



TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING ANEMIA AMONG ADOLESCENTS IN A SCHOOL OF PATNA”

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ABSTRACT

Introduction: The physical and physiological changes that occur in adolescents, place a great demand on their nutritional requirements and make them more vulnerable to anemia. Anemia in the adolescence causes reduced physical and mental capacity and diminished concentration in work and educational performance, and also possess a major threat to future safe motherhood in girls. **Aim:** The study aims to assess the level of knowledge regarding anemia among adolescents. Explore the effects of Structured Teaching Program on knowledge regarding anemia among adolescents. To determine the factors which are affecting the knowledge of adolescents regarding anemia. **Methods and Material** Quantitative evaluative research approach and pre experimental design was used to assess the existing knowledge of adolescents regarding anemia. Pre-test was taken by using a structured knowledge questionnaire. Video Assisted Teaching Program was administered and post – test was conducted with the same structured knowledge questionnaire. The collected data was analysed by using descriptive and inferential statistics. **Results:** Description of knowledge scores before and after the administration of Structured Teaching Program is: Adolescents scored 78% as average, 18% poor and 4% good in pre test, and 64% average and 36% good in post test. Since $t_{cal} > t_{tab}$ at df 99 and $p < 0.001$, hence null hypothesis was rejected at 99% level of significance. These findings showed that structured teaching was effective in increasing the knowledge of the adolescents.

Association between the knowledge of adolescents with the selected demographic variables showed that since the calculated Chi-square(χ^2) value is greater than the table value; and p value was less than 1% ($p < 0.001$), hence, null hypothesis was rejected accepting the alternate hypothesis which established a significant association between the level of knowledge and the demographic variables.

Keyword: Assess, Knowledge, Effectiveness, Anemia, Structured teaching program, Adolescent

Introduction

Anemia is one of the most widespread nutritional deficiency disease and a major public health concern and affecting the entire world, of all the ages, both gender and is often ignored in both developed and developing countries.

Anemia is a condition in which the number of red blood cells (RBCs) or their oxygen-carrying capacity is insufficient to meet physiologic needs, which vary with age, sex, altitude, smoking, and pregnancy status.

Nutritional anemia is one of India's major public health problem, where more than 60% is prevalent in adolescent girls

During childhood, nutritional needs of boys slightly differ from that of girls. But the difference in the nutritional needs widens after the onset of puberty. Iron requirements peak during adolescence due to rapid growth and increase in blood volume.

This is a vulnerable period in the human life cycle for the development of nutritional anemia, which has been constantly neglected by public health programs. Girls are more likely to be a victim due to various reasons. In a family with limited resources, the female child is more likely to be neglected; she is deprived of good food and education. The added burden of menstrual blood loss, normal or abnormal, precipitates the crises too often.

During adolescence, teenagers will acquire the knowledge and skills that will help them to become independent and successful but iron deficiency and iron deficiency anemia can affect their learning, growth and development. Therefore adequate information can help the teenagers to stay healthy and prevent iron deficiency

Methods and Material:

Quantitative evaluative research approach and pre experimental design was used to assess the existing knowledge of adolescents regarding anemia. The sample size for the study was 100. Data collection tools included a self structured knowledge questionnaire. 13 experts determined the content validity of the tools. Reliability was determined by Cronbach's alpha test. Knowledge questionnaire validity was done using test-retest method.

The reliability scores obtained for the self structured questionnaire on 10 samples were 0.8 respectively.

Pilot study was conducted on 10 samples from 22/08/23-29/08/23. The actual study was done in November. The analysis of the obtained data was done on the objectives and the hypothesis formulated for the study. Both descriptive and inferential statistics were used. The level of significance set for testing the hypothesis was 0.05 (5%) and 95 confidence level. In this study, independent variable is the Structured Teaching Program (STP) regarding anemia. In this study, dependent variable is the knowledge of adolescents regarding anemia. The setting of the present study was at Kendriya Vidyalaya, Bailey Road, Patna. In this study, population is the adolescents studying in Kendriya Vidyalaya, Bailey Road, Patna. Sample in the present study is late adolescents aged 15-18 years old studying in Kendriya Vidyalaya, Bailey Road, Patna. In the present study sample size is 100. Probability simple random technique is adopted in this study.

