ORIGINAL ARTICLE

MOUNTING AIDS AWARENESS THROUGH EDUCATIONAL INTERVENTION: HOW EFFECTIVE CAN IT BE?

Parul Sharma[1], Shaili Vyas[2], Anuradha Davey[1], Kajal Srivastava[3], Bhawana Pant[4]

Author's Affiliation: [1]Assistant Professor, Department of Community Medicine, Subharti Medical College, Meerut; [2]Assistant Professor, Department of Community Medicine, SRMSIMS, Bareilly, [3]Assistant Professor, Department of Community Medicine, D.Y.Patil College, Pune; [4]Professor, Department of Community Medicine, Subharti Medical College, Meerut
Correspondence: Dr. Parul Sharma, **E-mail:** dr.parulkhilnani@gmail.com

ABSTRACT

Background: School education has been described as a powerful preventive tool against HIV/AIDS. Policy makers have often recommended that schools can act as the center point for disseminating information and education on this killer disease.

Objectives: To assess the level of awareness, attitude and beliefs regarding HIV/AIDS among school children and to raise their awareness by imparting health education focusing on HIV/AIDS prevention.

Material and Methods: A cross sectional study was carried out covering all students studying in 9th and 11th standard of two purposively selected public schools of Meerut. Information was collected on a pre-tested and pre-designed questionnaire.

Results: All the students had heard about HIV/AIDS whereas only 100 students (31%) knew the difference between HIV/AIDS. Approximately one-third of the students had knowledge about all the high risk groups for the disease. Lower percentages (46%) of the students were aware of sexually transmitted infections whereas greater proportion (64%) of the subjects knew about ICTCs. More than half (56%) students believed that HIV infected people should be shown a friendly attitude. A smaller number (29%) of students said that HIV/AIDS education should be included in the school curriculum. Our educational intervention could raise awareness to 87.5% from the baseline.

Conclusion: The inclusion of HIV/AIDS education in the school curriculum is imperative to protect them and their counterparts from falling prey to this still-an –incurable killer disease.

Keywords: HIV/AIDS, ICTCs, Education, Awareness

INTRODUCTION

The HIV/AIDS epidemic continues to be a global tragedy .The epidemic of HIV/AIDS is now progressing at a rapid pace among young people.[1] Adolescents aged 10-19 years of age accounting for nearly 23% of the population of India are exposed to the risk of being victims of HIV/AIDS.[2] Specially, school children of today are exposed to the risk of being victims of HIV/AIDS - which was quite unknown to their predecessors a few decades ago.[3] There is as yet no cure for AIDS but the provision of appropriate and effective HIV/AIDS-related health education is an important strategy in helping people at risk to protect themselves. This in turn acts to limit the spread of the disease.[4]

It has been demonstrated that there is a substantial degree of lack of knowledge and misconceptions about HIV/AIDS among secondary school students world over.[5,6,7] School based educational programs have shown to increase students' knowledge about HIV/AIDS.[8,9] More still, among young people, programmes that focus on creating awareness of HIV/AIDS and dissemination of information about the illness and alternative behaviour remain the only means of primary prevention.[10]

Very few intervention studies on HIV/AIDS awareness among secondary school children have been done in our state. Thus, this study was primarily designed to assess the level of awareness, attitude and beliefs regarding HIV/AIDS among secondary school children as well as increasing their awareness regarding the same through health education.This can play an important role in the identification of potential educational interventions, for example the inclusion of an appropriate "Reproductive and Sexual Health"

education in the curriculum that could improve their knowledge and provide a better preparation for a healthy and safe sexual life.

The strength of the study lies in the fact that it can serve as benchmark for future comparisons besides providing valuable inputs in designing the content of health education to address important knowledge gap.

