EFFECTIVENESS OF REPRODUCTIVE HEALTH AND AIDS EDUCATION AMONG ADOLESCENT GIRLS IN UDUPI TALUK, INDIA

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ABSTRACT

An intervention study was undertaken among adolescent girls in age group 16-19 years, studying in pre-university colleges, in Udupi town in Karnataka State, India, to assess the impact of health education on knowledge regarding reproductive health & AIDS. 4 pre-university colleges were randomly selected in Udupi town. There were 551 students present for the pretest and 548 in the post test. Knowledge was assessed at the beginning of the study with the help of a questionnaire that was duly pre-tested. Based on the results of this baseline survey, a health education programme was developed and implemented after a week in each of the selected colleges. A second visit was made to the same colleges after one month of conducting health education programme for post-test. The same questionnaire was administered to assess the impact of health education. Significant increase in knowledge about adolescence, menarche, pregnancy, delivery, immunization and various aspects of AIDS following health education. This study has shown that there is a beneficial effect of health education on the knowledge and awareness related to reproductive health and AIDS among adolescent girls.

Key Words: Reproductive Health, AIDS, Health Education.

INTRODUCTION

Adolescence as the period between the ages of 10-19 years, encompassing the entire continuum of transition from childhood to adulthood. It is the most critical period of development, second only to early childhood, when they acquire new capacities and are faced with many new situations. This period presents not only opportunities for progress but also risks to health and wellbeing.¹

Adolescents make up about 20% of the world's population and their numbers are expected to grow world wide by at least 60 million between 1995-2025.² In India 4.8% of the total population is in the 15-19 year age group.³

Adolescent health and nutrition are important issues, since it reflects the health status of adults of tomorrow. The health

profile of adolescent girls has a great impact on their later reproductive performance, which is to bring about healthy motherhood and decreased maternal and infant mortality. Hence neglect of adolescents can lead to problems, both immediately and in the years ahead.

More adolescents today than in the past generations are involved in multiple health risk behaviours and at earlier ages. The mean age of onset of puberty is continuing to decline while the mean age of marriage is rising. This implies a longer period of possible unprotected sexual activity in unmarried adolescents, who have little access to contraceptives service, particularly in developing countries. This increasing unprotected sex brings in the danger of too early and unwanted pregnancy, induced abortion often in hazardous conditions, sexually transmitted diseases and HIV infection resulting in AIDS.

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These burgeoning health problems among adolescents make them a high risk group. Information about reproduction and sexuality if made available to them will go a long way in increasing the ability of adolescents to deal with their health problems. This study was therefore launched to determine the impact of health education on the knowledge towards reproductive health & AIDS.

MATERIALS AND METHODS

This study was conducted among adolescent girls in age group 16-19 years, studying in pre-university colleges, in Udupi town in Karnataka State, India. It was an intervention study conducted over a 6 months period from 1st June to 31st November 1999.

There are 10 pre university colleges in Udupi town. Among them 4 pre university colleges were selected randomly by lottery method. Adolescent girls of these selected colleges constituted the study subjects. Knowledge regarding reproductive health & AIDS was assessed at the beginning of the study with the help of a questionnaire that was duly pre-tested. Various aspects of reproductive health such as normal menstrual cycle, menarche, age at marriage, normal pregnancy, consequences of adolescent pregnancy were covered in the questionnaire. Knowledge related to diet during pregnancy, breast feeding,

safe sex & contraceptive methods as well as a host of other questions related to various modes of transmission of AIDS, its prevention and control were also included.

Based on the results of this baseline survey, training needs of the students were identified. Accordingly a health education programme was developed. After a week in each of the selected colleges the team of three peoples including doctor and two health educators visited to conduct health education regarding reproductive health and AIDS. For health education audio visual aids like video tape, pamphlets, flip charts were used. After education cross questions session was included to clear the confusion of students.

A second visit was made to the same colleges after three months of conducting health education programme. At this time same questionnaire was administered to assess the impact of health education on knowledge related to reproductive health and AIDS. Hence awareness regarding reproductive health and AIDS among adolescent girls was measured simply by administering questionnaire. Three months interval between health education and assessment was chosen following the same study conducted in India.⁴

The findings have been summarized in the tables using statistical methods such as proportions and Chi-square test.