Inclusion criterias:-

1. Late adolescents who are studying in a school.
2. Adolescents who are willing to participate after informed consent.
3. Age between 15 years to 18 years.
4. Study will be limited to those late adolescents who will be present at the time of data collection in the school.

Exclusion criterias:-

1. Early adolescents.
2. Adolescents who are on treatment of anemia.
3. Adolescents who are not present persistently at the time of data collection.

Data Collection

Formal permission was taken from the concerned authorities of Kendriya Vidyalaya, Bailey Road, Patna, for conducting the main study. Duration of the main study was from 13th November 2023 to 19th November 2023. On the 1st day, consent was taken and pretest administered in which existing

knowledge of the adolescents were assessed by self reporting questionnaire which consisted of 10 minutes. Structured Teaching Program was administered after pre test on the same day. On the 7th day, post test was administered using the same questionnaire to evaluate the effectiveness and the knowledge gained regarding anemia. The method of instruction was lecture cum discussion. A.V. aids like white board, chart paper, leaflets, pamphlets and roller board were used. The time taken for Structured Teaching Program was 40 minutes approximately.

Statistical analysis

The collected data was analysed by using both descriptive and inferential statistics. The data on sample characterized were described in the form of frequency and percentage. The data has been represented in the form of graphical representation whenever it was applicable. For this data was collected, validated, summarized, categorized and tabulated for the further statistical analysis.

Result

Presentation of data is organized in sections.

SECTION A

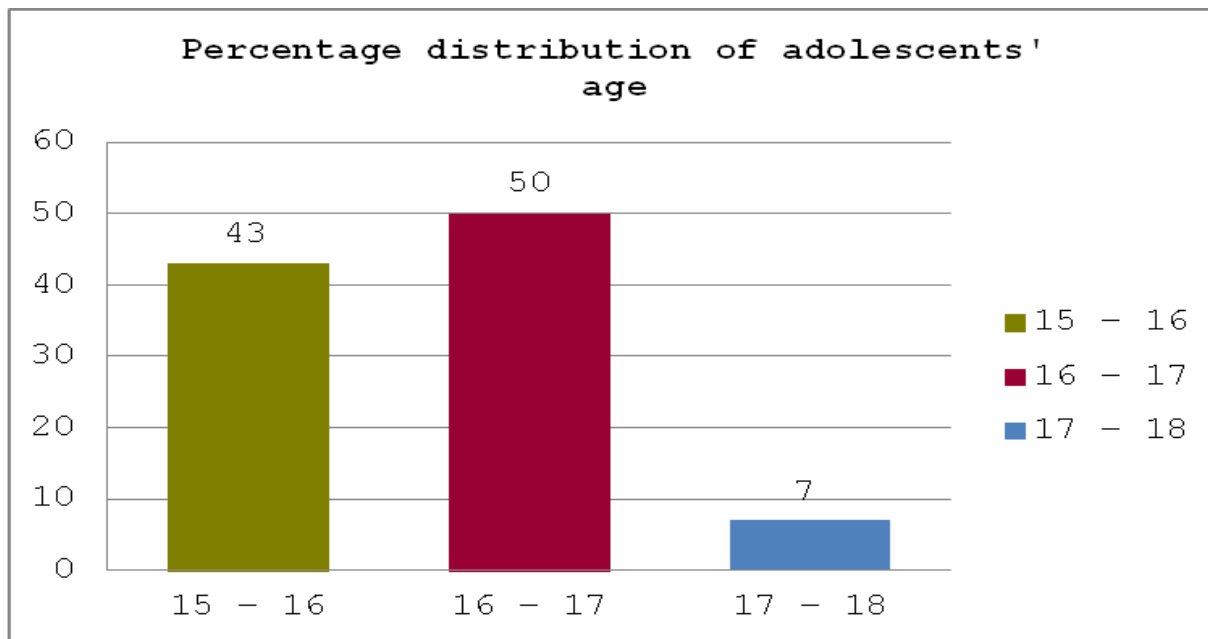
Frequencies and percentage of sample characteristics. The data collected obtained to describe the sample characteristics include age, gender, religion, type of family, place of living, previous information and source of information.

