



EFFECT OF TEACHER TRAINING PROGRAMME ON KNOWLEDGE AND ATTITUDE REGARDING ADOLESCENT REPRODUCTIVE HEALTH AMONG TEACHERS IN SELECTED GIRLS' HIGH SCHOOLS OF KOTTAYAM DISTRICT, KERALA

Nursing

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ABSTRACT

Introduction: Adolescents are in the most challenging phase of their lives. They need empowerment to effectively cope with this vibrant phase. Reproductive health education is a delicate topic the teachers and parents find uncomfortable to discuss in a scientific manner. Present study assessed the effectiveness of teacher training programme (TTP) on adolescent reproductive health (ARH) in terms of knowledge and attitude among teachers in selected schools. **Methodology:** A quantitative approach and experimental design with pretest posttest control and experimental groups was adopted. Multistage random sampling was used to select 30 teachers each in experimental and control groups from seven girls' high schools comes under 5 educational sub districts. Ethical clearance, administrative permission and subject consent were obtained. Pretest conducted with validated questionnaire, followed by 6 hours of teaching to teachers in each school under experimental group and control group don't receive any intervention. Posttest was done on day 30 and day 120. Data analyzed on SPSS vs20. **Results:** An Independent't' test revealed no significant difference between experimental group (E) and control group (C) in terms of their existing knowledge ($t=1.39, p=0.169$) and attitude ($t=0.56, 0.576$) towards ARH. After the intervention Independent't' test showed significant difference in mean knowledge scores of teachers between the experimental and control group at one month ($t=7.76, p<0.001$) and three months ($t=7.01, p<0.001$). Similarly, a significant difference was found in mean attitude scores of teachers between both groups at one month ($t=13.15, p<0.001$) and three months ($t=12.72, p<0.001$) after the TTP. **Conclusion:** Gain in knowledge and attitude of school teachers may have an impact on school based adolescent reproductive education.

KEYWORDS

Teacher Training Programme, Adolescent Reproductive Health, Knowledge, Attitude.

INTRODUCTION

Adolescence represents one of the critical transitions in the life span of the individual. World Health Organization (WHO) identifies adolescence as the period from the ages of 10 to 19 years and is predominantly marked by the development of human sexuality. Today, there are 1.2 billion adolescents worldwide and nearly 90 percent of them live in developing countries. In India, adolescents are about 20.9 percent of population, that is 253.2 million. Currently, far too few young people are receiving adequate preparation to get into this phase, which leaves them vulnerable to coercion, abuse, exploitation, unintended pregnancy and sexually transmitted infections, including HIV. Globally, an estimated 2.2 million adolescents are living with HIV and many do not know they are infected. This breaks down to 1.3 million (60%) adolescent girls and 8,70,000 (40%) adolescent boys.²

In each year, about 16 million girls aged between 15–19 years give birth globally, accounting for 11 percent of all births and 14 percent of all maternal deaths. Approximately, 95% of adolescent births occur in low- and middle-income countries. Bangladesh, India and Nigeria alone account for one in every three of the world's adolescent births.² Condition in Kerala do not differ from the global and Indian scenario. The India Today news paper reported in August 2013 that Kerala continues to treat its women and children harshly. During the first six months of the year 2013, about 246 children were raped and 224 were sexually harassed. President of Kerala State Women's Commission says that, it receives around 700 complaints of rape and molestation every month and most of these complaints are from girls aged between 14 and 18 years. Comparing to boys adolescent girls are victims of more abuses and physical crime. So it is urgent to empower them to safe guard their lives. But unfortunately, the parents often lack the skills and are reluctant to teach the reproductive health matters due to lack of knowledge and social taboos.

The teachers are potential pioneers who can play a critical role of being a resource of accurate information to impart knowledge and skills to young people. By empowering the teachers, training and follow up of adolescents will become more feasible and effective because they both spend nearly 6 hours together a day in the school. A process evaluation of a six days teacher training programme was under taken among 24 teachers at Cape Town of South Africa in 2006. An anonymous evaluation questionnaires comprising open-ended statements were administered prior to the training, on completion of the training and at two follow-up time periods. Result revealed that before the training, majority of teachers felt anxious about their lack of knowledge and exposure to HIV issues. On completion of training, 16 of the teachers believed that they had acquired reproductive health

knowledge and an understanding of group facilitation skills and group-work experience. Teachers reported increased confidence and comfort in teaching the sexuality curriculum. However, many struggled with transfer of reproductive health knowledge and facilitative teaching methods into the classroom context. All these highlights the need for ongoing support and encouragement for teachers in the process of these teaching practices.⁶

