



“A STUDY TO ASSESS EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM REGARDING KNOWLEDGE ON MENSTRUAL HYGIENE AMONG THE NEWLY PUBERTY ATTAINED GIRLS AT SELECTED COMMUNITY AREA IN AHMEDABAD CITY, GUJARAT.”

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ABSTRACT

Background: The newly puberty attained girls in community area lacked knowledge regarding menstrual hygiene. The study was designed to evaluate the effectiveness of structured teaching program on knowledge regarding menstrual hygiene among newly puberty attained girls at Ahmedabad.

Objective: 1. To assess the pretest and posttest score of knowledge regarding menstrual hygiene among newly attained puberty girls. 2. To assess the effectiveness of structured teaching program regarding knowledge on menstrual hygiene among newly puberty attained girls. 3. To find out relationship between the pretest score of knowledge regarding menstrual hygiene among newly attained puberty girls and their selected demographic variables.

Methods: Quasi-experimental one group pre-test and post-test design with the aid of a questionnaire schedule was conducted among 30 newly attained puberty girls in selected community area at Ahmedabad. The pre-test knowledge was assessed using structured knowledge questionnaire.

Results: Out of 30 newly attained puberty girls, most of the participants gained knowledge about menstrual hygiene. The mean Pre-test score was 10.7 and the mean Post-test score was 24.3. The mean post-test knowledge score is significantly higher than the mean pretest knowledge score with the mean difference of 13.6 and the calculated “t” value ($t = 4.66$) which significantly proved at 0.05 level of significance. Therefore, the null hypotheses was rejected and research hypotheses was accepted and it revealed that the structured teaching program was effective in increasing knowledge regarding menstrual hygiene among newly attained puberty girls in selected community area at Ahmedabad.

Conclusions: The study concluded that structured teaching program was an effective strategy in improving the knowledge regarding menstrual hygiene among newly attained puberty girls in selected community area at Ahmedabad.

Key Words

Menstrual Hygiene, Structured Teaching Program, Newly Puberty Attained Girls

INTRODUCTION

Adolescent period is the formative period when maximum amounts of changes take place and pubertal change is one of them. The main pubertal change that occurs in girls is menstruation; this is an important landmark in the process of growth and maturation and prepares them for motherhood. Yesterday's girls are today's adolescent and tomorrow's mother.

Practice related to menstruation hygiene are of major concern as it has a health impact if neglected, it leads to toxic shock syndrome, reproductive tract infection, and other vaginal diseases. Poor genital hygiene negatively affects adolescents' health. Most girls are unaware and unprepared for menarche as they are not informed or ill-informed about menstruation.

Maharjan S, Maharjan M (2020) conducted a study on effectiveness of structured teaching programme on knowledge and practices on menstrual hygiene among adolescent school girls in some government schools in India. The mean age of participants was 13.79 ± 1.3 years (range from 11-18 years). Distribution of pre-test knowledge among respondents regarding menstrual hygiene showed, 49.21% moderate and 50.79% adequate knowledge respectively. In the case of post-test, all of them demonstrated adequate knowledge and none of them showed inadequate knowledge. Pre-test practices among respondents regarding menstrual hygiene recorded as 3.75% inadequate, 61.25% moderate and 35.0% adequate practices. The pre-test mean score for the level of knowledge was 13.36 ± 1.64 , whereas the post-test mean score was 15.8 ± 0.73 . Practice related pre-test mean score was 10.66 ± 1.81 in comparison to, post-test mean score 13.34 ± 0.75 . There was no significant association found between knowledge regarding menstrual hygiene among adolescents with socio-demographic variables at $p < 0.05$ level. It is concluded that the Structured Teaching Program is an effective strategy to improve knowledge and practice regarding menstrual hygiene for adolescent girls.

OBJECTIVES OF THE STUDY

- To assess the pre-test and post-test score of knowledge regarding menstrual hygiene among newly attained puberty girls.
- To assess the effectiveness of structured teaching program regarding knowledge on menstrual hygiene among newly puberty attained girls.
- To find out relationship between the pre-test score of knowledge regarding Menstrual Hygiene among newly attained puberty girls and their selected demographic variables.

METHODOLOGY

In this study, the researcher used a Quantitative research approach in which quasi experimental one group pre test–post post test research design was adopted. The study samples are newly puberty attained girls who are residing in NEW GOTA of Ahmedabad city, Gujarat with a size of 30 samples. The samples were collected by convenient sampling technique. Based on the objectives of the study the investigator has prepared a structured knowledge questionnaire to assess the knowledge among the newly puberty attained girls regarding menstrual hygiene. The tool consisted of total 30 questionnaires regarding knowledge related to menstrual hygiene. The reliability of the tool was determined by 'test-retest method' and using 'Karl parson's correlation co-efficient formula'. Descriptive and inferential statistics was used to analyze the data.

RESULTS

Data were organized and presented including its description of all aspects. [SECTION-A]

Table 1 Frequency And Percentage Distribution According To The Selected Demographic Variables.