S.No.	Characteristics		Samples N = 100	
			Frequency	Percent
1	Age in years	15-16	43	43
		16-17	50	50
2	Sex	17-18	7	7
		Male	29	29
3	Religion	Female	71	71
		Hindu	90	90
		Muslim	8	8
		Christian	1	1

4	Dietary Pattern	Others	1	1
		Vegetarian	15	15
		Non-vegetarian	19	19
		Mixed Diet	60	60
5	Meal Pattern (per day)	Eggetarian	6	6
		Once a day	1	1
		Twice a day	13	13
		Thrice a day	60	60
6	Source of information about anemia	Small and frequent meals	26	26
		Family	14	14
		School	61	61
		Friends	3	3
7	Birth Order	Mass media	22	22
		Eldest	27	27
		Elder	15	15
		Middle	19	19
		Younger	16	16
		Youngest	23	23

8	Types of family	Joint family	35	35
		Nuclear family	61	61
		Extended family	4	4
9	Number of family Members	≤ 4	28	28
		4-6	50	50
		8-10	17	17

10	Family Income(₹)/ month	10	5	5
		5000/-	3	3
		5,000-15,000/-	6	6
		15,000-25,000/-	12	12
		25,000-35,000/-	26	26
11	Have you heard about Weekly Iron and Folic acid Supplementation (WIFS) Program	35,000/-	53	53
		Yes	16	16
		No	84	84



Frequency and percentage distribution of sex in adolescents

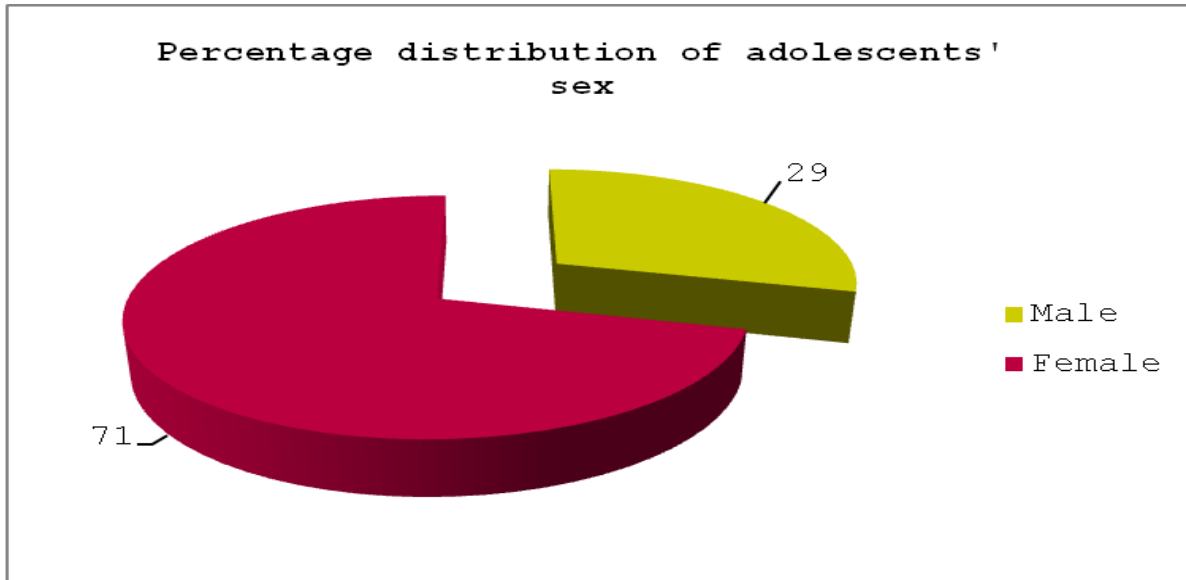


Fig.4: Pie diagram showing percentage distribution of sex of adolescents.

