# Original Article

# Effectiveness of health education among female teachers of senior secondary schools regarding problems in adolescence

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#### Abstract

Research question: What is the effectiveness of health education among female teachers of senior secondary schools regarding problems in adolescence?

**Objective**: To document the effectiveness of health education among female teachers of senior secondary schools regarding problems in adolescence before and after intervention.

Study Design: An interventional study.

Settings: Fifty senior secondary schools both private and government of Amritsar district.

Participants: Teachers of senior secondary schools.

Study variables: Knowledge, attitude and practices regarding problems among adolescents and regarding help they extend

Statistical analysis: Chi- square test

**Results**: Result shows majority 145(63%) teachers said they were consulted by the adolescents for their problems and 127(55.2%) teachers had partial knowledge about adolescent problems. Maximum 87(37.8%) teachers said that they counselled the girls.

Conclusion: It can be concluded from the present study that the overall knowledge of teachers regarding adolescent health problems is less.

Key Words: Adolescent, Senior Secondary School.

#### Introduction:

Schools lay a country's foundation for the future and have a major effect on a host of issues, including health. The schools are the main venue to increase knowledge as well as to discuss various health problems with an experienced person<sup>1</sup>. What is learnt at this impressionable stage of life in terms of knowledge, attitudes and behaviors has a lasting impact on the entire life span of the individual. This is the primary reason for health issues occupying the centre stage in the school curriculum<sup>2</sup>.

Whole of the adolescent period is spent in schools. As each young person matures sexually, physically and psychologically, many are uncertain of their role in society. Demands of culture, gender, globalization and poverty have pushed millions of adolescents prematurely into adult roles and responsibilities<sup>3</sup>. The widening world also exposes adolescents to serious risks before they have adequate information, skills and experience to avoid or counteract them. Their level of maturity and social status is no match for some challenges, unless they are provided with support, information and access to resources<sup>4</sup>.

Health is maintained and diseases most effectively controlled by knowledge. Ensuring that children have access to knowledge ensures that they are able to use it to mould not only their own attitudes and behavior, but that of their families and communities as well. This is the primary reason for health issues occupying the centre stage in the school curriculum<sup>5</sup>.

The problems of adolescent age groups are mainly nutritional, reproductive health problems, drug abuse, accidents and injuries. Most common problem among adolescents is those related to malnutrition. On one hand where 3.4% of adolescent population is underweight on the other hand, adolescents from effluent society were at risk for becoming overweight<sup>6</sup>. It is largely caused by unhealthy lifestyles, eating bad foods and sedentary behaviours<sup>7</sup>. which is accompanied with poor eating habits like missing of meals, high sugar snacks of low nutritional value, peer pressure leads to erratic eating habits, and secondly there are special considerations or stresses in this period like menstruation, teenage pregnancy, and substance abuse8. Teachers are perceived as the main manpower resources for presenting information and are considered to be the main link between health services and students. It is the impact of teachers which seen in the whole range of age groups from children less than 5 years to adolescents up to 19 years of age and beyond that also. Female teachers are the

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persons who spend the maximum time with the children after their parents.

Female teacher in the school are the main key who can provide a supportive environment to address adolescents' reproductive health and psychological needs and wellbeing. They provide counselling and practical services regarding reproductive and sexual health issues, adequate information, skills and experience thus enabling them to better handle the problems faced during the growing up phase<sup>6</sup>.

For teachers a programme to educate adolescents on every health aspect is challenging. Unless the teachers can develop a positive and non judgmental attitude, free of their personal biases, education on this most important area cannot succeed.

Teachers are among the most important influence in the lives of school aged children, yet relatively little emphasis has been placed on examining the potential role general academic teacher may play in facilitating adolescent health promotion efforts.

The active participation of adolescents is influenced by teachers themselves and for this they should be well equipped with the knowledge about adolescent health and their needs in solving these problems.

Teachers has been focused in the study as they can better dealt adolescent problems because they are well experienced person, their knowledge and expertise can be meaningfully used for their services for adolescent age group and also to built their capacity also.

Ultimately role of female teacher is most important for improving the adolescent girls health who are going to be future mother, educator and the message can be passed from generation to generation.

This study is therefore done to document that what was the existing knowledge of teachers regarding adolescent health and how much it increased after intervention.

#### Material and Methods:

The study was carried out in the Department of Community Medicine from May 2008 to April 2009. A list of total number of senior secondary schools having female students in Amritsar District was obtained from the District Education Office. Out of 129 senior secondary schools the list of which was obtained from district education office, 50 Schools, 25 each from urban and rural areas were to be studied. Out of 129 schools 85 were government schools affiliated with PSEB all of which were located in rural areas. While out of remaining 44 schools located in urban areas 21 were affiliated to CBSE, 9 were affiliated to ICSCE and 14 were private added schools affiliated to PSEB. After repeated efforts 13

out of 21 CBSE schools, 3 out of 9 ICSCE schools agreed for the study. All these were included in the study. So for achieving the desired sample of 50, 34 out of 85 government schools were included in the study. Finally a list of 34 government and 16 private schools was prepared. A list of female teachers of all subjects teaching class IX to XII was obtained from the principals of the schools.

