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Interventional Study to Assess Knowledge and Attitude of School Going Adolescents About Reproductive Health

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Abstract

The object of the present study was to assess baseline knowledge and attitude of school going adolescents about reproductive health.The study also investigated the effect of audio-visual health education intervention on knowledge and decision making skills of school going adolescents about reproductive health. An interventional study was carried out in randomly selected 200 school adolescents. Baseline knowledge and attitude was determined by questionnaire method. An audio-visual health education intervention was carried out in these students. Knowledge and attitude was again tested using same questionnaire. It was found that most of the students were unaware of reproductive organs in human, modes of transmission of HIV, prognosis of AIDS. Results suggested that knowledge regarding reproductive health increased significantly after health education. It may be concluded that health education is important for adolescents to improve their decision making skills regarding reproductive health.

Key Words: school going adolescents, reproductive health, health education intervention, decision making skills.

Introduction

The World Health Organization defines 'Adolescence' as the age group of 10-19 years[1]. "About one-seventh of all new HIV infections occur during adolescence".[2]Adolescents constitute 21% of the total population of India.[3]According to National Family Health Survey-III, teenage pregnancy rate in urban areas is 8.7% and 19.1% in rural areas.[4]A majority of the victims of HIV are young and under the age of 30 years, of which about 30% are in the sexually active phase of life. It is, therefore, essential to 'catch them young', impart them knowledge on adolescent sexual health, STDs, HIV/AIDS before they indulge in any high-risk behaviour.[5]

Aims and Objectives

1. To assess baseline knowledge and attitude of school going adolescents about reproductive health.

2. To study the effect of audio-visual health education intervention on knowledge and decision making skills of school going adolescents about reproductive health.

Materials and methods

An interventional study was carried out in 200 School going adolescents. Written consent was taken from principal of school. The students absent and unwilling were excluded from study. Simple random sampling method was used to select 100 boys and girls respectively from 8th standard of the school.Baseline knowledge and attitude was determined by questionnaire method. An audio-visual health education intervention was carried out in these students. Knowledge and attitude was again tested using same questionnaire after 10 days.The questionnaire was divided in 3 parts and each correct answer carried 1 mark. Knowledge regarding reproductive health: 34 marks, Knowledge with special reference to HIV: 19 marks and decision making skills of students regarding reproductive health : 9 marks. Percentage of total marks was used to categorize students in three groups, 1. Poor knowledge/ decision making skills: <50% marks, 2.Partial knowledge/ decision making skills: 50 -70% marks and 3. Adequate knowledge / decision making skills: >/=70%marks.
The data gathered was analyzed using paired t test.

Results

There is statistically significant difference between knowledge of students, both boys and girls regarding reproductive health, knowledge with special reference to HIV and decision making skills regarding reproductive health before and after the audiovisual health education intervention, observed using paired t test. (p value < 0.01) as seen in table no. 1.Number of female students scoring total marks >/= 70% after intervention rose from 0 to 82 as shown in graph 1. Number of male students scoring total marks > 70% after intervention rose from 2 to 88 as shown in graph 2. Most of the students were unaware of reproductive organs in human, STDs, modes of transmission of HIV and its preventive measures. Female students were shy and avoided talking on subject before intervention.