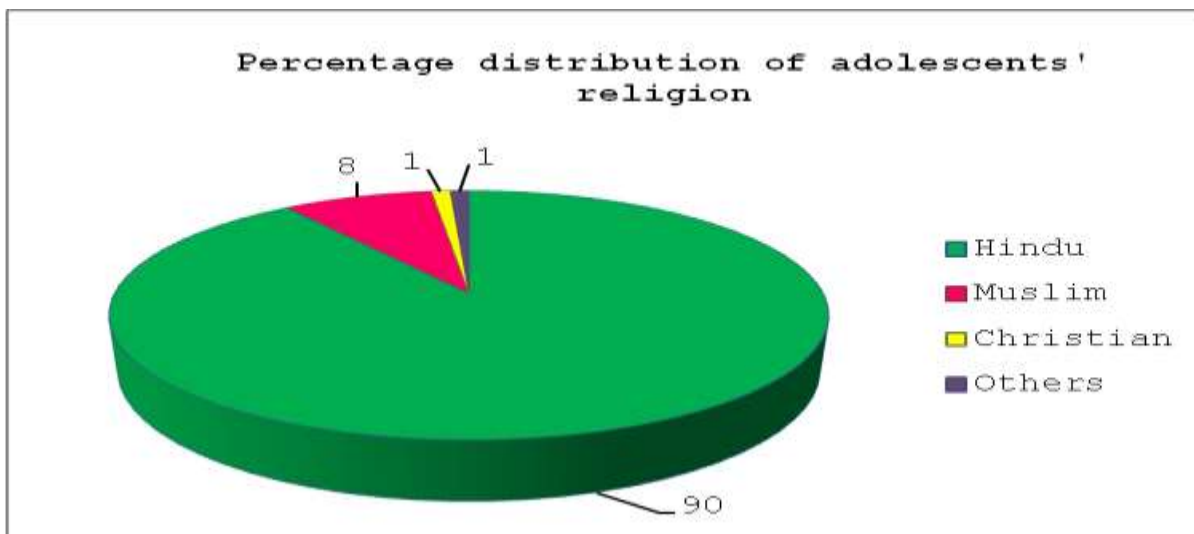


Fig.5: Pie diagram showing percentage distribution of religion of adolescents.

