# Effectiveness of Planned Teaching Programme (PTP) on Knowledge Regarding Menstruation and its Hygiene among Adolescent Girls

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#### **Abstract**

A study was conducted to assess the knowledge regarding menstruation and its hygiene among adolescent girls at K.L.E's Institute Of Nursing Sciences, Hubballi. Twenty eight (28) students were selected by non probability; purposive sampling technique. The knowledge was assessed by using structured knowledge questionnaire. The study results revealed that in Pre test majority of subjects 17 (60.71%) had average knowledge, 6 (21.42%) had good knowledge and 5 (17.85%) had poor knowledge respectively, where as in Post test all the subjects 28 (100%) had good knowledge about the menstruation and its hygiene.

**Keywords:** Knowledge; Menstruation.

#### Introduction

Adolescence in girls has been recognized as a special period that is, the transition from girlhood to womanhood. Many physiological changes results into her body in which, onset of menstruation or menarche is the hall mark of female pubertal development. The menstrual cycle is a very important indicator of women's reproductive health and their endocrine function. Most adolescents are concerned about their menstrual health and hygiene.

In the existing Indian culture milieu, the society is interwoven into a set of traditions, myths and misconceptions especially about menstruation and its related issues. Menstruation is generally considered as unclean in Indian society. Isolation of the menstruating girls and restrictions imposed in the family have reinforced negative attitude towards this phenomenon in girls.

Several research studies have shown that, there is a low level of awareness about menstruating girls when they first experience it. Social prohibitions and negative attitude of parents in discussing the related issues openly has blocked the access of adolescent girls to right kind of information especially in rural and tribal communities.

Personal experience of the investigator and review of literature revealed that adolescent girls are unaware of hygiene and its management. These adolescent girls are tomorrow's mothers. The reproductive health decisions they make today will affect the health and wellbeing of their community and their country for decades to come. The nurse being the part of health team must educate the adolescent girls regarding menstruation and its hygiene. Therefore the investigator has selected First year B.Sc Nursing student keeping in mind that they themselves are benefitted and are future nurses and teacher who will educate the girls or public regarding menstruation and its hygiene.

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Statement of the problem

"A study to evaluate the effectiveness of planned teaching programme [PTP] on knowledge regarding menstruation and its hygiene among adolescent girls at KLES' Institute of Nursing Science, Hubballi. Karnataka."

## Objectives of the Study

- 1. To assess the knowledge regarding menstruation and its hygiene among adolescent girls.
- To evaluate the effectiveness of planned teaching programme on knowledge regarding menstruation and its hygiene among adolescent girls in terms of gain in knowledge score.
- To find out an association between pre test knowledge with their selected demographic variables.

### *Review of literature*

The literature reviewed for this study has been categorized under the following sections:

Section I - Review of literatures related to menstruation and its hygiene.

Section II - Review of literatures related to planned teaching programme.

## Methodology

Research Approach: An evaluative.

**Research Design**: Pre experimental, one group pre test, posttest design.

*Sampling Technique*: Non probability: purposive sampling technique.

Sample size: 28.

**Population**: 1<sup>st</sup> year B.Sc (N) students.

**Setting**: KLES' Institute of Nursing Sciences, Hubballi.

*Tool used*: Structured knowledge questionnaire on menstruation and its hygiene.

*Section 1:* Socio demographic variables of 1<sup>st</sup> year B.sc nursing students.

*Section 2:* Structured knowledge questionnaire contains items on:

 Part A: Consists of 4 items on Introduction to adolescent

- Part B: Consists of 9 items on female reproductive system
- Part C: Consists of 16 items on menstrual cycle
- Part D: Consists of 10 items on menstrual hygiene

## Procedure of Data Collection

Formal permission was obtained from the Principal and the class coordinator of 1<sup>st</sup> year B.Sc Nursing, K.L.E.S Institute of nursing sciences Hubballi, the investigator proceeded for data collection. The main study was conducted for three weeks.

The methods used for data collection were as follows:

- The investigator introduced herself & explained the purpose of the study to 1<sup>st</sup> year B.Sc nursing students.
- The written consent was obtained from the participants.
- The data was obtained by administering structured knowledge questionnaire.

## Data analysis plan

The data obtained were analyzed in terms of the objectives of the study, using descriptive and inferential statistics. The analysis was planned as follows;

- Organization of data on the master sheet
- Tabulation of the data in terms of frequency. Percentage, mean, median standard deviation and range.
- Classification of knowledge scores on
- Good score:  $(\bar{X} + SD)$  & above
- $\checkmark$  Average score:  $(\bar{X} + SD)$  to  $(\bar{X} SD)$
- ✓ Poor score: ( $\bar{X}$  SD) & below.

[Note:  $(\bar{X} = Mean. SD = Standard deviation]$ .

#### Results

Section I: Distribution of sample characteristics according to demographic variables of respondents.