The literature search has enlightened the investigator with the awareness that even though it is recognized that teachers have an important role in molding their students, relatively very few studies are undertaken in this area worldwide and in India, especially in Kerala. At the same time parents, social and education leaders are expecting an age-appropriate, adolescent friendly, culturally sensitive education in the school settings. Thus, the teacher training on adolescent reproductive health education is an urgent need that will have as significant influence on ARH.⁷

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of teacher training programme on knowledge and attitude regarding adolescent reproductive health among teachers in selected girls' high schools of Kottayam District, Kerala.

OBJECTIVES

1. Assess and compare the pretest and posttest knowledge scores regarding adolescent reproductive health among teachers in experimental and control groups.
2. Assess and compare the pretest and post-test attitude scores regarding adolescent reproductive health among teachers in experimental and control groups.

HYPOTHESES

- H1. There is a significant gain in the knowledge score regarding adolescent reproductive health among the school teachers in experimental group as compared to control group.
- H2. There is a significant difference in the attitude scores regarding adolescent reproductive health among the school teachers in experimental group as compared to control group.

METHODOLOGY

An experimental study with pretest posttest, control and experimental groups by quantitative approach was designed. The study was conducted among 60 high school teachers selected by

multistage random sampling from seven selected Government aided girls' high schools under the corporate educational agency of Pala in Kottayam district. The sample was divided into 2 groups of 30 subjects each in control and experimental groups. The tool consisted of a pretested validated questionnaire for knowledge and attitude besides the teacher training programme for intervention. The CV index was 0.94 and Cronbach's Alpha was 0.749 for knowledge questionnaire; while for attitude scale, it was 0.95 and 0.765 respectively. TTP contained information regarding adolescence, puberty and sexuality, physical, mental and emotional changes during adolescence, anatomy and physiology of reproductive system, menstruation and menstrual hygiene, process of conception, consequences of early sexual behaviour, addressing myths and misconceptions, life skills and responsible sexual behaviour, rationale for ARHEP in schools along with role and responsibilities of school teachers.

Data collection

Ethical clearance from IRB and administrative permissions from head of the institutions and informed consent from subjects were obtained. Pretest was given to both groups followed by intervention to experimental group. The training was provided in three sessions of two hours each, reinforced with training materials and handouts. Posttest was conducted on day 30 and day 90 to both groups. The data was subjected to statistical analysis using SPSS v.20.

RESULTS

Sample characteristics: The control group subjects (100%) and 66.7% from experimental group were teaching in rural schools. An Independent 't' test showed no significant difference in the mean pretest knowledge scores regarding ARH between experimental and control groups ($t=1.39$, $p=169$). Similarly, the mean pretest attitude scores between experimental and control groups showed no significant differences ($t=0.56$, $p=0.5676$).

Table 1: Comparison of mean pre and post test knowledge scores regarding ARH among teachers between experimental and control groups (N=60)

Variables	GROUPS				df	Independent t –value	p- value
Knowledge	Experimental (n=30)		Control (n=30)				
	Mean	SD	Mean	SD			
Pretest	29.0	3.2	30.4	4.5		1.39	0.169 ^{NS}
Post-test 1	37.7	1.4	31.3	4.4		7.76	0.000***
Post-test 2	36.2	1.3	30.4	4.4		7.01	0.000***

*** $p<0.001$

A highly significant difference ($p<0.001$) was observed in the mean post test scores of knowledge between experimental and control groups related to ARH after 30 and 90 days of intervention. Whereas the pretest showed no significant difference ($p>0.05$) between the experimental and control group. Hence it can be inferred that the Teachers Training Programme on ARH was effective in training the teachers.

Table 2: Comparison of mean pre and posttest attitude scores regarding ARH among teachers between experimental and control groups (N=60)

Variables	GROUPS				df	Independent t –value	p- value
Attitudes	Experimental (n=30)		Control (n=30)				
	Mean	SD	Mean	SD			
Pretest	39.3	4.3	39.9	4.4		0.56	0.576
Post-test 1	55.0	2.6	40.5	5.5		13.15	0.000***
Post-test 2	53.3	2.6	40.1	5.1		12.72	0.000***

*** $p<0.001$

A highly significant difference ($p<0.001$) was observed in the mean posttest scores of attitude related to ARH between experimental and control groups after 30 and 90 days of intervention. Whereas the pretest showed no significant difference ($p>0.05$) between groups. Hence it can be inferred that the TTP was effective in developing positive attitude towards Adolescent Reproductive Health Education Programme.