DEMOGRAPHIC VARIABLES		NO. OF SAMPLES	PERCENTAGE (%)
Age	11	1	3.33%
	12	8	26.66%
	13	11	36.66%
	14	10	33.33%
Religion	Hindu	30	100%
	Muslim	00	0%
	Christian	00	0%
	Others	00	0%
Standard	5th	1	3.33%
	6th	8	26.66%
	7th	11	36.66%
	8th	10	33.33%
Previous Knowledge	Yes	8	26.66%
	No	22	73.33%
Family Income (In Rs.)	10000-15000	19	63.33%
	15000-20000	8	26.66%
	20000-25000	1	3.33%
	>25000	2	6.66%

Table 1 shows that the distribution of samples by age, majority of the samples 11(36.66%) belong to the age group of 13 years, 10(33.33%) samples belong to the agegroup of 14 years 8(26.66%) belong to the age group of 12 years and 1(3.33%) 11 years. Distribution of samples according to religion, majority of the samples 30(100%) are Hindu. As regard standard the majority of samples 11(36.66%) were of 7th standard, 10(33.33%) samples were of 8th standard, 8(26.66%) samples were of 6th standard and 1(3.33%) 5th standard. As about previous knowledge of menstrual hygiene majority of sample 22(73.33%) were knowing about menstrual hygiene. Distribution of samples according to family income, majority of samples 19(63.33%) having 10000-15000 Rs. Monthly Income, 8(26.66%) having 15000-20000 Rs, 1(3.33%) having 20000-25000 Rs. 2(6.66%) having >25000 Rs. Monthly income.