Discussions

Report of evaluation of family life and AIDS education project by Dr. Pratinidhi, Dr. Mangulikar and Dr.Kurulkar in Pune district in tribal and rural students have given results similar to present study except in attitude and decision making skills in tribal students , after health education intervention and focus group discussion with teachers and peer group educators[6]. Bhasin et al. in East Delhi studied the impact of educational intervention about AIDS and observed significant change in knowledge following intervention, with $P < 0.01$.[7] Rusakenikos et al. studied the impact of an intervention on knowledge levels of various reproductive health issues through trend analysis. The general trend of knowledge levels in old areas of reproductive health pregnancy risk, STDs, and HIV/AIDS showed an upward trend from 20% to 96%. [8] Gupta et al., conducted a study among school going unmarried, rural adolescents to know about their reproductive health awareness. The study showed tremendous lacunae in the awareness level of all reproductive health matters. The correct knowledge among girls (15-19 years) was present in 56.1% of them with regard to the legal age at marriage.[9] Cheng et al.conducted a study to evaluate the feasibility and effectiveness of a life planning skills training program by using participatory method among rural senior high school students in Shanghai Country, Henan Province, China. The interaction effects in ordinal logistic regression analysis were found on HIV/AIDS-related knowledge ($P<0.0001$), attitude towards daily contacts with HIV-positive individuals ($P<0.0001$) and subjects protection self-efficacy ($P<0.001$) suggesting the intervention increased subjects knowledge significantly, changed attitudes positively, and improved their protection self-efficacy.[10]In an educational intervention study on adolescent reproductive health among pre-university girls in Davangere district, by Rangappa Manjula et al, there was overall significant change in knowledge ($P<0.001$, HS) after educational intervention.[11].

Shrestha , Rao P also showed significant increase in knowledge about adolescence, menarche, pregnancy, delivery, immunization and various aspects of AIDS following health education in their study[12] . The study by Hunshal, Saraswati C., Lata L et al recommended that the intervention programme benefited the adolescent girls in enhancing their knowledge about reproductive health. So it is necessary to provide such intervention programme to adolescent girls living in different villages.[13]

Conclusion

Knowledge regarding the subject increased significantly after audiovisual health education intervention. Students opted for choices suggesting better attitude towards the topic after intervention.

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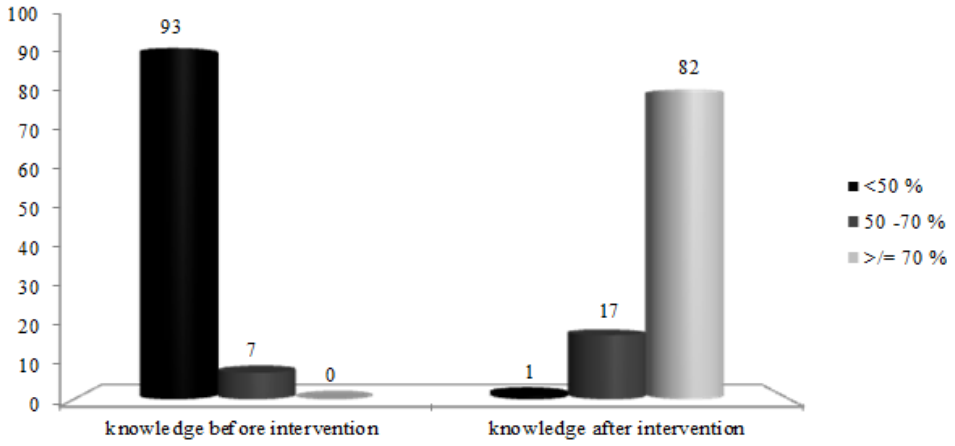
Table No 1.Effect of audio-visual health education on students' knowledge and decision making skills.

Knowledge regarding reproductive health					
Male students	Pre test	Post test	Female students	Pre test	Post test
Mean score	13.01	23.24	Mean score	10.66	21.83
SD.	3.47	3.71	SD.	4.60	3.01
Significant by t test at $p < 0.01$			Significant by t test at $p < 0.01$		
Knowledge with special reference to HIV					
Male students	Pre test	Post test	Female students	Pre test	Post test
Mean score	7.04	16.64	Mean score	5.14	21.78
SD.	2.80	2.70	SD.	2.96	2.98
Significant by t test at $p < 0.01$			Significant by t test at $p < 0.01$		
Decision making skills regarding reproductive health					
Male students	Pre test	Post test	Female students	Pre test	Post test
Mean score	5.56	8.11	Mean score	4.04	5.70
SD.	2.08	1.14	SD.	2.63	1.66
Significant by t test at $p < 0.01$			Significant by t test at $p < 0.01$		



Graph 1 showing effects of health education intervention on overall knowledge regarding the topic in female students.