

A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Pubertal Changes and Menstrual Hygiene among Adolescent Girls in Higher Primary Schools at Murudeshwar, Uttara Kannada

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Abstract—A pre-experimental one group pretest post test design was used for the study. Sample consisted of 60 adolescent girls. The sample was selected by purposive sampling technique. A structured questionnaire was given to assess the knowledge regarding pubertal changes and menstrual hygiene among adolescent girls. Before data collection the researcher introduced the purpose of the study, clarifies the queries and took the verbal consent from the subjects. The mean percentage of post-test knowledge score (90.6%) was higher than the mean percentage of pre-test knowledge score (50.6%). The calculated 't' value showed significant difference between mean pre and post-test knowledge scores. Calculated 'X²' values showed significant association between the demographic variables with their pretest knowledge scores at 0.05 level of significance. The study concluded that the STP is effective in increasing the knowledge of adolescent girls.

Index Terms—Pubertal changes, Menstrual Hygiene, Structured Teaching Program (STP), Purposive Sampling Technique, Adolescent girls.

I. INTRODUCTION

Adolescence is the transitional stage of physical and psychological human development that generally occurs during the period from puberty to adulthood.¹ During puberty the body makes hormones that leads to physical and emotional changes.² physiological development in adolescent girls during puberty often begins with thelarche, the onset of breast development. This typically occurs between the ages of 8 and 13, with an average age around 10 years. Thelarche is usually the first

visible sign of puberty in females, followed by other secondary sexual characteristics such as pubarche and menarche.³ Menstruation marks a significant milestone in life of a girl, indicating the commencement of her reproductive years. A poor menstrual understanding and its unhealthy practices may increase the risk of reproductive infection urinary tract infection and even cancer.⁴ Menstrual hygiene is vital to the empowerment and well-being of women and girls worldwide. Reproductive tract infections (RTIs), including sexually transmitted infections (STIs), pose a significant global health burden. Maternal RTIs can also adversely affect offspring.¹⁵ Recognizing these potential risks, our study aims to assess and enhance the knowledge regarding pubertal changes and menstrual hygiene among adolescent girls.

II. OBJECTIVE OF THE STUDY

- 1.To assess the existing knowledge regarding pubertal changes and menstrual hygiene among adolescent girls.
- 2.To evaluate the effectiveness of structured teaching program on knowledge regarding pubertal changes and menstrual hygiene among adolescent girls.
- 3.To find out the association between the pre-test knowledge scores with their selected demographic variables.

HYPOTHESIS :

H₁: The mean post test knowledge score of adolescent will be significantly higher than their mean pre-test score.

H₂: There may be significant association between the pre-test level of knowledge of adolescent girls with their selected demographic variables.

III. METHODS AND MATERIALS

The evaluative approach was adopted for the study. A pre-experimental one group pre-test post-test design was used for the study. The purposive sampling technique was used. A descriptive research design used to collect information within a given population having same characteristics of interest. The sample size consists of 60 adolescent girls who were fulfilling the inclusion criteria. A structured knowledge questionnaire was used to assess the knowledge and Structured Teaching Programme was implemented to evaluate its effectiveness. The group included only those study subjects who were present at the time of data collection.

IV. RESULT AND ANALYSIS

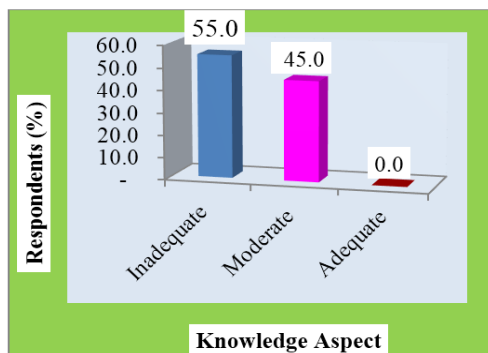
Section I: Analysis of Pre- test Knowledge level on pubertal changes and menstrual hygiene.

Pre -test Knowledge level on pubertal changes and menstrual hygiene reveals that 55.0% is having inadequate knowledge 45.0% is having moderate knowledge and 0.0% were having adequate knowledge.

Table-1: Classification of respondents pretest knowledge on pubertal changes and menstrual hygiene.