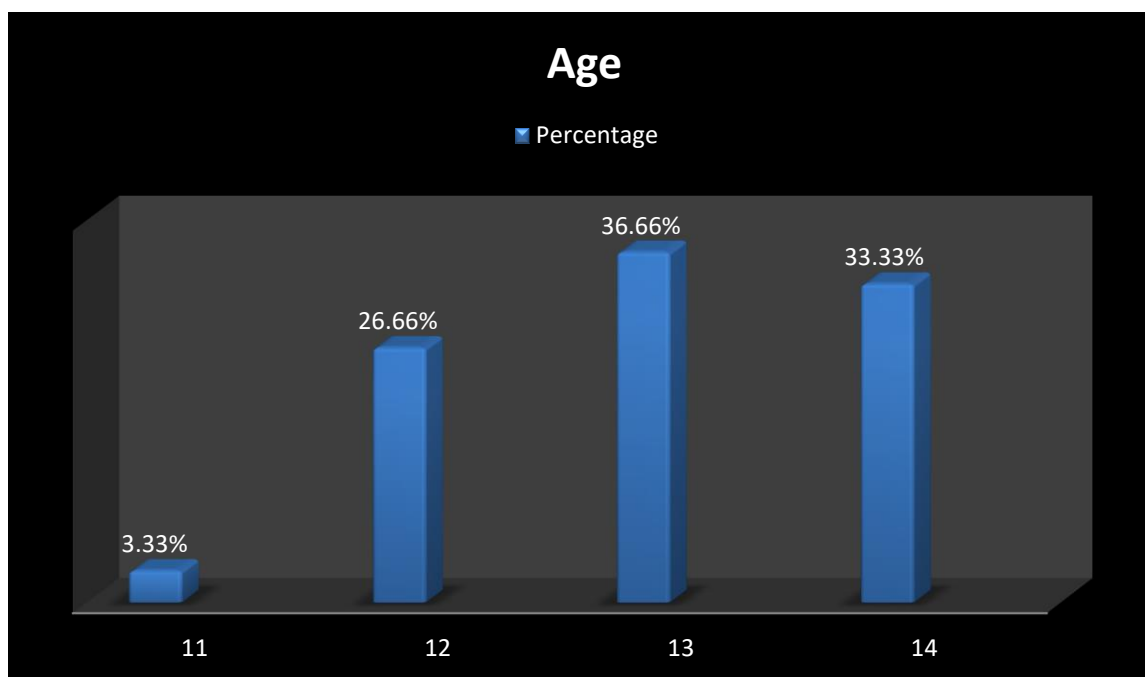


Figure 1: Bar Graph Showing The Age Distribution Of Samples

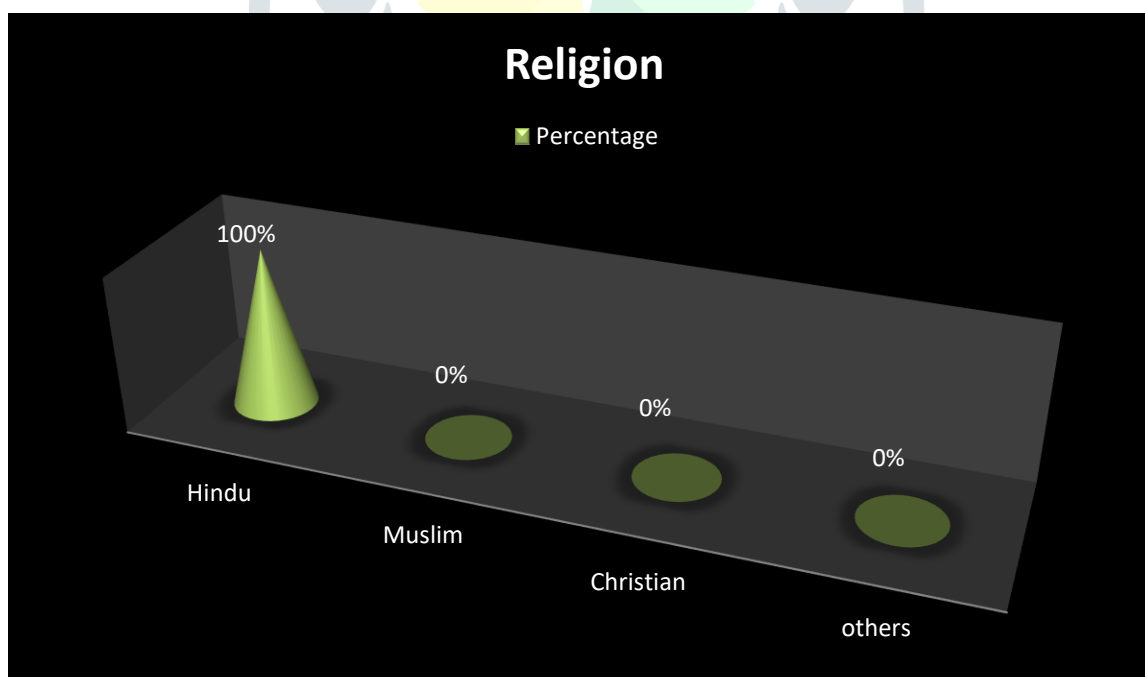


Figure 2: Column Graph Showing Religion Of The Samples

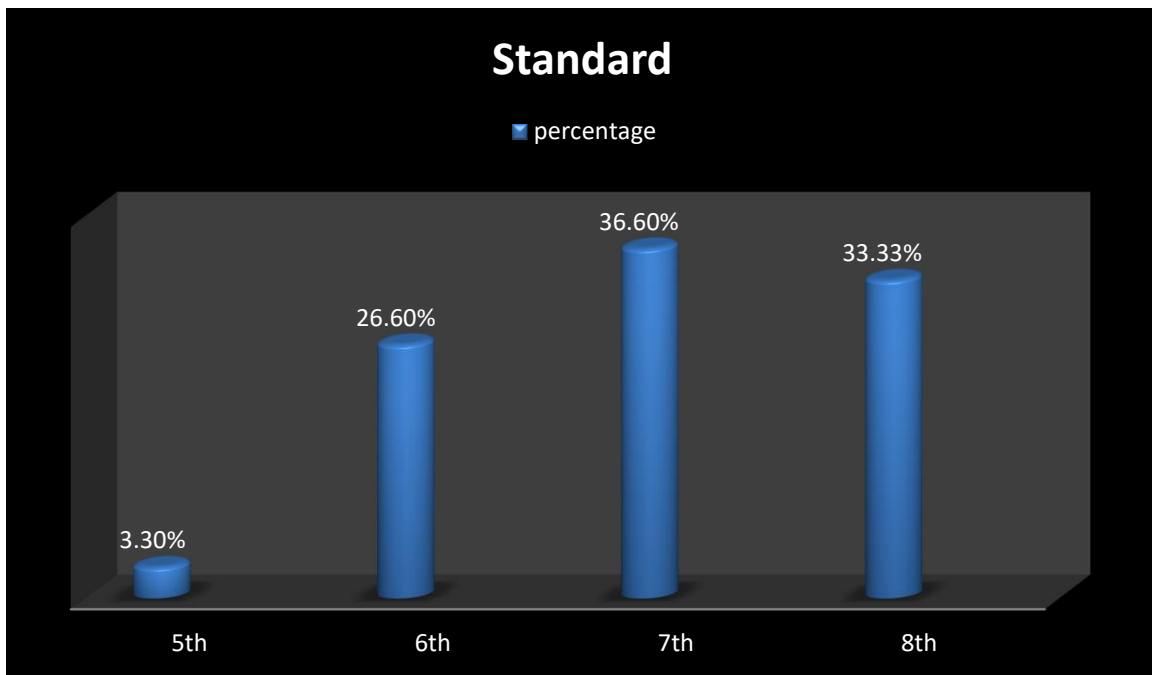


Figure 3: Column Graph Showing The Standard Of Sample

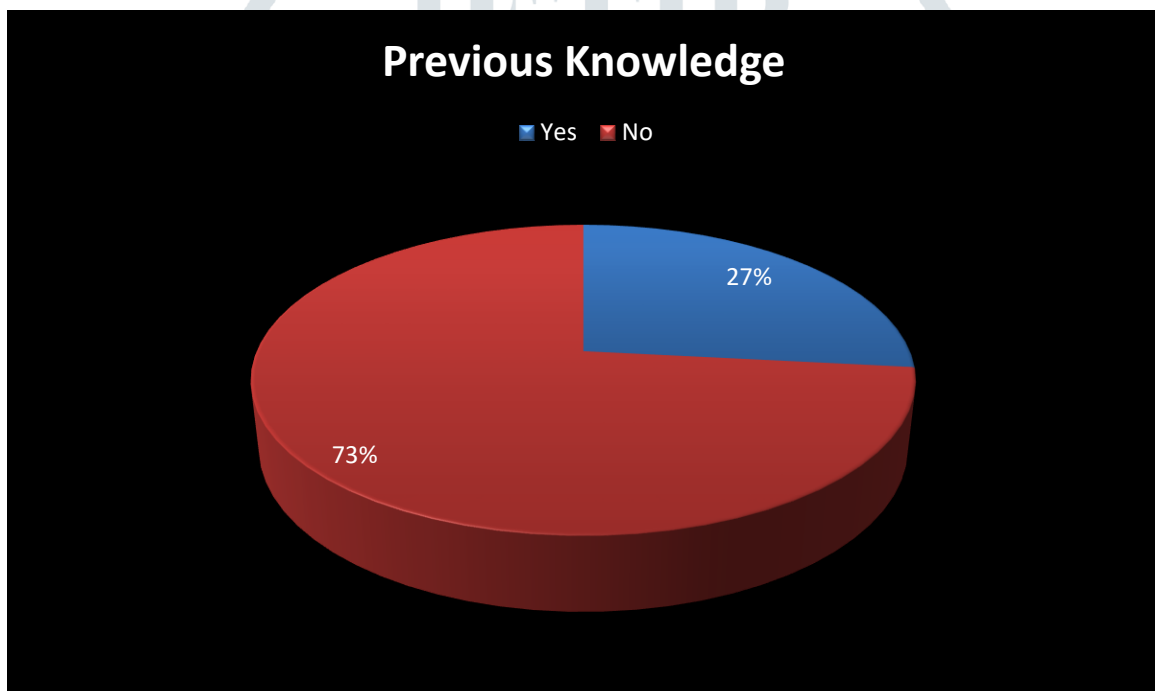


Figure 4: Pie Graph Showing The Previous Knowledge Of Samples Regarding Menstrual Hygiene

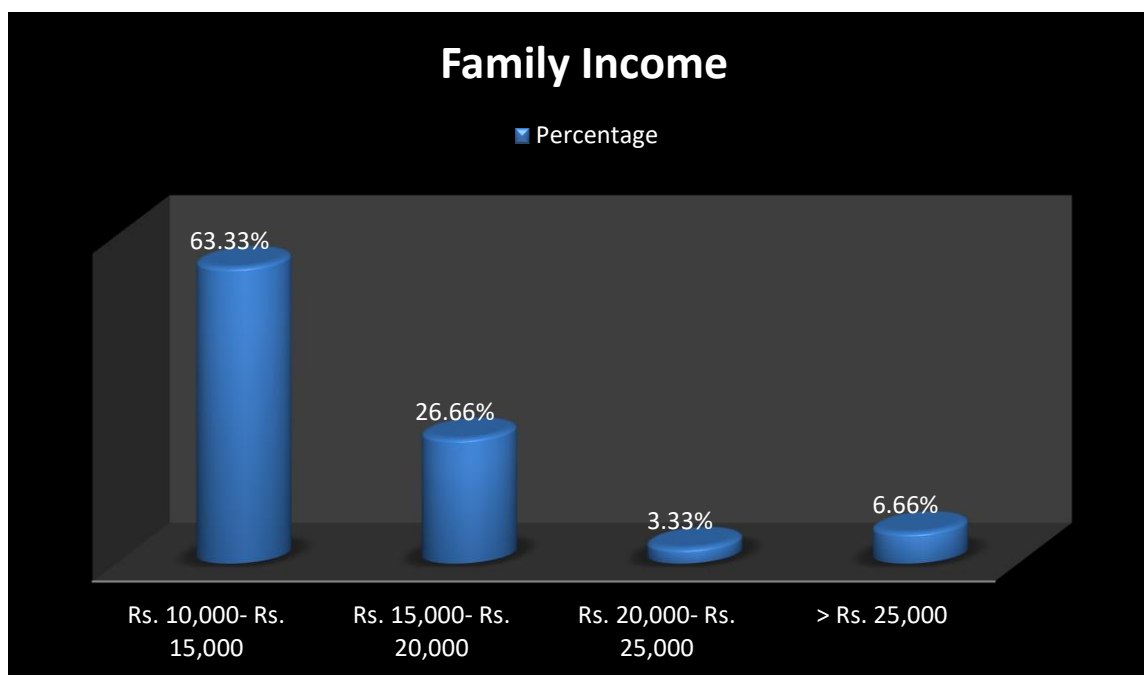


Figure 5: Bar Diagram Showing The Family Income Of The Samples

[SECTION – B]

Table 2 Area Wise Pre-Test Knowledge Score Regarding Menstrual Hygiene Among Newly Puberty Attained Girls.

AREA OF CONTENT	MAXIMUM SCORE	MEAN	MEAN %
INTRODUCTION	4	1.5	37.5%
MENSTRUATION	3	1.06	35.33%
MENSTRUAL CYCLE	4	1.36	34%
SIGN AND SYMPTOMS	2	0.76	38%
MENSTRUAL HYGIENE	17	6.26	36.82%

TABLE 2 shows that in pretest a student had more knowledge (37.5%) regarding introduction, they had (35.33%) of menstruation, (34%) regarding menstrual cycle, (38%) sign and symptoms, (36.82%) menstrual hygiene.