Table I : Knowledge about Menstruation, Menarche, Age at marriage and Adolescent Pregnancy among adolescent girls

Knowledge	Pretest (n=551) Correctly answered		Post-test (n=548) Correctly answered		P-value
	No.	%	No.	%	
Usual age of Marriage	351	63.7	468	85.4	<0.001
Duration of menstrual cycle	349	63.3	445	81.2	<0.001
Age of marriage	517	93.8	835	98.2	<0.001
For girls & boys III effects of adolescent pregnancy	197	35.2	428	78.1	<0.001

Table II : Knowledge about Menstruation, Menarche, Age at marriage and Adolescent Pregnancy among adolescent girls

Knowledge	Pretest (n=551) Correctly answered		Post-test (n=548) Correctly answered		P-value
	No.	%	No.	%	
Pregnancy as a normal physiological phenomenon	424	76.9	464	84.6	<0.001
Diet during pregnancy	187	33.9	331	60.4	<0.001
Importance of health checkups in pregnancy	170	30.9	379	69.2	<0.001
Delivery by trained personnel	323	58.6	488	89.0	<0.001
Institutional delivery	481	87.3	538	98.2	<0.001
Initiation of breast feeding	245	44.4	414	75.5	<0.001
Exclusive breast feeding	75	13.6	243	44.3	<0.001
Weaning	261	47.3	403	73.5	<0.001
Immunization of Infants	40	7.3	440	80.2	<0.001
Age to have the first child	492	89.2	505	92.1	0.102
Use of family planning before marriage	91	16.5	192	35.0	<0.001

Table III : Knowledge about AIDS among adolescent girls

Knowledge	Pretest (n=551) Correctly answered		Post-test (n=548) Correctly answered		P-value
	No.	%	No.	%	
AIDS is preventable	155	28.1	453	82.6	<0.001
Transmission through unprotected sex	427	77.5	461	84.1	0.005
Transmission by kissing	94	17.0	398	72.6	<0.001
Transmission through blood	346	62.7	443	79.1	<0.001
Transmission through infected needle	333	60.4	434	79.1	<0.001
Transmission by bites	321	58.2	472	86.1	<0.001
Transmission by contaminated water	294	53.4	401	73.1	<0.001
Transmission by using swimming pool	353	64.0	387	70.6	0.020
Prevention of AIDS by using condom	285	51.7	390	71.2	<0.001

OBSERVATIONS AND DISCUSSION

There were 551 students present for the pretest, where as in the post test there were only 548 students.

Table I show that a majority of students (93.8%) were aware of the correct age of marriage for both girls and boys. Only 35.2% of students were aware about consequences of adolescent pregnancy. However, there was an absolute increase in number of students with correct knowledge about adolescent pregnancy after health education. There was also a significant rise in the knowledge regarding menarche and menstrual period after intervention. Most students were aware that hospital was the best place for delivery(87.2%) and also had correct knowledge regarding age to have first child (89.2%).Only 7.2% of the students knew about infant immunization and 13.6% of the students had correct idea about exclusive breast feeding. 33.9% of students had correct knowledge about diet during pregnancy. These findings are consistent with the findings of a study conducted in a rural south Indian Population by S Chandrakala et al.⁴ Following health education there was a significant increase in the knowledge regarding pregnancy, breast feeding and contraceptive methods (Table II).

Table III shows that only 28.1% of study subjects were initially aware that AIDS is preventable and this proportion increased to 82.6% after health education. Half of the students knew that AIDS could be prevented by using condom. Further there

was a significant increase in the knowledge regarding mode of transmission and prevention of AIDS following health education.

This study has demonstrated the effect of health education in bringing about improvement in the awareness regarding reproductive health and AIDS among adolescent girls.

Hence there is a need to conduct Health education programmes in high schools and colleges specifically directed towards adolescent girls. This would go a long way in strengthening the strategies for reproductive and child health.

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