Table 1: reveals that, majority of subjects 21 (75%) belonged to age the group of 18-19 yrs, while minimum number 1 (3.75%) belonged to the age

group 20-21 yrs. Majority of the subject 20 (71.42%) people belonged to Hindu religion, while minimum 1 (3.57%) belonged to other religion. Majority of subjects 10 (35.71%) have secondary level education, while minimum 2 (7.14%) had no formal education of the mother majority of the subjects 11 (39.28%) had primary education while minimum 2 (7.14%) had graduation and above education of the father. Majority of the subjects 17 (60.71%) belongs to rural, while minimum 11 (39.28%) belongs to urban area. Majority of the subject 20 (71.42%) were having mixed, while minimum 8 (28.57%) having

vegetarian, majority of the subjects 15 (53.57%) had their menarche in the age of 12-14 years. While minimum 1 (3.57%) had their menarche in the age of 16 years and above. Majority of the subjects 14 (50%) peoples getting health information from health professional, while minimum number of 2 (7.14%) people getting health information from new age media.

Section II: Analysis and interpretation of knowledge scores of B.Sc (N) 1<sup>st</sup> year students regarding menstruation and its hygiene.

**Table 1:** Frequency and percentage distribution of B.Sc (N)  $1^{st}$  year students according to their sociodemographic variables.

1. No	Demographic variables	Frequency (f)	Percentage (%)
1.	Age in year		
	a. 18-19	21	75
	b. 19-20	6	21.42
	c. 20-21	1	3.57
2.	Religion		
	a. Hindu	20	71.42
	b. Muslim	3	10.71
	c. Christian	4	14.28
	d. Any other	1	3.57
3.	Education status of father		
	a. No formal education	2	7.14
	b. Primary	6	21.42
	c. Secondary	10	35.71
	d. Pre-university	5	17.85
	e. Graduation and above	5	17.85
4.	Educational status of mother		
1,	a. No formal education	2	7.14
	b. Primary	11	39.28
	c. Secondary	9	32.14
	d. Pre-university	2	7.14
	e. Graduation and above	4	14.28
5.	Habitat (area of residence)		
٥.	a. Rural	17	60.71
	b. Urban	11	39.28
6.	Dietary pattern		
	a. Vegetarian	8	28.57
	b. Mixed	20	71.42
7.	Age of menarche		
	a. 10-12	3	10.71
	b. 12-14	15	53.57
	c. 14-16	9	32.14
	d. 16 yrs above	1	3.57
8.	Source of information	-	0.0.
٥.	a. Print media	4	14.28
	b. Electronic media	3	10.71
		2	7.14
	c. New age media	5	
	d. Peer group and social	5 14	17.85 50
0	e. Health professional	14	30
9.	Previous history of menstrual problem	12	42.85
	a. Irregular menstrual	12	
	b. Scanty		3.57
	c. Painful menstrual	12	42.85
	d. Heavy menstrual bleeding	1	3.57
	e. Other specify	2	7.14

Table 2 reveals that in pretest mean knowledge scores in pre test was 20.64, Median was 20.5, mode was 22, Standard deviation was 3.00 and range was 16, where as in Post test mean knowledge score was 34.92, Median was 35, mode was 35, Standard deviation was 1.48 and range was 7.

Table 3 reveals that in Pre test majority of subjects 17 (60.71%) had average knowledge, 6 (21.42%) had good knowledge and 5 (17.85%) had poor knowledge respectively; where as in Post test all subjects 28 (100%) had good knowledge.

Table 4 reveals that the mean percentage of knowledge scores in the pretest was 52.93 and is 89.56 in posttest. Hence the total gain in mean percentage of the knowledge scores was 36.63%.

# Section III: Testing Hypotheses

H<sub>1</sub>: The mean post-test knowledge scores of adolescent girls regarding menstruation and its hygiene will be statistically higher than the mean pre-test scores at 0.05 level of significance.

Table 5 reveals that calculated paired 't' value ( $t_{cal} = 5.01^*$ ) was greater than tabulated value ( $t_{tab} = 1.70$ ). Hence  $H_1$  was accepted.

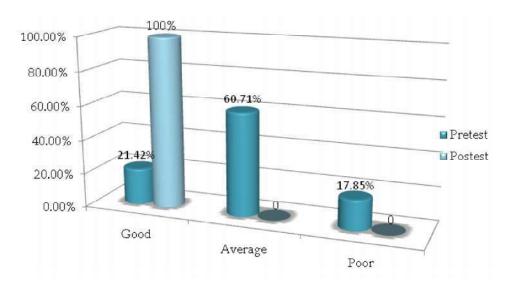
H<sub>2</sub>: There will be statistical association between pre-test knowledge scores with their selected demographical variable at 0.05 level at significant.