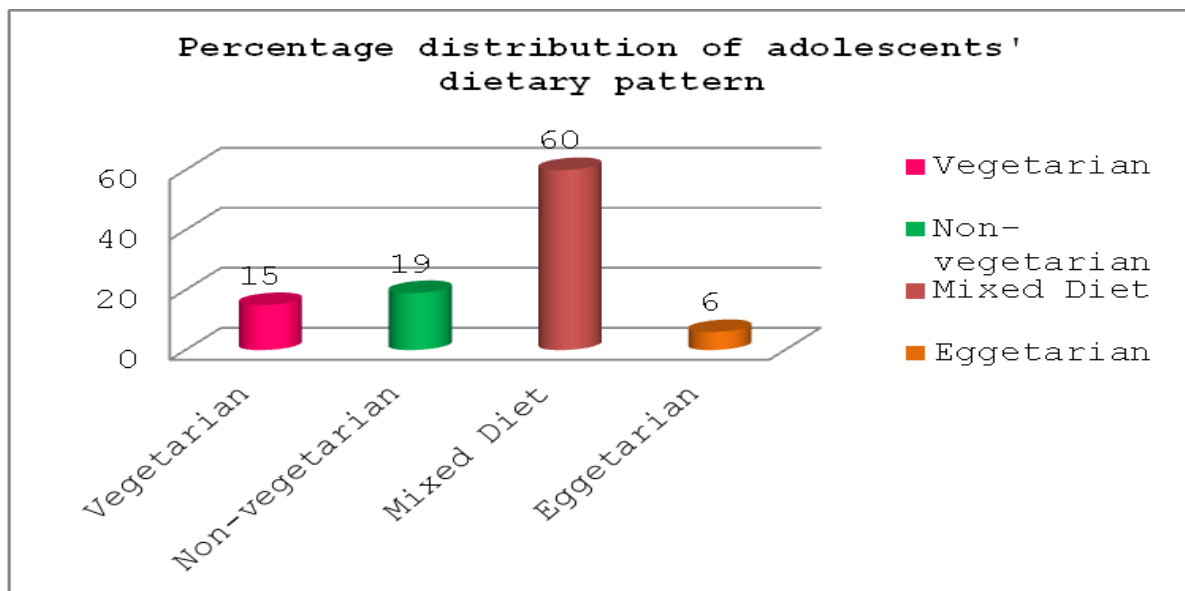


Fig.6: Cylinder diagram showing percentage distribution of dietary pattern of adolescents.

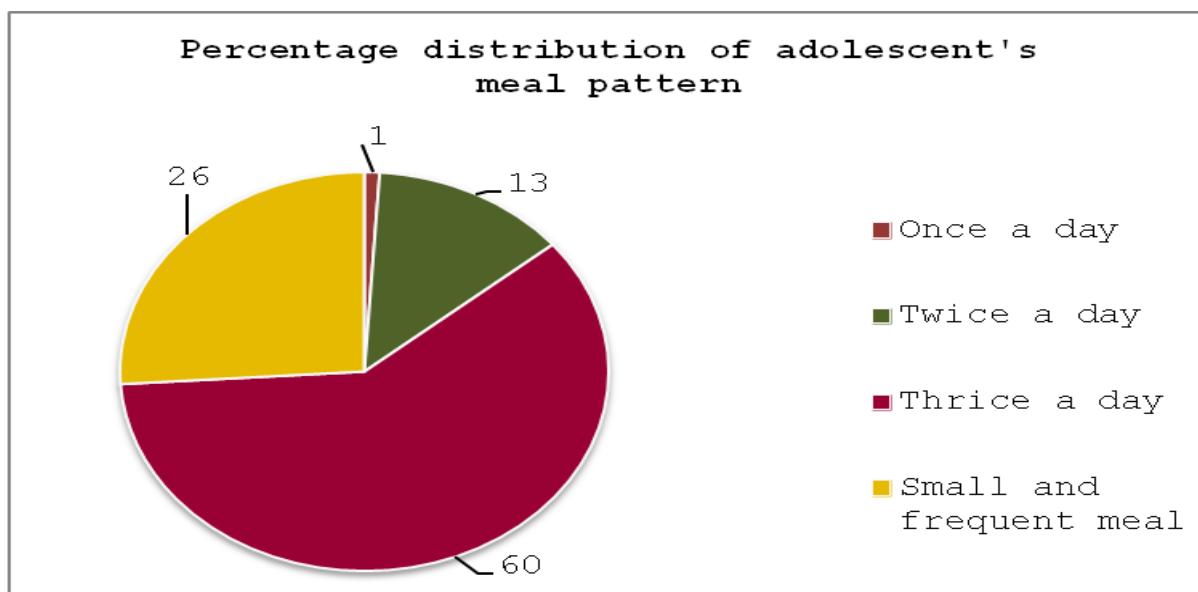


Fig.7: Pie diagram showing percentage distribution of meal pattern in adolescents.