Table 3: Measures of Repeated ANOVA showing variations in level of mean knowledge scores regarding ARH across various time intervals group wise (N=30)

Time intervals	Stages	Mean	SD	F#	'p' value	Pair	Mean Diff.	p-value
Day 1	Pretest (S1)	29.0	3.2	184.31	0.000***	S1 & S2	8.7	$p<0.05$
Day 30	Posttest1 (S2)	37.7	1.4			S1 & S3	7.2	$p<0.05$
Day 90	Posttest 2 (S3)	36.2	1.3			S2 & S3	1.5	$p<0.05$

*** $p<0.001$

One-way Repeated measures ANOVA, the 'F' value (184.31) showed a highly significant ($p<0.001$) variation in knowledge scores across different time intervals. Post hoc test with Bonferroni corrections revealed the differences in knowledge scores at pretest and on 30th and 90th days after intervention were significant ($p<0.05$).

Table 4: Measures of Repeated ANOVA showing variations in level of mean Attitude scores regarding ARH across various time intervals group wise (N=30).

Stage	Mean	SD	F#	'P' value	Pair	Mean Diff.	p \$
Pre (S1)	39.3	4.3	221.94	0.000***	S1 & S2	15.7	$p<0.05$
Posttest 1 (S2)	55.0	2.6			S1 & S3	14.0	$p<0.05$
Posttest 2 (S3)	53.3	2.6			S2 & S3	1.7	$p<0.05$

*** $p<0.001$

One-way Repeated measures ANOVA, the 'F' value (221.94) showed a highly significant ($p<0.001$) variation in attitude scores across different time intervals. Post hoc test with Bonferroni corrections revealed the differences in attitude scores at pretest and on 1st, 30th and 90th days after intervention were significant ($p<0.05$).

DISCUSSION

Adolescent Reproductive Health is a subject of controversy as to who will impart this most wanted knowledge in a scientific manner to the adolescents. As the parents are reluctant to discuss the topic or having insufficient skills to impart scientific knowledge, the children often turn to their friends or unauthorized sources where they acquire partial knowledge or wrong information. This becomes a potential trap during the vulnerable phase of adolescence.

Teachers are the next resources they can depend on because of their accessibility, approachability and resourcefulness to empower the adolescents with the essential but sensitive information. Although the teachers are teaching, handling the sensitive topics on human sexuality and reproductive biology may not be comfortable for everyone. Empowerment with scientific knowledge and ready to teach resource materials can provide confidence to the teachers in imparting the same to the students and present study findings are supportive of this. The control and experimental groups did not differ in their knowledge or attitude towards ARH during pretest ($p>0.05$) whereas after intervention, the experimental group acquired significant differences ($p<0.001$) in their knowledge and attitude scores towards the ARH. Hence the hypotheses H1 and H2 can be accepted. It can be inferred that the school teachers are a powerful team to educate the adolescents on reproductive health and clear the doubts in this area.

This finding is congruent with a similar study conducted among school teachers of rural Nigeria in 2006. The study assessed the effect of a TTP on their knowledge and attitude towards reproductive health education in five randomly selected rural schools. The findings showed a significant increase in knowledge score at post test compared with pre test score (from 14.3% to 53.6%, $p=0.0001$) and an increase in attitude score (from 17.9% to 45.2%, $p=0.0001$). The study findings recommended Reproductive Health Education to be mandatory for all teacher training programs. Similarly a study was done in 2010 in Malawi to determine the effect of Life Skills (LS) and Sexual and Reproductive Health (SRH) education on the behaviour of teachers and students. Seventy percent (70%) of teachers indicated that LS/SRH had changed their behaviours. The most indicated behaviour changes were in improvement in decision making, problem solving and change from immoral behaviour. The majority of head teachers (66.7%) emphasized that lack of teaching materials, poor orientation

of teachers on LS/SRH, and teaching time are the major challenges affecting the teaching of LS/SRH. They also requested to provide more resources in order to create an enabling environment for teaching LS and SRH.⁹

CONCLUSION

Adolescent reproductive health education programme is a need of the hour. Teachers are an effective means to reach the adolescents. They are the primary contacts of adolescents next to their parents. Empowerment of teachers can enhance the adolescent education on an ongoing basis and enlighten the future generations for a safer reproductive health and hygiene.

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