The study was carried out in three phases:

In the first phase, on the day of the visit, the teachers were explained in detail about the purpose of the study. Informed consent was taken. Teachers were assured that strict confidentiality would be maintained and this information would be used only for the purpose of the study. They were requested to answer the questions. The proformas which were in Punjabi and English, consisting of 28 open ended and 16 multiple choice questions, were given to the teachers. Time allotted to answer was 45 minutes. Strict invigilation was done to ensure that the teachers do not help each other during the process.

The proformas had two parts—question number one to seven was regarding the bio data of the teachers and question seven onwards regarding the knowledge, attitudes and practices of teachers related to health of adolescent girls. After the teachers filled the proforma, it was collected from them and three interactive sessions were conducted in the batches of 20-25 in the Department of Community Medicine with the help of audiovisual aids which are detailed as under:

**Session I:** The contents of the first session consisted of adolescence, puberty, nutritional requirements of adolescents, junk food, eating disorders, nutritional deficiency, programmes related to adolescents. It lasted for 25 minutes.

**Session II:** The second session was on mental and behavioural changes during adolescence, critical faculty, abstract thinking, body image, relationship with family and friends of same and opposite sex, drug abuse. It lasted for 30 minutes.

**Session III:** The third session focussed on sexual changes during adolescence, menarche, menstruation, menstrual hygiene, pregnancy, sexually transmitted diseases and prevention and control, AIDS and their prevention and control. It lasted for 45 minutes

At the end of each session 10 minutes were given for clarifications. All the queries were adequately clarified and the teachers were satisfied with the answers. The teachers were requested to translate this knowledge into action so that the adolescents stood benefitted from this and they

were also advised that in case any help is required, the department is ready to provide all help related to adolescent health.

To study the impact of the interactive sessions and sustainability of knowledge gained, the knowledge, attitude and practices were again assessed after a period of 3 months.

Out of 265 teachers, 230 turned up for evaluation. In spite of repeated efforts by the authors the remaining 35 teachers did not report and thus were not included in the evaluation. The information obtained at the beginning and after 3 months was compiled, tabulated and statistically analysed and valid conclusions were drawn.

### Results and Discussion:

TABLE – 1
Distribution of teachers

S. No.	Di	stribution	Number	Percentage				
1	According to age							
	A	20-30 years	38	14.3				
	В	30-40	115	43.4				
	C	40-50	75	28.3				
	D	50 and above	37	14.0				
	E	Total	265	100.0				
2	Ac	cording to qualification	g to qualification					
	A	Post graduate	178	67.2				
	В	Graduate	67	25.3				
	C	Matric/ HSC/Diploma holder	20	7.55				
	D	Total	265	100.0				
3	Ac	cording to place of their educati	on					
	A	Urban	175	66.0				
	В	Rural	90	34.0				
	C	Total	265	100.0				

Out of 265 teachers, maximum 115(43.4%) teachers were 30-40 years of age and 75(28.3%), 38(14.3%) were in the age group of 40-50 years and 20-30 years while 37(14%) were from above 50 years of age. Majority 178 (67.2%) teachers were post graduates and 67 (25.3%) were graduates while 20 (7.54%) teachers were high school pass, diploma holder, matric pass. 175(66%) teachers were from urban background while 90(34%) were from rural back ground.

TABLE 2

Distribution of teachers according to the problems, knowledge about problems, to practices regarding help they extend & reasons for not discussing problems by the adolescent girls in classes before and after intervention

Girls consulted for problems							
	Before intervention		After intervention				
	Number	%	Number	%			
Consulted	145	63.0	144	62.6			
Not consulted	85	37.0	86	37.4			
Total	230	100.0	230	100.0			
Knowledge about Problems among adolescence							
Partial Knowledge	127	55.2	132	57.4			
No Knowledge	86	37.4	80	34.8			
Adequate	17	7.4	18	7.8			
Total	230	100.0	230	100.0			
Help teachers extended							
Counselling	87	37.8	97	42.2			
Solving problems	26	11.3	24	10.4			
Consult doctors	06	2.6	03	1.3			
None	118	51.3	113	49.1			
Reason for not discussing problems in class							
Reason not mentioned	49	21.3	46	20.0			
Socially not acceptable	20	8.7	27	11.7			
Co-education	16	6.9	13	5.7			
Feel Shy	11	4.8	10	4.3			
Not comfortable	1	0.43	1	0.43			
	Consulted Not consulted Total Knowledge about Problem Partial Knowledge No Knowledge Adequate Total Help teachers extended Counselling Solving problems Consult doctors None Reason for not discussion Reason not mentioned Socially not acceptable Co-education Feel Shy	Before into Number  Consulted 145 Not consulted 85 Total 230 Knowledge about Problems among add Partial Knowledge 127 No Knowledge 86 Adequate 17 Total 230 Help teachers extended Counselling 87 Solving problems 26 Consult doctors 06 None 118 Reason for not discussing problems in Reason not mentioned 49 Socially not acceptable 20 Co-education 16 Feel Shy 11	Before intervention   Number   %	Before intervention   Number   Number   Number   Number			