Knowledge level	Score	Respondents	
		Number	Present (%)
Inadequate	0-15	33	55.0
Moderate	16-22	27	45.0
Adequate	23-30	0	0.0
Total		60	100.0

Figure.1: Classification of Respondent Pretest Knowledge on pubertal changes and menstrual hygiene.



Section II: Analysis of pre-test and post-test knowledge scores of respondents and effectiveness of structured teaching programme.

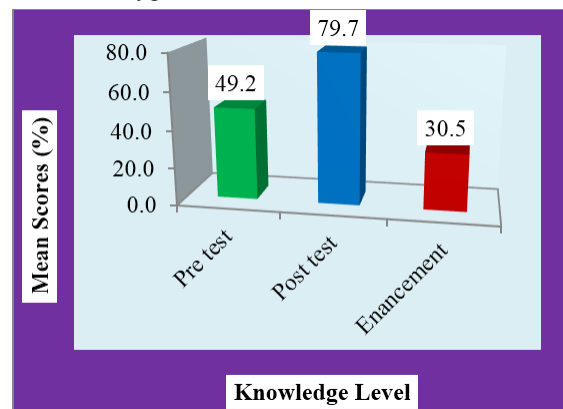
Over all Pre- test and Post -test Mean Knowledge scores on Pubertal changes and Menstrual hygiene reveals that maximum score in pre -test is 49.2%, maximum score in post- test is 79.7% and in enhancement maximum score is 30.5%.

Table- 2: Over all Pre -test and Post- test Mean Knowledge scores on pubertal changes and menstrual hygiene.

Aspects	Max. Score	Knowledge Scores				Paired 't' Test
		Mean	SD	Mean%	SD%	
Pretest	30	14.77	3.96	49.2	13.2	20.54*
Posttest	30	23.92	3.11	79.7	10.4	
Enhancement	30	9.15	3.46	30.5	11.5	

* Significant at 5% level, $t(0.05, 59df) = 1.96$

Figure 2: Over all Pre -test and Post- test Mean Knowledge scores on Pubertal changes and Menstrual hygiene.



Section-3: Association between demographic variables and pre test knowledge level on pubertal changes and menstrual hygiene.

The findings revealed that association of post-test level of knowledge of study participants and their selected socio-demographic variable and calculated X²value. The calculated x² value with regard to all the selected social-demographic variables viz. age (x² =4.21*), class (x² =5.07*), source of information(x² =7.33*), education status of mother (x² = 8.88*), education status of father (x² = 7.95*), occupation of mother (x² =6.25*), occupation of father (x² = 8.54*) were more than the table value at 0.05 level of significance which indicates that there is a significant association between pre-test knowledge scores and demographic variables, hence

the stated research hypothesis H_2 is accepted with regard to above mentioned demographic variables, but the calculated χ^2 value with regard to religion ($\chi^2 = 0.02$), type of family ($\chi^2 = 0.50$), family income ($\chi^2 = 5.99$) were less than the table value at 0.05 level of significance which indicates that there is no significant association between pre-test knowledge scores and demographic variables, hence the stated research hypothesis H_2 is rejected with regard to above mentioned demographic variables.

V. DISCUSSION

Menstrual hygiene involves adopting proper practices to manage menstrual flow, maintain cleanliness, and prevent infections. Good hygiene during menstruation is especially important for adolescents, helping them stay healthy, confident, and comfortable as they experience this natural transition.⁵

This chapter presents the major findings of the study and discusses them in relation to the findings of other research studies. The study intended to assess the effectiveness of structured teaching program on the knowledge regarding pubertal changes and menstrual hygiene among adolescent girls in higher primary schools in Uttara Kannada. The overall experience was a satisfying one. The investigator found that structured teaching program was an effective teaching strategy to improve on knowledge regarding pubertal changes and menstrual hygiene among adolescent girls in higher primary schools in Uttara Kannada.

VI. CONCLUSION

The study significantly proved that there is a remarkable improvement in the knowledge of adolescent girls regarding pubertal changes and menstrual hygiene.

VII. SUMMARY

The researcher experienced profound satisfaction and fulfillment upon conducting the study, which provided deeper insight and empathy regarding the training needs of adolescent girls concerning pubertal changes and menstrual hygiene. The valuable contributions from experts, the assistance of college staff, and the cooperation of participants rendered the study both fruitful and engaging. The findings demonstrated that the structured teaching programme (STP) is an effective educational strategy.

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