



# “A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Menarche Among Pre-Adolescent Girls Of Govt. High School, Andharua, Jagannath Prasad, Bhubaneswar”.

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## ABSTRACT:-

Menarche signifies the onset of puberty and the ability of female to potentially reproduce in future. It is a period of mild haemorrhage which occurs approximately once in each month, during which the uterine epithelium is sloughed off and expelled out. It is the discharge of blood and elements of the uterine mucous membrane. This study was conducted with 30 samples (pre-adolescent girls) in quantitative approaches, Quasi experimental with one group pre-test post-test design, sampling selection was done by random sampling technique. Structured questionnaire was used to elicit the knowledge of pre- adolescent girls at Govt. High school, Andharua, Jagannath prasad, Bhubaneswar.

The study was revealed that among pre-adolescent girls according to the findings, in pre- test 60.4% pre-adolescent girls had average knowledge and 39.6% had good knowledge, in post-test 15% had average knowledge and 85% had good knowledge. The mean knowledge score of pre-tests is 16 and standard deviation was 4.96. The pair ‘t’ value is 16.71 and ‘p’ value is 0.05.

## PROBLEM STATEMENT:-

“A study to assess the effectiveness of structured teaching programme on knowledge regarding menarche among pre-adolescent girls of Govt. high school, Andharua, Jagannath prasad, Bhubaneswar”.

**OBJECTIVES:**

1. To assess the pre-test knowledge regarding menarche among the pre-adolescent girls of Govt. high school, Andharua, Jagannath prasad, Bhubaneswar.
2. To assess the effectiveness of planned teaching programme on knowledge regarding menarche among the pre-adolescent girls of Govt. High School, Andharua, Jagannath prasad, Bhubaneswar.
3. To assess the post-test knowledge regarding menarche among the pre-adolescent girls of Govt. High School, Andharua, Jagannath prasad, Bhubaneswar.
4. To find out association between pre-test knowledge regarding menarche among the pre-adolescent girls with their selected sociodemographic variable.

**INTRODUCTION:-**

*“Embrace your period as reminder of your extraordinary power as a woman.”*

Menarche is the culmination of series of physiological and anatomical process of puberty such as secretion of oestrogen by ovaries in response to pituitary hormone. It is a period of mild haemorrhage which occurs approximately once in each month, during which the uterine epithelium is sloughed and expelled out from the uterus. The statistical data explained that a majority of girl (66.2%) attained menarche between the age of 13-14 years. Moreover about 17.2% of girls experienced an early age at menarche whereas 16.7% of girl had a late age at menarche.

The onset of the first menstrual period is a qualitative event of measure significant of a women's life, denoting the achievement of a measure functional state. The bodily changes associated with puberty affect a girl's physiological & social development which experience the physical changes that are occurring as well.

**REVIEW OF LITERATURE:****‘LITERATURE RELATED TO KNOWLEDGE REGARDING MENARCHE AMONG PREADOLESCENT GIRL.’**

**Mr. Arash Arashkia (2024)**, conducted a quantitative study to determine the knowledge regarding menarche among adolescent girls. The study was conducted on 50 sample. Data was collected using structured knowledge questionnaire. Result of the study found that, in the pre-test the majority (60%) adolescent girl with inadequate knowledge regarding menarche. In post - test knowledge the same group has gained adequate knowledge (80%). The study finding indicate that the structure teaching programme was effective in enhancing knowledge of adolescent girls regarding menarche.

**Krishma, Nidhi Sagar, Mamta (2023)**, conducted a descriptive study on knowledge regarding menarche among 200 early adolescent girls of Bhartiya vidya mandir and USPC Jain public school of city, Ludhiana, Punjab. The sample was selected by convenience sampling technique. The result of study revealed that 48.5% early adolescent girls had good knowledge, 48% had average, 2% had excellent knowledge regarding menarche. Thus, it is necessary to provide education regarding menarche to early adolescent girls.

## METHODOLOGY

This deals with a brief description of research approach, research design settings, population, sample criteria, sampling technique, description of tools, data collection procedure, plan for data analysis.

### **RESEARCH APPROACH:**

A quantitative research approach was used for this study.

### **RESEARCH DESIGN:**

Quasi experimental one group pre- test post- test design was chosen.

**Table: 1**

SCHEMATIC REPRESENTATION OF RESEARCH DESIGN.

Group	Pre- test	Intervention	Post- test
Study group	O1	X	O2

### **KEYS:**

**O1** - Pre- test on knowledge regarding menarche.

**X** - Intervention- structure teaching programme regarding menarche among Pre-adolescent girls.

**O2** - Post-test on knowledge regarding menarche.

### **SETTING OF THE STUDY:-**

The study was conducted among school girls of aged between 9-12 years and studying in 6th,7th standard in Govt. High school, Andharua Jaganath Prasad, Bhubaneswar. The school was located at semi urban area in Andharua, Bhubaneswar. The school comprised of classes starting from 6th-10th standard. Total strength of the student in the school was 300. A total of 30 school girls were selected for the study by adapting random sampling technique.