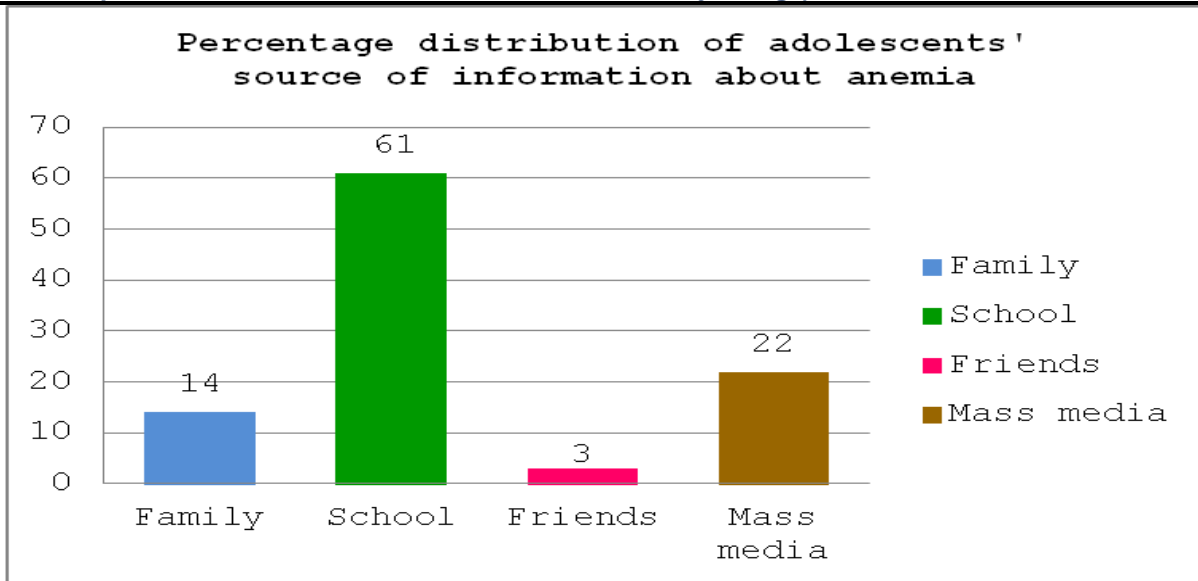


Fig.8: Bar diagram showing percentage distribution of source of information about anemia of adolescents.