**Table 2:** Mean, Median, Mode, Standard deviation and range of knowledge scores of subjects regarding menstruation and its hygiene. n=28

Area of Analysis	Mean	Median	Mode	Standard deviation	Range
Pre test (x)	20.64	20.5	22	3.00	16
Post test (y)	34.92	35	35	1.48	7
Difference (y-x)	14.28	14.5	13	1.51	9

Table 3: Frequency and Percentage distribution of subjects regarding menstruation and its hygiene. n=28

Knowledge scores	Pre	test	Post test		
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Good (24 & above)	6	21.42	28	100	
Average (18-24)	17	60.71	00	0.00	
Poor (18 & below)	5	17.85	00	0.00	



 $\begin{tabular}{ll} \textbf{Table 4:} Pre-test and Post-test percentage of knowledge score of subjects in different items of menstruation and its hygiene. \\ \begin{tabular}{ll} n=28 \end{tabular}$ 

Items	Total score	Mean % of knowledge scores of subjects			
		Pre test	Post test	Gain in knowledge (y-x)	
Structured knowledge	578	52.93	89.56	36.63	
Questionnaire					

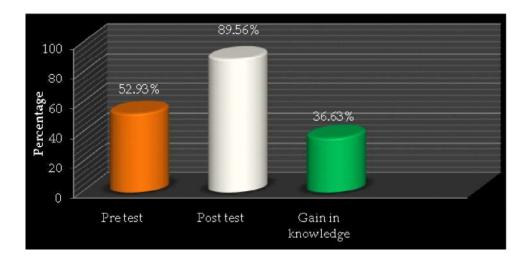


Table 5: Mean difference (d), Standard Error of difference (SED) and paired' values of knowledge scores of subjects. n=28

Mean difference (d)	Standard Error of difference (SED)	Paired 't' values	
		Calculated	Tabulated
14.28	3.26	5.01 *	1.70

Table 6: Association between the existing knowledge of B.Sc (N)  $1^{st}$  year students with their selected demographic variables. n=28

Sl. No	Demographic variable	Good	Average	Poor	Chi-S	quare	df
					Cal	Tab	ar
1	Age in year a. 18-19 b. 19-20 c. 20-21	5 1 0	11 5 1	5 0 0	3	9.49	4
2	Religion a. Hindu b. Muslim c. Christian d. Others	5 - 1 -	12 3 1 1	3 - 2 -	5.98	12.59	6
3	Educational status of the father a. No formal education b. Primary c. Secondary d. Pre university e. Graduate and above	0 1 4 1 0	2 4 4 4 3	0 1 2 0 2	7.39	15.51	8
4	Educational status of the mother a. No formal education b. Primary c. Secondary d. Pre university e. Graduate and above	$egin{array}{c} 0 \\ 0 \\ 4 \\ 1 \\ 1 \end{array}$	2 9 4 1	0 2 1 0 2	11.6	15.51	8
5	Habitant (Area of residence) a. Rural b. Urban	5 1	10 7	2 3	2.21	5.99	2
6	Dietary pattern a. Vegetarian b. Mixed	4 2	4 13	0 5	6.48*	5.99	2
7	Age of menarche a. 10-12 b. 12-14 c. 14-16 d. 16 yrs above	1 5 0	1 10 5 1	1 0 4 0	10.9	12.5	6

8	Source of information						
	a. Print media	0	3	1			
	b. Electronic media	1	2	0			
	c. New age media	1	0	1	5.14	15.51	8
	d. Peer group and social	1	3	1			
	e. Health professional	3	9	2			
9	Previous history of menstrual problem						
	a. Irregular menstrual	1	9	2			
	b. Scanty	0	1	0	15	15.51	0
	c. Painful menstrual	5	6	1	15	13.31	0
	d. Heavy menstrual bleeding	0	1	0			
	e. Other specify	0	0	2			

#### Table 6 reveals that

- The calculated chi square value (3) was lesser than tabulated chi square value (9.49). Hence H2.1 was rejected.
- The calculated chi square value (5.98) was lesser than tabulated chi square value (12.59). Hence H2.2 was rejected.
- The calculated chi square value (7.39) was lesser than tabulated chi square value (15.51). Hence H2.3 was rejected.
- The calculated chi square value (11.6) was lesser than tabulated chi square value (15.51). Hence H2.4 was rejected.
- The calculated chi square value (2.21) was lesser than tabulated chi square value (5.99). Hence H2.5 was rejected.
- The calculated chi square value (6.48) was greater than tabulated chi square value (5.99). Hence H2.6 was accepted.
- The calculated chi square value (10.9) was lesser than tabulated chi square value (12.5). Hence H2.7 was rejected.
- The calculated chi square value (5.14) was lesser than tabulated chi square value (15.51). Hence H2.8 was rejected.
- The calculated chi square value (15.0) was lesser than tabulated chi square value (15.51). Hence H2.9 was rejected.

#### Conclusion

Based on the findings of the study the following conclusion was drawn;

- 1. Pre test knowledge of students regarding menstruation & its hygiene was inadequate.
- 2. There was a need for PTP for students regarding menstruation & its hygiene.

3. The findings of the study have proved that planned teaching programme was effective in improving the knowledge of Ist year B.Sc nursing students regarding menstruation & its hygiene.

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