MATERIAL AND METHODS

An institutional based interventional cross-sectional study was carried out in two purposively selected English medium private schools after taking approval from the ethical committee of our Institute**.** Based on consecutive sampling technique all the students from class 9th and 11th standard were included in the study. The students were divided according to sections in respective classes. There were three sections in class 9th with 60, 65 and 68 students respectively whereas there were two sections in class 10th with 78 and 70 students respectively. School students were enrolled after obtaining verbal consent and participation was purely voluntary and they were also assured that the study will not have any detrimental effect on the participants. The students were assured that any information, thus obtained will be treated with utmost confidence. Students who were not willing to participate or who were absent on that particular day were excluded from the study. Thus, a total of 320 students formed the universe of the study. An informed consent was also taken from the school principal after explaining the purpose of the study. A pre-tested self administered anonymous questionnaire containing questions on knowledge, attitude and beliefs regarding various aspects of HIV / AIDS was used to assess the level of awareness of the study subjects.

After getting the questionnaire filled, the data was analysed to get baseline information on their awareness level. No information pertaining to personal identity was collected to ensure unbiased response. Awareness about HIV/AIDS was provided to the students in different visits i.e one section of the class was covered in one visit through powerpoint presentation and pamphlets.The power point presentation was given by two health professionals with MD (community medicine) qualification in all the five visits so as to ensure quality.The presentation was of one hour duration and included information regarding the source of HIVinfection, modes of transmission, high risk groups,complications of the disease, social stigma associated with the disease, various myths, prevention , control and prognosis of the disease and the various prevention, diagnosis and treatment modalities/options under the guidelines of the national programme, the facilities where these services are available and the importance of voluntary HIV testing at ICTC centers.In the end they were also told about the need to include HIV education in the school curriculum and how youngsters like them can prove as effective channels for dissemination of awareness regarding the disease. The presentation was followed by pamphlets distribution with same contents accompanied by pictoral description for greater reinforcement. It was also accompanied by a group discussion in which we tried to solve the queries and doubts of the students**.** The students were then asked to fill the same questionnaire again, and the change in the level of awareness was assessed after the educational session.Both the pre-test and post-test awareness were assessed on the same day of the visit for each section respectively.

RESULTS

A total of 320 students were surveyed out of which majority of the students (41.6%) were 16 years old whereas only 7.8% were 13 year old(Mean=14.8 years).[Table 1]**.**

Table 1: Distribution of Students According to Age (n=320)

Age(years)	Students (%)
13	25 (7.8)
14	120 (37.5)
15	42 (13.1)
16	133 (41.6)
Mean age=14.8 years	

Only 146 students(46%) were aware about HIV/AIDS but the educational intervention raised their awareness level to 91% and the difference was found to be statistically significant (z=5.6,p<.01).Awareness regarding cure for HIV/AIDS was found to be low (32%) which increased to 68% after the educational intervention (z=6.2, p<.01).Very few students (46%) knew that condom use prevents HIV/AIDS and this level increased to 83% after the intervention(z=6.3, p<.01). More than two-third students became aware about post-exposure prophylaxis for HIV/AIDS as compared to 22% before our educational session (z=6.4, p<.01).[Table 2]

Previously, only 178 (56%) of the students believed that friendly behaviour should be the attitude towards HIV infected person but after our intervention,316 (99%) of the students had a positive belief (z=6.1,p<.01).Awareness regarding survival of HIV infected person increased from 62% to 83% after our intervention(z=6.7,p<.01).Previously, only 36 (10%) of the students believed that physical relationship with a person of opposite sex before marriage is not acceptable but after the health education, about 220(69%) of the students agreed with us(z=5.7,p<.01).A lower percentage (29%) of the students agreed that HIV/AIDS education should be included in school curriculum whereas the educational session increased this to 99% (z=7.03,p<.01).More than half(59%) of the students were of the view that school/college children are at increased risk of contracting HIV/AIDS but this percentage increased to 90% after the intervention

(z=5.39,p<.01).A lower percentage (46%) of the study subjects believed that no more programmes are necessary to raise awareness about HIV/AIDS whereas this figure was raised to 99% after our educational talk.(z=6.5, p<.01).[Table 3]

Table 2: Distribution of students according to awareness about HIV/ AIDS (n=320)