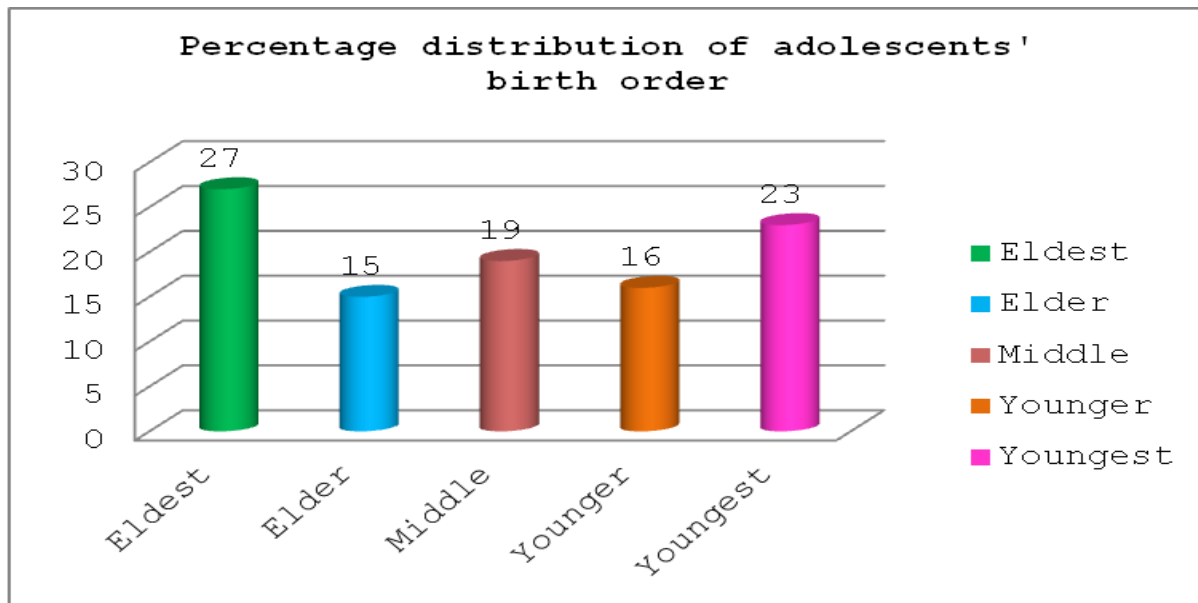


Fig.9: Cylinder diagram showing percentage distribution of birth order of adolescents.

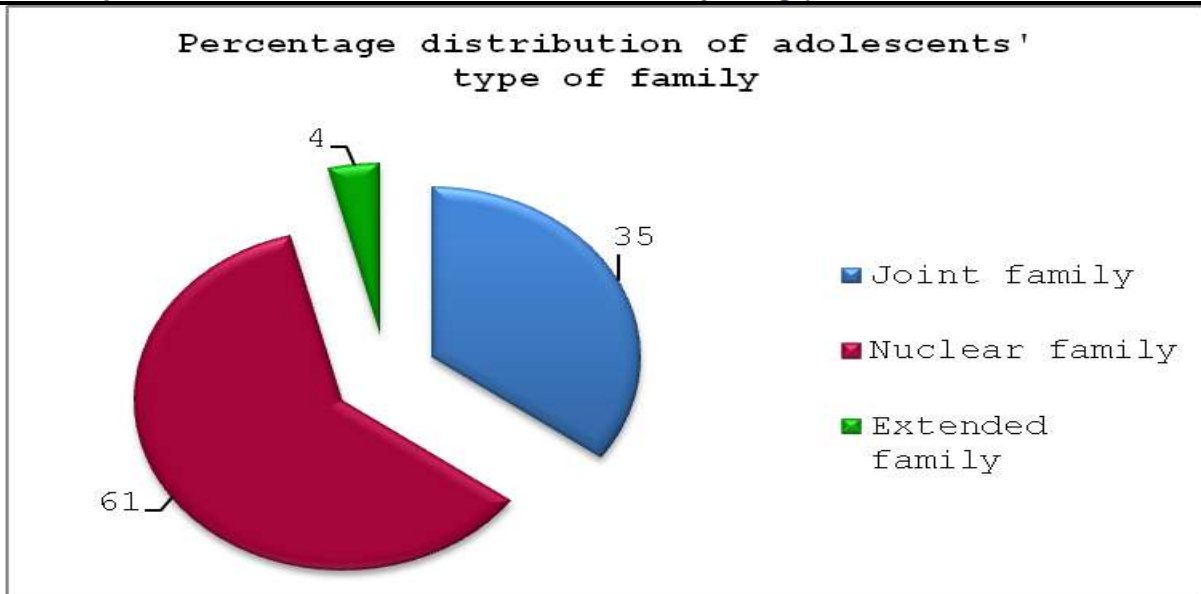


Fig.10: Pie diagram showing percentage distribution of type of family of adolescents.

