering adolescents to manage their Adolescent, reproductive and sexual health (ARSH) issues and concerns, including avoidance of risky behaviors. HIV/AIDS is an area where the scale and impact of the problem is such urgency implementing that the of preventative measures, including skills based health education, is critical and school is a better platform to impart these issues as the students enjoy considerable degree of trust and respect towards their teachers. Strict adherence to the working manual which is evidence based can lead to successful implementation of school AIDS

education programme and helps to meet the required objectives of the programme.

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