Variables	Pre-Test (%)	Post-Test (%)	z-test (p-value)
Awareness about HIV/AIDS important			
Yes	146 (46)	290 (91)	5.6 (p<.01)
No	174 (54)	30 (9)	6.8 (p<.01)
Cure for HIV/AIDS			
Yes	218 (68)	104 (32)	5.2 (p<0.01)
No	102 (32)	216 (68)	6.2 (p<0.01)
Vaccine for HIV/AIDS prevention available			
Yes	65 (41)	22 (14)	6.2 (p<0.01)
No	95 (59)	138 (86)	5.9 (p<0.01)
HIV/AIDS can be prevented by			
Condom use	148 (46)	272 (83)	6.3 (p<.01)
Use of unsterilized needles	14 (4)	46 (14)	5.1 (p<.01)
Proper hand washing	116 (36)	0 (0)	5.07 (p<.01)
Proper sanitation	42 (13)	02 (1)	5.4 (p<.01)
Any post-exposure prophylaxis available			
Yes	35 (22)	102 (64)	6.4 (p<.01)
No	125 (78)	58 (36)	7.1 (p<.01)

Table 3: Distribution of students according to attitude and beliefs about HIV/AIDS (n=320)

Variables	Pre-Test (%)	Post-Test (%)	z-test(p value)
Attitude towards HIV positive person			
Stop talking to that person	34 (10)	04 (1)	5.6 (p<.01)
Pass comments	104 (33)	0 (0)	5.03 (p<.01)
He/She should not be allowed to be a part of society	04 (1)	0 (0)	3.3(p<.01)
Friendly behaviour	178 (56)	316 (99)	6.1 (p<.01)
Survival of a person with HIV/AIDS			
Few days	78 (24)	06 (1)	4.97 (p<.01)
Few months	26 (8)	44 (15)	7.90(p<.01)
Few years	20 (6)	04 (1)	12.5(p<.01)
Time of survival is different in each case	196 (62)	266 (83)	6.7 (p<.01)
Physical relationship with opposite sex before marriage acceptable			
Yes	184 (90)	100 (31)	6.4 (p<.01)
No	36 (10)	220 (69)	5.7 (p<.01)
Physical relationship with multiple partners acceptable			
Yes	196 (61)	32 (10)	5.8 (p<.01)
No	124 (39)	288 (90)	6.02 (p<.01)
HIV/AIDS education should be included in school/college curriculum			
Yes	94 (29)	308 (99)	7.03 (p<.01)
No	226 (71)	12 (1)	6.91 (p<.01)
School/college students are at a high risk of getting HIV/AIDS			
Yes	188 (59)	284 (90)	5.39 (p<.01)
No	132 (41)	36 (10)	5.9 (p<.01)
More programmes should be carried out to increase HIV/AIDS awareness			
Yes	73 (46)	156 (99)	6.50 (p<.01)
No	87(54)	04 (1)	6.66 (p<.01)

DISCUSSION

The present study supports a number of recent studies that have indicated that school-based HIV/AIDS prevention and sex education programs may successfully increase students' knowledge about AIDS, change attitudes toward risk behaviours, delay onset of sexual intercourse, and increase condom use among sexually active students.

Awareness: The target study depicted that lower proportion (46%) of students were aware about HIV/AIDS. In contrast to our findings, the level of awareness was found to be 74.5% & 71% according to another studies by Namaitijiang Maimaiti in Malaysia &

Ruchi et al.[11,12] According to Yusuf et al, sixty four percent (64%) of the respondents stated that their knowledge increased as a result of the training they underwent whereas in our study the level of awareneness increased from 46 percent to 91 percent after our educational intervention.[13]

Cure: In our study, 68% students stated that there is a cure for this disease but after the educational intervention ,32% of them agreed that there is no cure for this dreaded disease. In contrast to our study, 13 percent respondents, each from both the Posttest (Group 1) and Pretest group (Group 2) agreed with this statement according to Yusuf et al[13] According to another study by Shankar et al at Nainital ,96% of the students stated that it is an incurable disease.[14]