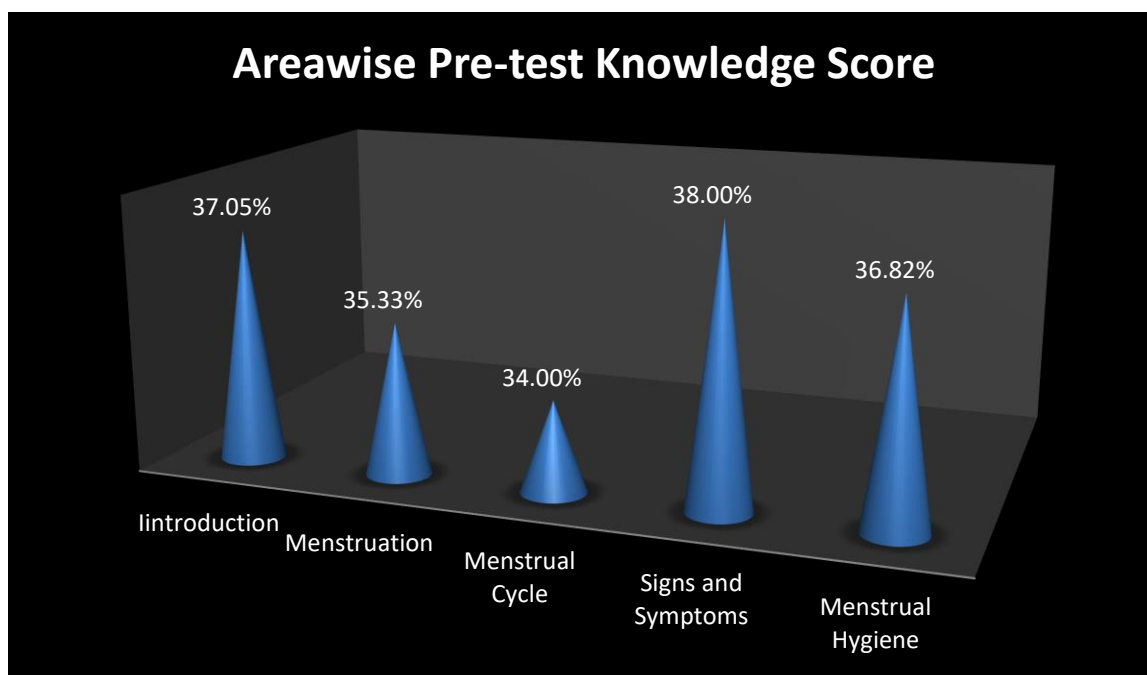


Figure 6: Pyramidal Diagram Showing Area Wise Pre-test Knowledge Scores Of Samples

Table 3: Area Wise Post-Test Knowledge Score Regarding Menstrual Hygiene Among Newly Puberty Attend Girls.

AREA OF CONTENT	MAXIMUM SCORE	MEAN	MEAN %
INTRODUCTION	4	2.96	74%
MENSTRUATION	3	2.06	68.66%
MENSTRUAL CYCLE	4	3.2	80%
SIGN AND SYMPTOMS	2	1.86	93%
MENSTRUAL HYGIENE	17	14.1333	83.13%

TABLE 3 shows that in posttest a student had more knowledge (83.13%) regarding Menstrual hygiene, they had (80%) regarding menstrual cycle, (74%) regarding introduction, (93%) sign and symptoms, (68.66%) menstruation.

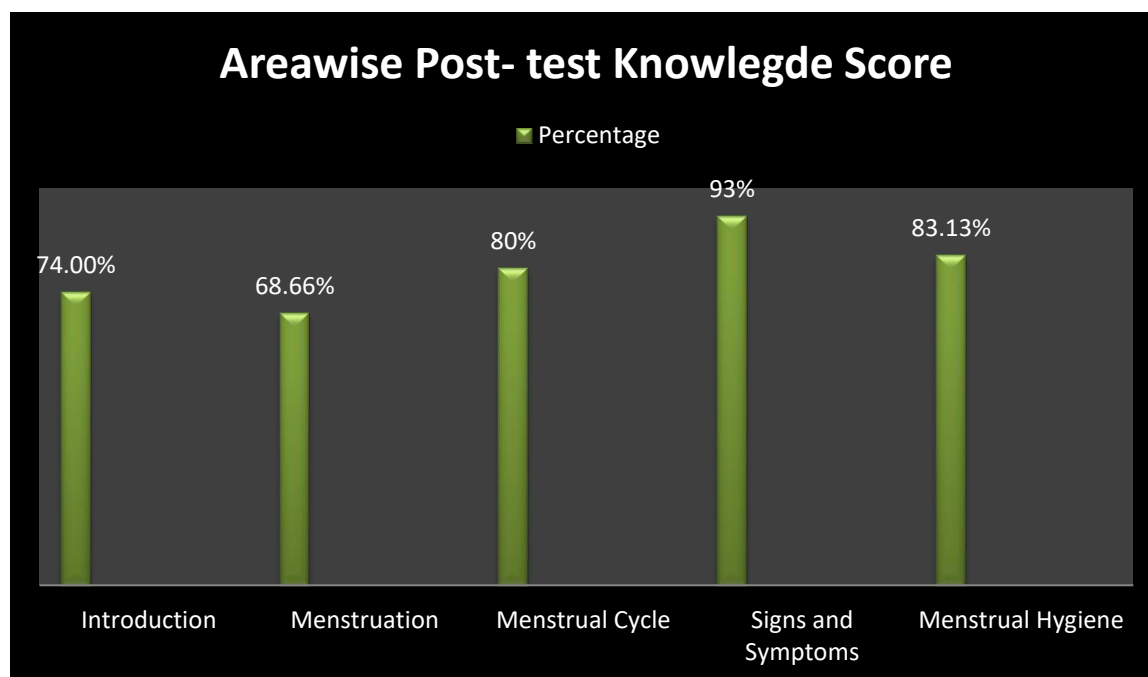


Figure 7: Bar Diagram Showing Area Wise Post Test Knowledge Score Of The Samples
[Section-C]

Table 4: Frequency Distribution Level Of Knowledge Among Newly Puberty Attained Girls In Pre And Post Test

LEVEL OF KNOWLEDGE	PRE TEST		POST TEST	
	FREQUENCY	%	FREQUENCY	%
EXCELLENT	0	0%	13	43.33%
VERY GOOD	2	6.66%	13	43.33%
GOOD	5	16.66%	3	10%
AVERAGE	8	26.66%	1	3.33%
POOR	9	30%	0	0%
VERY POOR	6	20%	0	0%

Table 4 shows the findings of the Pre-test and Post-test knowledge is to know the effectiveness of structured teaching program on Menstrual hygiene among newly puberty attained girls. It is inferred that, in the pre-test, 20% have demonstrated very poor knowledge, 30% have poor knowledge and 26.66% students have average knowledge regarding menstrual hygiene. In the post test, 3.33% have average knowledge, 10% were good and 43.33% were very good knowledge, 43.33% were excellent knowledge regarding their knowledge in menstrual hygiene.