### **POPULATION: -**

#### **TARGET POPULATION:**

Pre-Adolescent girls of Odisha.

#### **ACCESSIBLE POPULATION:**

School girls aged between 9-12 years of Bhubaneswar, Khordha district.

### **SAMPLE: -**

In this study the sample comprised of pre-adolescent school girls who are studying at Govt. High school, Andharua, Jaganath Prasad, Bhubaneswar.

#### **SAMPLING TECHNIQUE:**

A simple random sampling

**SAMPLE SIZE:**

A sample of 30 school girls who were studying 6<sup>th</sup> & 7<sup>th</sup> standard and aged between 9-12 years at Govt high school, Andharua Jaganath Prasad, Bhubaneswar and who fulfilled the inclusion criteria were chosen for this study.

**CRITERIA FOR SAMPLE SELECTION: -****INCLUSION CRITERIA FOR SAMPLING:**

- Pre-adolescent girls who are studing in class 6<sup>th</sup> & 7<sup>th</sup>
- Pre-adolescent girls who are able to understand Odia.
- Pre-adolescent girls who are available at the time of data collection.

**EXCLUSION CRITERIA FOR SAMPLING:**

- Pre-adolescent girls who are not available during the time of data collection.

**SELECTION AND DEVELOPMENT OF THE STUDY INSTRUMENT**

- Pre-adolescent girls who are not willing to participate in the study.

The tool for this study consisted of two sections.

**SECTION-A: -****DEMOGRAPHIC VARIABLES:**

The demographic variables consisted of age in years, class, religion, type of family, educational status of mother.

**SECTION-B: -****HEALTH RELATED VARIABLES:**

It consisted of menarche, puberty, menstruation. Sign of Secondary sexual characteristics development, Causes of early menarche and late menarche, positive impact of menarche, female reproductive organs, Phases and physiology of menstrual cycle, Detection of anaemia, Management of menstrual hygiene.

**SECTION-A:**

The numerical values were assigned for the demographic variables.

**SECTION B:**

It consisted of 35, self-structured multiple choice question regarding introduction, female reproductive organ, menstrual cycle phases & physiology, cause and complication of menarche, positive impact of menarche.

The total score was computed and categorized as follows.

Score	Level of knowledge in percentage	Category
< 9	Poor	30%
15-18	Average	50-60%
21-24	Good	70-80%

**DATA COLLECTION PROCEDURE**

The data collection procedure included the following steps-

- Collection of demographic variables and health related variables by self- structured questionnaire.
- Conduct of pre-test by self-structured multiple-choice question of knowledge regarding menarche.
- Administration of structured teaching programme.
- Conduct of post-test by self-structured multiple choice questions knowledge regarding menarche.

The written permission was obtained from the authority of Govt. high school, Andharua Jagannath Prasad, Bhubaneswar. The data collection was done for the main study on 31.08.2024. The participants for main study were selected by simple random sampling among school girls who are studying in class 6<sup>th</sup> & 7<sup>th</sup>. Totally 30 school girls were selected who fulfilled the inclusive criteria. Before giving the intervention, the investigator conducted pre- test in the exam hall as per the data collection schedule. The structured teaching programme regarding menarche was given to pre-adolescent girls, on same day and then post-test which was done by using same tool to assess the level of knowledge regarding menarche among school girls.

### PLAN FOR DATA ANALYSIS

The data analysis was done by using descriptive and inferential statistics. The plan for data analysis were as follows:

**TABLE: 2** (Plan for data analysis).

S. No.	Data Analysis	Statistical Test	Objectives
1.	Descriptive statistics	Frequency, percentage, mean & standard deviation	Frequency and percentage distribution of demographic variables, health related variables, level of knowledge regarding menarche among study group.
2.	Inferential statistics	Paired “t” test	Comparison of pre-test & post- test knowledge regarding menarche among school girls.

**RESULTS****SECTION 1 –**

Description of sociodemographic data of pre-adolescent girls

The section represents the frequency and percentage distribution of selected demographic variables of pre-adolescent girls.

**TABLE-3:**

The frequency and percentage distribution of pre-adolescent girls according to age:

SL NO	AGE IN YEARS	FREQUENC Y	PERCENTA GE
1	9 -11	12	40%
2	11-13	15	50%
3	13-15	3	10%

This data indicates 40% of the age group between 9-11 years where as 50% of the age group were 11-13 years and 10% were of 13-15 years.

**TABLE-4:**

The frequency and percentage distribution of pre-adolescent girls according to their religion.

SL NO	RELIGION	FREQUENC Y	PERCENTA GE
1	Hindu	30	100%
2	Christian	0	0%
3	Muslim	0	0%
4	Others	0	0%

This data indicates about the religion of the group among the pre-adolescent girls where there are 100% of the Hindu are present, 0% were Christian, Muslim & others

**TABLE-5:**

The frequency and percentage distribution of pre-adolescent girls according to the education of their mother.

SL NO	EDUCATION OF MOTHER	FREQUENC Y	PERCENTA GE
1	Illiterate	3	10%
2	Primary	9	30%
3	High school	15	50%
4	Higher secondary or above	3	10%

This data indicates about the qualification of mother of pre-adolescent girls which contain 10% of illiterate,30% are primary level, 50% are high school level,10% are higher secondary level or above.

