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Impact assessment of IEC intervention on knowledge of HIV/AIDS among secondary and higher secondary school students of Himmatnagar, Gujarat, India

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ABSTRACT

Background: Pertaining to increasing incidence of HIV/AIDS among youths, it becomes a need of the hour to make them aware about every aspects of disease. Students of secondary and higher secondary school can be targeted for achieving this goal. The objective of the study was to assess the knowledge about HIV/AIDS among the school students before and after giving educational intervention.

Methods: An educational interventional study was carried out among school going adolescents of one of the school situated in the field practice area of one of the rural teaching hospitals of Gujarat. Pre-designed and pre-tested proforma was used for pre and post test study. Educational intervention in the form of power point presentation was conducted on various aspects of HIV/AIDS.

Results: Around 163 students participated in the study. Mean age of the students were 16.6±0.7 yrs. Among them, 148 (90.8%) have heard about HIV/AIDS and only 26.3% could tell correctly about full form of HIV/AIDS before intervention. After giving educational intervention this percentage was raised to 89.2% which was significant statistically. Knowledge on almost all the aspects viz. modes of transmission and preventive aspects were significantly raised among the student after giving educational session.

Conclusions: Correct knowledge about etiological and preventive aspects were lacking among the students before intervention. Various misconceptions which were prevalent among them were cleared by giving educational intervention. Secondary and Higher secondary schools can be selected as a platform for raising overall awareness about HIV/AIDS.

Keywords: Awareness, HIV/AIDS, Educational intervention, School students

INTRODUCTION

HIV/AIDS has now become a well known disease for majority of the people living around the world. As compared to previous decades more awareness has been generated among the people by various means including national programmes. The recent National AIDS Control Policy of the Government of India aims at preventing the spread of AIDS by making people aware of its

implications and providing them with the necessary tools for protecting themselves. Youths are specially targeted audience for the same as they are the most vulnerable group towards getting sexually transmitted infections as well as HIV. According to reports from UNAIDS, 30% of new infections world-wide, occurs in the age group 15 -24 yrs. Now a day, the youths are indulging in unhealthy practices at relatively early age; the easy accessibility to internet facilities can be one of the

reasons. It is very necessary to give the school age children the correct knowledge regarding HIV/AIDS as the routes of it are spawning in this age only.

School education always remains the best part for developing health lifestyle practices. Present study was conducted among students of secondary and higher secondary school with objectives of assessing their knowledge regarding HIV/ AIDS before and after attending health educational session about the HIV/AIDS and its prevention.

METHODS

An interventional study was conducted among 163 students studying in secondary and higher secondary school (10th and 12th standards) located in the field practice area of GMERS Medical College, Himmatnagar which is one of the teaching hospitals of Gujarat. Study was conducted in the month of December 2017. Prior permission from the principal of the school was sought for the same. Students were enrolled on voluntary basis and informed consent was obtained from them. Prestructured and pre-designed study proforma was used for collecting the data. Students' knowledge on various aspects of HIV/AIDS was collected as a part of pre test study. After that health education session on various aspects of HIV/AIDS and its prevention was conducted among them. Their doubts and myths were cleared by the health educators. After 24 hours of conducting a session, same proforma was distributed among them as a part of post test study. Students who were absent on the day of education session were excluded from the study. Data were entered and analyzed using MS Excel. Z test for two proportions was applied for analyzing statistical significance.

RESULTS

Total 163 students from class 10th and class 12th were present on the day of intervention. Mean age of the students were 16.6±0.7 yrs. Females constituted 48% while 52% were males (Figure 1). Out of 163 students 148 (90.8%) have heard about HIV/AIDS. Out of them, only 26.3% could tell correctly about full form of HIV/AIDS before intervention. After giving educational intervention percentages of students having correct knowledge of full form of HIV/AIDS raised to 89.2% which was significant statistically.

Percentage of students having correct knowledge about various modes of transmission of HIV/AIDS is shown in the Table 1. Before intervention 60% of students believe that unsafe sexual practices are one of the cause for transmission of HIV, knowledge about this was raised to 95.7% after intervention. Forty percent of students have correct knowledge about transmission of HIV from pregnant mother to her new born before intervention whereas 91.4% knew about the same after intervention. Similarly, for rest of the modes of transmission the level of knowledge was significantly raised among the students after intervention.

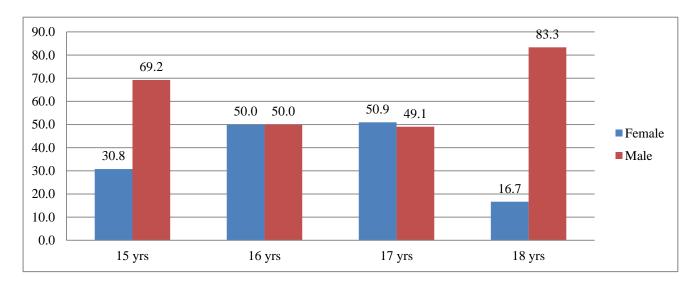


Figure 1: Age and sex wise distribution of study group.

Various myths prevalent among students regarding HIV/AIDS transmission are depicted in Table 2. It was observed that 42.9% students before intervention believed that mosquito bite can transmit the HIV. After intervention only 1.8% had this belief. Around 30% students have known sexual transmission as the only way of transmission of HIV before intervention. After

intervention almost cent percent of students have cleared their minds about this myth.