Premarital sex: According to Yusuf et al 94 percent of the respondents of Group 1 (Posttest)agreed with this statement. In Group 2 (Pretest group), 67 percent of the respondents agreed with this statement.[13] In comparision to this in the index study, 90 percent subjects were in favour of pre-marital sex but after our health education this percentage dropped to 10 percent. The responses of Group 1 and the post-test group in our study are totally in line with this fact. In yet another Study by Jayanta kumar in Maharahtra & Tiwari et al in Delhi & Lucknow 88% of the female students & 63% of youths believed that premarital sex is unacceptable in their society whereas 58% &18 % felt that sex is a natural phenomenon & one should not feel guilty about it.[15,16]

HIV Transmission & Prevention: In our study only 46% students were of the view that condoms prevent the transmission of HIV/AIDS though this awareness increased to 83% after our health education session. According to Yusuf et al, 67% of the Group 2(Pretest) respondents,& 94% of Group 1(Post test) respondents are totally in line with this fact.[13] According to a study in Vietnam & yet another in Malaysia most students (75%-80%) & 65-75% thought condom can prevent HIV transmission during sexual intercourse.[17,11] In yet another study by Mohei El Din A et al, awareness was found to be poor regarding HIV/AIDS prevention and transmission i.e 25.6% and 43% respectively though the awareness level improved to 41.9% and 63.1% respectively.[18] The reason for this social and cultural barriers that restrict an open and frank discussion on sex-related issues. Surprisingly, in our study the methods stated by the students for prevention of HIV/AIDS were condoms (46%) followed by hand-washing (36%) and proper sanitation (13%) respectively.

Attitude: According to a study in Malaysia, only 33.8% of respondents had positive attitude towards HIV/AIDS and patients with HIV/AIDS.[11] Our analysis showed 56.0% of the respondents indicated that people with HIV&AIDS should be shown friendly behavior though this percentage increased to 99% after our intervention. According to Yusuf et al, HIV positive should be isolated from the rest of the population (He/she should not be allowed to be a part of the society) Group 1 (Posttest)responded to this statement by indicating that 13% of them agreed with it, 7% were neutral while 80% disagreed. In Group 2, (Pretest) 12% agreed with the statement, 8% were neutral and 79% were in disagreement.[13]

Vaccine: In our study, 59% of the students believed that there is no vaccine available at present to prevent HIV transmission though this percentage increased to 86% after our intervention. Similar findings were reported by Mini KV**,** respondents stated that no vaccine is available to prevent HIV infection, this awareness increased from 57-90% after imparting health education.[19] According to Mahajan P. et al when asked about status of vaccines on HIV/AIDS, about half [56% females, 41% males] were aware that no such vaccine was yet available in the market that could effectively protect individuals from getting the disease.[20]

Multiple Sex partners: According to another study by Shankar et al at Nainital, all the students agreed that avoidance of multiple sex partners was the most important approach for prevention of infection.[14] In contrast to this the target study depicted that approximately 61% students agreed that physical relationship with multiple partners is acceptable but after the educational intervention 90% students were of the view that multiple sex partners should be avoided.

CONCLUSION

Our study highlighted that although students had knowledge regarding HIV/AIDS, they still harbor negative attitude towards HIV/AIDS patients. Knowledge alone is not enough to change attitudes towards people having HIV/AIDS, but deep seated social and cultural factors such as religion, attitude towards ill-health and risk behaviors especially sexual behaviors can affect attitude too. The study thus concludes that educational intervention definitely has a positive impact on students's knowledge. Thus, the Government should take initiative for the compulsory inclusion of HIV/AIDS education in school curriculum and train teachers to specifically teach issues pertaining to HIV/AIDS. Besides this, there is need to follow up the implementation of policy on HIV/AIDS education.Schools can serve as the best channels to train such core groups of young people who can serve as peer educators and counselors in communities**.**

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