**TABLE-6:**

The frequency and percentage distribution of the pre-adolescent girls according to their type of family.

SL NO.	TYPE OF FAMILY	FREQUENCY	PERCENTAGE
1	Joint	18	60%
2	Nuclear	12	40%
3	Others	0	0%

This data indicates the types of the pre-adolescent girls they belong to 40% of the girls belongs from nuclear family and 60% are from joint family.

**TABLE-7**

The frequency and percentage distribution of the pre-adolescent girls according to their socio-economic status of the family.

SL NO.	SOCIOECONOMIC STATUS	FREQUENCY	PERCENTAGE
1	Poor	3	10%
2	Middle class	24	80%
3	Rich	3	10%

This data indicates pre-adolescent girls of 80% belongs to middle class family, 10% each belongs to poor & rich family.

## SECTION -II

Description of the overall knowledge of pre-adolescent girls regarding menstrual hygiene.

**TABLE-8:**

Overall knowledge distribution of pre-adolescent girls based on criteria measure

This column diagram representing the distribution of overall knowledge of the pre-adolescent girls in pre-test and post-test.

Sl. No	Level of knowledge	Pre-Test		Post Test	
		N	%	N	%
1	Poor	6	20%	0	0
2	Average	15	50%	9	30%
3	Good	9	30%	21	70%
Total		30	100	30	100

The above table reveals that 15 (50%), 9 (30%) and 6 (20%) pre-adolescent girl's participants had average, good & poor knowledge in pre-test and post-test 9(30%) and 21 (70%) had average and good knowledge in post-test.

**SECTION III****TABLE 9:**

Comparison of pretest and post-test knowledge scores of the pre-adolescent girls regarding menstrual hygiene.

SL. No.	Observation	Mean	SD	Pair 't' value	p-value
1	Pre test	16	4.96	2.05	0.05
2	Post test	28.8	2.79		

The above table reveals that there was a statistically significant difference between pre and post-test knowledge score regarding menstrual hygiene among adolescent girls at level  $P < 0.05$ .

**DISCUSSION AND ANALYSIS OF DATA**

This chapter deals with the discussion which was based on the objectives, findings obtained from the data analysis and its relation to the subjects of the study and with the revealed literature. The aim of the study was to assess the effectiveness of structured teaching programme on knowledge regarding menarche among preadolescent girls at Govt. High School, Andharua Jagannath Prasad, Bhubaneswar. The study findings are discussed based on the following objectives.

**FIRST OBJECTIVE:**

**To assess the pre-test knowledge score regarding menarche among the preadolescent girls.**

The analysis of knowledge score regarding menarche among the preadolescent girl's pre-test mean score is 12(40%) had their average knowledge in pre-test, whereas 27 ( 90 % ) had good knowledge in post- test. The mean score of pre-test knowledge was 12, in which it was increased to 24 in the post-test. This shows that the knowledge regarding menarche is increased among preadolescent girls because of structured teaching programme.

**SECOND OBJECTIVE:**

**To assess the post- test knowledge score regarding menarche among the pre-adolescent girls.**

The post-test knowledge regarding menarche among the preadolescent girls has increased to 95%. This shows that the knowledge regarding menarche is increased among preadolescent girls because of structured teaching programme.

**THIRD OBJECTIVES:**

**To compare the pre- test and post- test knowledge score regarding menarche among the preadolescent girls.**

The comparison of pre and post-test knowledge and practice score regarding menarche among pre-adolescent girls unveiled that the mean knowledge score was 12 in pre-test where as in post-test it was 24. The mean score was increased because of the administration of structured teaching programme

regarding menarche.

The paired “t” value on comparison of pre and post-test knowledge score regarding menarche was 16.71 which was statistically significance at  $P < 0.05$ . The comparison of pre and post-test practice score elicited that the “t” value was 16.71, which was statistically significance at  $P < 0.05$ . From these findings it is concluded that structured teaching programme enhances knowledge and practice regarding menstrual hygiene among pre-adolescent girls. Hence H1 there will be a significance difference between the pre-test and post-test knowledge score among pre-adolescents girls and H2 there will be significance association between pretest knowledge score and selected demographic variables among pre-adolescent girls.

#### **FOURTH OBJECTIVE:**

**To determine the association between pre-test knowledge score with their selected demographic variables regarding menarche among the pre-adolescent girls.**

The chi-square value on association of demographic variables with level of knowledge depicted that there was a statistically significance association of age, class, religion, education of mother, type of family with the level of knowledge regarding menarche among pre-adolescent girls, at level  $P < 0.05$ .

#### **CONCLUSION:**

The study finding proved that the structured teaching programme administered by the researcher was effective to increase the knowledge regarding menarche among pre-adolescent girls

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#### **ETHICAL CLEARANCE**

This study was conducted with accordance with the ethical standards of the institutional research committee with the declaration and its later amendments. Informed consents were obtained from all individual participants included in the study.

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