Before intervention 74.8% of students had correct knowledge regarding use of condom and safe sexual practices as one of the preventive measures which was raised to 98.8% after intervention. HIV tested blood and use of sterilized needles and syringes for prevention of

HIV transmission was known to 53.4% and 62.6% of students, respectively before intervention. Significant improvement in the knowledge for these two aspects was found after intervention among 85.3% and 95.1% of

students, respectively. Only 19.6% had knowledge about availability of antiretroviral drugs before intervention, knowledge about the same was raised to 90.2% after intervention (Table 3).

Table 1: Correct knowledge regarding various modes of transmission of HIV/AIDS (n=163).

Modes of transmission	Pre test	Post test	P-value
Unsafe sexual practices	98 (60.1)	156 (95.7%)	< 0.0001
Use of contaminated needles and syringes	84 (51.5%)	153 (93.9%)	< 0.0001
Infected pregnant mother to her new born	66 (40.5%)	149 (91.4%)	< 0.0001
Transfusion of HIV infected blood	102 (62.6%)	161 (98.8%)	< 0.0001

Table 2: Myths prevalent among the study group regarding HIV transmission (n=163).

Myths prevalent about transmission of HIV/AIDS	Pre test	Post test	P-value
Mosquito bite can lead to HIV/AIDS	70 (42.9%)	3 (1.8%)	< 0.0001
Sharing common toilets with HIV infected person	148 (90.8%)	12 (7.4%)	< 0.0001
Kissing and hugging an HIV infected person	155 (95.1%)	23 (14.1%)	< 0.0001
Sharing the utensils with HIV infected person	103 (63.2%)	11 (6.7%)	< 0.0001
Transmitted only by unsafe sex (no other modes of transmission)	49 (30.1%)	0	< 0.0001

Table 3: Correct knowledge on preventive aspects of HIV/AIDS among students (n=163).

Preventive aspects of HIV/AIDS	Pre test	Post test	P-value
Practice of safe sex (using condom and being faithful to partner)	122 (74.8%)	161 (98.8%)	< 0.0001
HIV testing of blood before transfusion	87 (53.4%)	139 (85.3%)	< 0.0001
Using sterilized syringes and needles	102 (62.6%)	155 (95.1%)	< 0.0001
Availability of anti-retroviral drugs	32 (19.6%)	147 (90.2%)	< 0.0001

DISCUSSION

An educational intervention study was carried out among 163 school going adolescents. Post test study was carried out after 24 hours of intervention using the similar questionnaire as in pre test study. Before intervention around 90% of students heard about HIV/ AIDS, but those who can answer correctly about full form of HIV/AIDS were only 26.3%. This finding was similar to the study conducted by Patel et al.⁴ In present study after intervention 89.2 % had correctly mention the full form of HIV/AIDS.

Before intervention 60% of students believe that unsafe sexual practices are one of the cause for transmission of HIV, knowledge about this was raised to 95.7% after intervention. Finding of Patel et al reveal that percentage of students knowing correctly about unsafe sexual practice as one of the modes of transmission was 76.17% which was raised to 84.22% after intervention.⁴ Study conducted by Gao et al mentioned that almost 90% of the high school students identified three modes of transmission, namely sexual, blood transfusions, and mother-to-child transmission before intervention.⁵

Percentages were relatively higher in their study compared to present study. In present study 40% students

have correct knowledge about transmission of HIV from pregnant mother to her new born before intervention whereas 91.4% knew about the same after intervention. Similar finding was there in the study conducted by Das et al which stated that before intervention 48.4% of students cited mother to child transmission as routes of transmission. In present study, knowledge about all the modes of transmission was significantly raised among the students after intervention. Similar findings were observed in the study by Bhasin et al.

As far as myths related to HIV/AIDS were concerned, majority (90-95%) of students in present study stated that kissing or hugging with HIV infected person or sharing common toilets with them may transmit the disease. These percentages were come down to 14% and 7% after intervention, respectively. In the study conducted by Das et al, they mentioned that "shaking hands with infected person can transmit AIDS" was the myths among 42.3% of students before intervention. Whereas 45.6% believed, "mosquito bites can cause AIDS" in their study. 6 Present stud 42.9% students stated mosquito bite as a mode of transmission before intervention. This myth got cleared to most of the students after intervention. Gao et al reveal that 27.73% high school students had myth regarding mosquitoes bite and spread of the virus. They mentioned that, rate of awareness regarding this myth was significantly raised among them as a result of intervention.⁵

In present study 74.8% of students had correct knowledge regarding use of condom and safe sexual practices as one of the preventive measures which was raised to 98.8% after intervention. Zaman mentioned in their study that baseline knowledge regarding prevention of transmission of HIV/AIDS by having one faithful sex partner was there among 65% of the respondents, which increased amongst 82.2% of the respondents just after the intervention. In their study, knowledge of using safe blood for prevention of HIV increased from 57.7% to 75.4%. In present study these percentages were raised from 53.4% to 85.3%. In the study by Patel et al, it was found that 89.26% of students after intervention mentioned about use of safe blood for prevention of HIV transmission. 4

CONCLUSION

Knowledge about etiological and preventive aspects was low among the students before intervention. As an impact of educational intervention the percentages of students having correct knowledge about the same were enhanced significantly. Also various misconceptions were also removed from the mind of school going students as a part of educational intervention.

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Institutional Ethics Committee

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