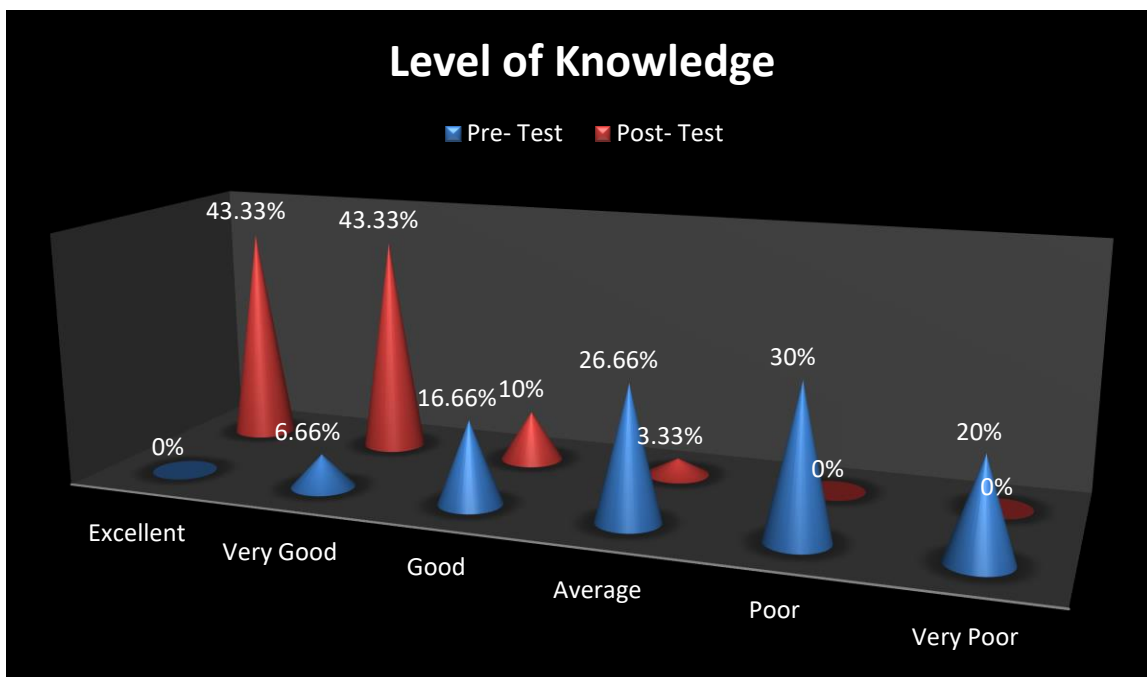


Figure 8: Pyramidal Diagram Showing Level Of Knowledge Of Samples

[Section-D]

Table 5: Comparison Of Pre-Test And Post- Test knowledge Regarding Menstrual Hygiene Among Newly Puberty Attained Girls (Area Wise):

AREA OF CONTENT	OBSERVATION	MEAN	MEAN%	EFFECT
INTRODUCTION	PRE TEST	1.5	37.5%	1.46
	POST TEST	2.96	74%	
MENSTRUATION	PRE TEST	1.06	35.33%	1
	POST TEST	2.06	68.66%	
MENSTRUAL CYCLE	PRE TEST	1.36	34%	1.84
	POST TEST	3.2	80%	
SIGN AND SYMPTOMS	PRE TEST	0.76	38%	1.1
	POST TEST	1.86	93%	
MENSTRUAL HYGIENE	PRE TEST	6.26	36.82%	7.87
	POST TEST	14.13	83.13%	

Table 5 shows the knowledge on introduction of menstrual hygiene among newly puberty attained girls in pre test, the mean score was 1.5 and in the post test, the mean score was 2.96. The knowledge regarding menstruation among newly puberty attained girls in pre test, the mean was 1.06 and in the post test the mean score was 2.06. The knowledge on menstrual cycle among newly puberty attained girls in pre test, the mean score was 1.36, and in the post test, the mean score was 3.2. The knowledge on sign and symptoms among newly puberty attained girls in pre test, the mean score was 0.76, and in the post test, the mean score was 1.86.