Majority 145(63%) teachers said they were consulted by the adolescents for their problems while 85(37%) teachers said they were not consulted by the adolescents. After intervention the number changed to 144(62.6%) and 86(37.4%) respectively. The change was not statistically significant. The figures before and after intervention were same because teachers often find the topics regarding sexual and psychological problems embarrassing or shameful, and may avoid such issues, even in schools that supposedly teach a family

life/sex education as part of curriculum. As a result of adults' reluctance to address these issues, young people tend to rely on peers and mass media for information about sex, reproduction and STIs including HIV/AIDS.

Majority 127(55.2%) teachers had partial knowledge and 86(37.4%) teachers had no knowledge while only 17(7.4%) had adequate knowledge. The level of knowledge increased after intervention was statistically insignificant.

Maximum 87(37.8%) teachers said that they counselled the girls and the figures increased to 97(42.2%) after interven-

tion, while 26(11.3%) and 6(2.6%) teachers solve their problem and advise to consult doctors and after intervention the number changed to 24(10.4%) and 3(1.3%) respectively. Majority 118(51.3%) teachers extend no help to these girls and the number decreased to 113(49.1%) after intervention. The change was not statistically significant. The reason for this change is teachers were told about the benefits of counselling and taking help of medical services for solving the problems of adolescent during intervention. There was increase for counselling as a method for solving the problems of adolescents. This shows that teachers had recognised their responsibility and the importance of counselling.

Maximum 49(21.3%) teachers didn't mention any reason while, 20(8.7%), 16(6.9%) and 11(4.8%) said because the topics were not socially acceptable, co-education and girls feeling shy during such discussions. After intervention their number changed to 46(20%), 27(11.7%), 13(5.7%) and 10(4.3%) respectively, while discussing these problems among adolescents 1(0.43%) teachers felt uncomfortable both before and after intervention.

In a study done by R.K.Gupta et.al.(2006) in 8 schools in Rajouri district of Jammu and Kashmir on 100 teachers it was revealed that many teachers felt it would be embarrassing for them to teach about AIDS. Educational intervention removed this apprehension to some extent<sup>10</sup>.

Baser M et al, (2007) conducted study on "Evaluating first aid knowledge and attitude of Turkish primary school teachers. Results shows that most of the teachers do not have correct knowledge and attitude about first aid<sup>11</sup>. Bishops .M. and Boag EN (2006) conducted study on knowledge of teachers about epilepsy and attitudes towards students with epilepsy Lexington, U.S.A. The results suggest that although their attitude about epilepsy was positive but there was significant deficit in terms of general knowledge about epilepsy<sup>12</sup>.

Walter H.J et. al., (2006) conducted study on teachers beliefs about mental health needs in elementary schools at Chicago. The teacher's knowledge about mental health issues was limited, and they did not feel confident about their ability to manage mental health problems in their classroom<sup>13</sup>.

TABLE 3

Distribution of teachers according to the opinion regarding various people who could guide adolescents

S.	Who could guide	Before intervention		After intervention	
No.	them	Number	%		
1	Parents	207	90.0	210	91.3
2	Teachers	205	89.1	206	89.6
3	Friends	106	46.0	106	46.0
4	Doctors	53	23.0	50	21.7
5	Others	136	59.1	142	61.7
6	Don't know	19	8.2	17	7.4

 $\chi$ 2=1.020, p > 0.05

Maximum 207(91.3%) teachers said that parents are best guide of adolescents which increased to 210(91.3%) after intervention while 205(89.1%), 106(46%), 53(23%) said that teachers, friends and doctors can also guide them after intervention the number were changed to 206(89.6%), 106(46%) and 50(21.7%) respectively. About 136(59.1%) teachers said that other persons like relatives, brother and sisters and society are best guide of adolescents and the number increased to 142(61.7%) after intervention. The change was not statistically significant.

Study done by SK Bhasin and OP Aggarwal (2006) among 476 senior secondary school teachers in Delhi revealed that school teachers were considered by 69.4% of the teachers to be the most appropriate persons for providing sex education<sup>14</sup>.

### **Conclusions:**

It can be concluded from the present study that the overall knowledge of teachers regarding school health services is less. The intervention done was effective in increasing the knowledge of teachers regarding adolescent problems but not up to the mark, may be due to the time duration(3 months) given after interactive sessions because of which teachers are not able to retain the knowledge given during the interactive sessions. Adequate pre service and regular in service training courses regarding adolescent health and related problems should be imparted to the teachers through programmes exclusively designed for teachers which help adolescents to develop the resiliency needed to manage the challenges in their lives because establishing healthy patterns from the start is easier than changing risky behaviours already entrenched.

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