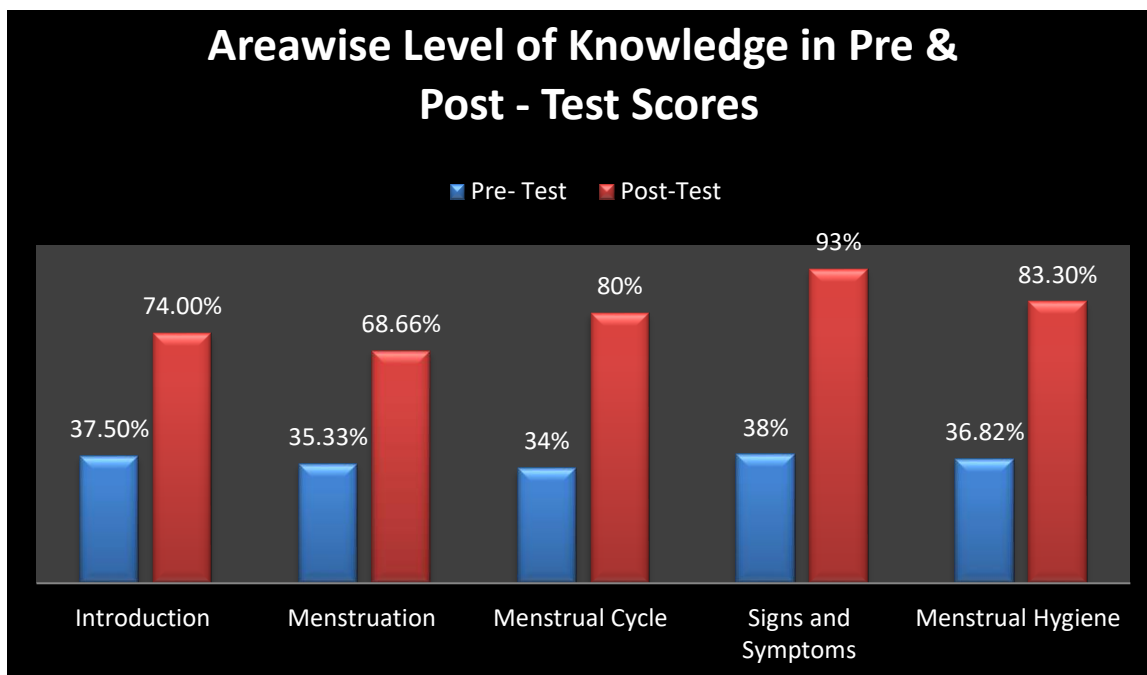


Figure 9: Bar Diagram Showing Area Wise Comparison Of Pretest And Posttest LevelOf Knowledge Regarding Menstrual Hygiene Among Newly Puberty Attained Girls [Section-E]

Table 6: Comparison Of Mean Scores Between PreTest And Post Test Of Knowledge Regarding Menstrual Hygiene (Overall).

AREA OF CONTENT	OBSERVATION	MEAN	MEAN%	EFFECT	SD	't' VALUE
Overall knowledge scores	PRE- TEST	10.7	35.66%	13.6	5.718391	4.66566
	POST - TEST	24.3	81%		3.74304	

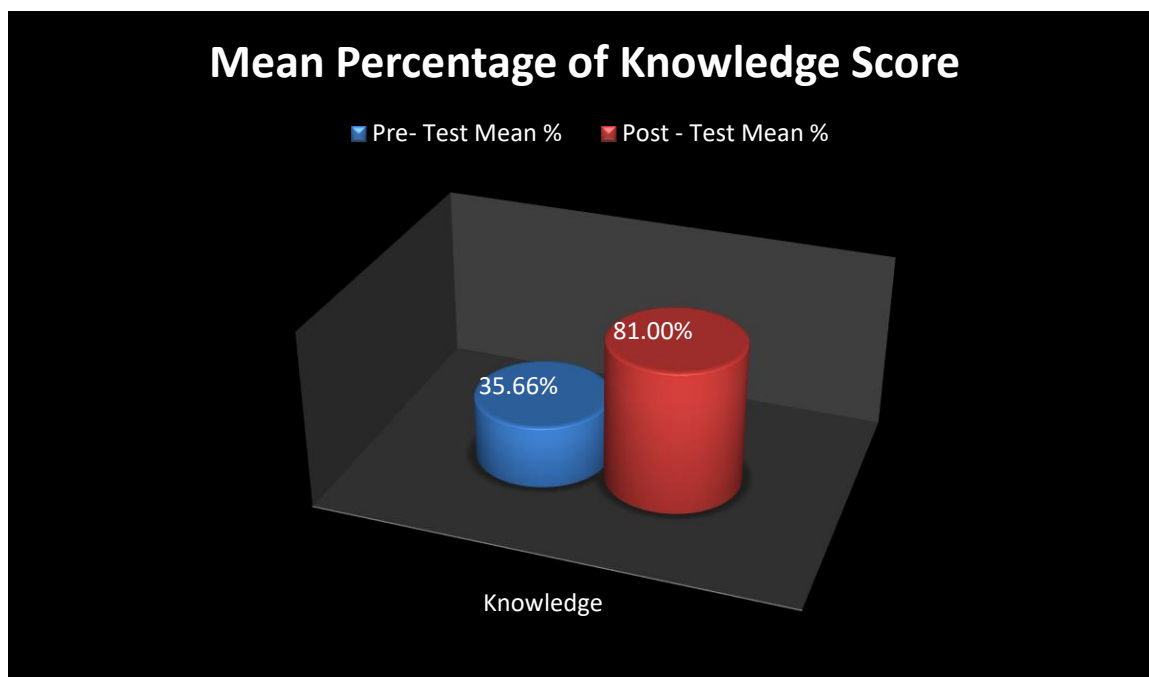


Figure 10: Bar Diagram Showing The Comparison Of Overall Mean Score Between Pre-Test And Post-Test Level Of Knowledge Regarding Menstrual Hygiene Among Newly Puberty Attained Girls.

[Section- F]

Table 7 Analysis And Interpretation Of The Data Related To The Association Of Pre –Test Knowledge Score With Selected Demographic Variables.

DEMOGRAPHIC VARIABLES		PRE -TEST					TOTAL	FISHERS CHI SQUARE	DF	T VALUE	SIG/ NON-SIG
		VERY POOR	AVERAGE	GOOD	VERY GOOD						
Age	11	0	1	0	0	0	1	5.137	12	0.953	S
	12	2	3	1	0	1	7				
	13	1	5	5	2	0	13				
	14	2	1	2	3	1	9				
Religion	Hindu	5	10	8	5	2	30	0	12	0	NS
	Muslim	0	0	0	0	0	00				
	Christian	0	0	0	0	0	00				
	Others	0	0	0	0	0	30				
Standard	5th	0	1	0	0	0	1	5.137	12	0.953	S
	6th	2	3	1	0	1	7				
	7th	1	5	5	2	0	13				
	8th	2	1	2	3	1	9				
Previous Knowledge	Yes	CAN'T BE COMPUTED									
	No	CAN'T BE COMPUTED									
Family	10000-15000	3	4	5	2	19	1.682	12	0.999	S	
	15000-20000	1	4	3	0	8					

Income (In Rs.)	20000- 25000	1	0	0	0	0	1			
	>25000	1	1	0	0	0	2			

Table 7 shows age group with the pre-test knowledge scores, the calculated value of chi-square 5.137 was more than 0.953, the table value of chi-square at the 12 degree of freedom and 0.05 level of significance. Therefore, age was significant for the knowledge of samples. Religion of samples with pre-test scores, the calculated value of chi-square was 0, the table value was 0 at the 12 degree of freedom and 0.05 level of significance. Therefore, religion was non-significant for the knowledge of samples. Standard of samples with the pre-test knowledge scores, the calculated value of chi-square 5.137 was more than 0.953, the table value of chi-square at the 12 degree of freedom and 0.05 level of significance. Therefore, standard of samples was significant for the knowledge of samples. Family income of samples with the pre-test knowledge scores, the calculated value of chi-square 1.682 was more than 0.999, the table value of chi-square at the 12 degree of freedom and 0.05 level of significance. Therefore, family income of samples was significant for the knowledge of samples.

DISCUSSIONS

The present study was conducted to assess effectiveness of structured teaching program regarding knowledge on menstrual hygiene among the newly puberty attained girls at selected community area in Ahmedabad city, Gujarat. Based on the objectives, an extensive search for literature was made to determine and develop the conceptual framework and research methodology to conduct the study the conceptual framework use in the study is based on JW Kenny's open system model. Research approach selected for the study was Quantitative Research with Quasi Experimental One Group Pre-test Post- test research design. The main study was conducted at New Gota Urban Health Center, Ahmedabad city, investigator adopted convenient sampling techniques, and 30 samples were selected. The prepared tool under guidance of experts in the field was administered after the oral concern taken from the samples selected as pre- test questionnaire and then the structured teaching program was given to the samples who gave pre-test and after seven days post test was conducted with the same questionnaire. Thus the researcher collected the needed data for the study from 8th October 2021 till 30th October 2021.

The data were analyzed and interpreted in terms of objectives and hypotheses of the study. Descriptive and Inferential Statistics methods were used for data analysis the major findings of study under the following sections.

Section 1:- Distribution of sample according to demographic variable regarding knowledge on menstrual hygiene among the newly puberty attained girls at selected community areas in Ahmedabad city, Gujarat.

Section 2:- To Assess the effectiveness of structured teaching program regarding knowledge on menstrual hygiene among the newly puberty attained girls at selected community areas in Ahmedabad city, Gujarat.

According to the data collected, the results were interpreted as below: In the pre-test newly puberty attained girls had more knowledge (37.5%) regarding introduction, they had (35.33%) of menstruation, (34%) regarding menstrual cycle, (38%) sign and symptoms, (36.82%) menstrual hygiene and in post- test newly puberty attained girls had more knowledge (83.13%) regarding Menstrual hygiene, they had (80%) regarding menstrual cycle, (74%) regarding introduction, (93%) sign and symptoms, and (68.66%) menstruation.

And also the findings show the knowledge score and their relationships with the selected demographic variables are given below. In the age group with the pre-test knowledge scores, the calculated value of chi-square 5.137 was more than 0.953, the table value of chi-square at the 12 degree of freedom and 0.05 level of significance. Therefore, age was significant for the knowledge of samples. Religion of samples with pre-test scores, the calculated value of chi-square was 0; the table value was 0 at the 12 degree of freedom and 0.05 level of significance. Therefore, religion was non-significant for the knowledge of samples. Standard of samples with the pre-test knowledge scores; the calculated value of chi-square 5.137 was more than 0.953, the table value of chi-square at the 12 degree of freedom and 0.05 level of significance. Therefore, standard of samples was significant for the knowledge of samples. Family income of samples with the pre-test knowledge scores, the calculated value of chi-square 1.682 was more than 0.999, the table value of chi-square at the 12 degree of freedom and 0.05 level of significance. Therefore, family income of samples was significant for the knowledge of samples.

Thus, the structured teaching program is found to be effective to increase the knowledge regarding menstrual hygiene among the newly puberty attained girls.

CONCLUSION

The following conclusion can be drawn from the present study findings. The mean post-test knowledge score was higher than the mean pre-test knowledge score. Hence it was proved that the structured teaching programme was effective in increasing knowledge regarding menstrual hygiene among newly puberty attained girls. There was a significant association between age and pre-test knowledge score.

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