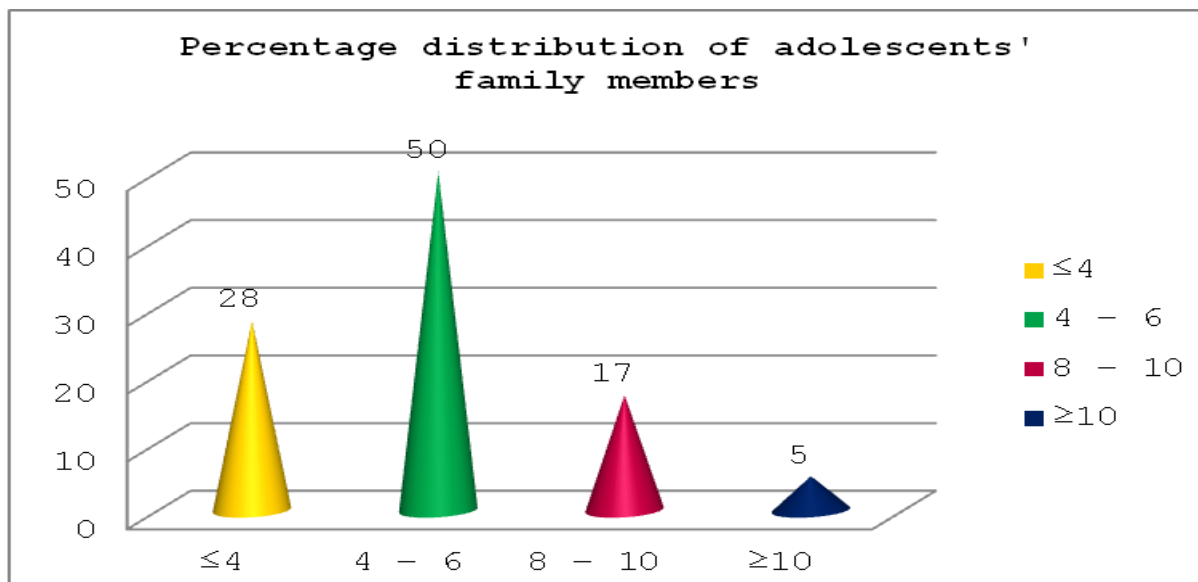


Fig.11: Cone diagram showing percentage distribution of number of family members of adolescents.

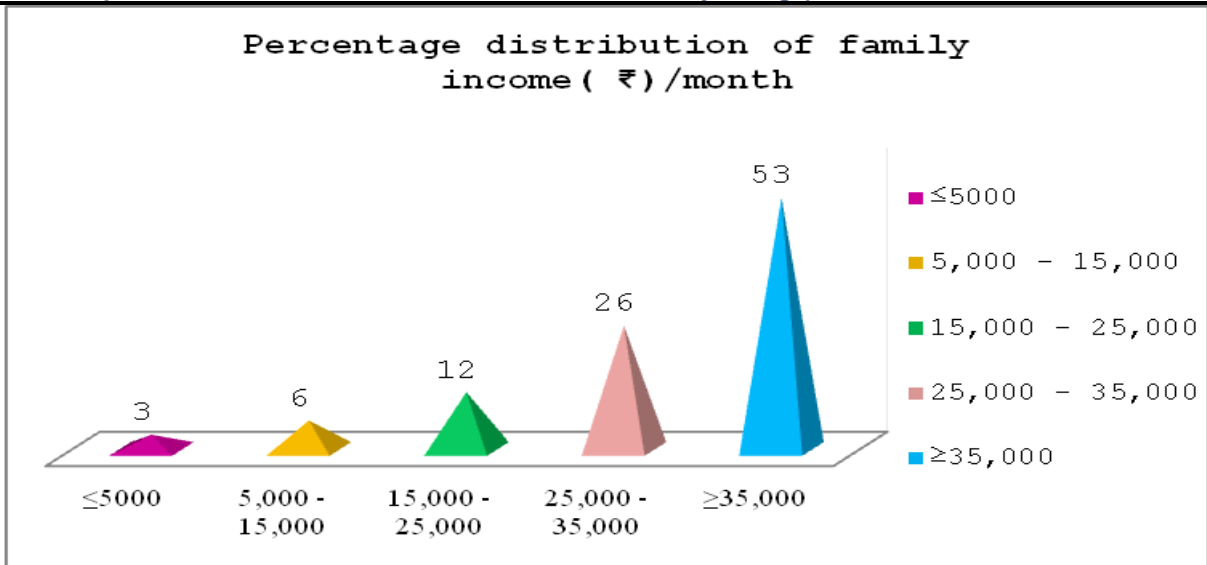


Fig.12: Pyramid diagram showing percentage distribution of family income in (₹)/ month.

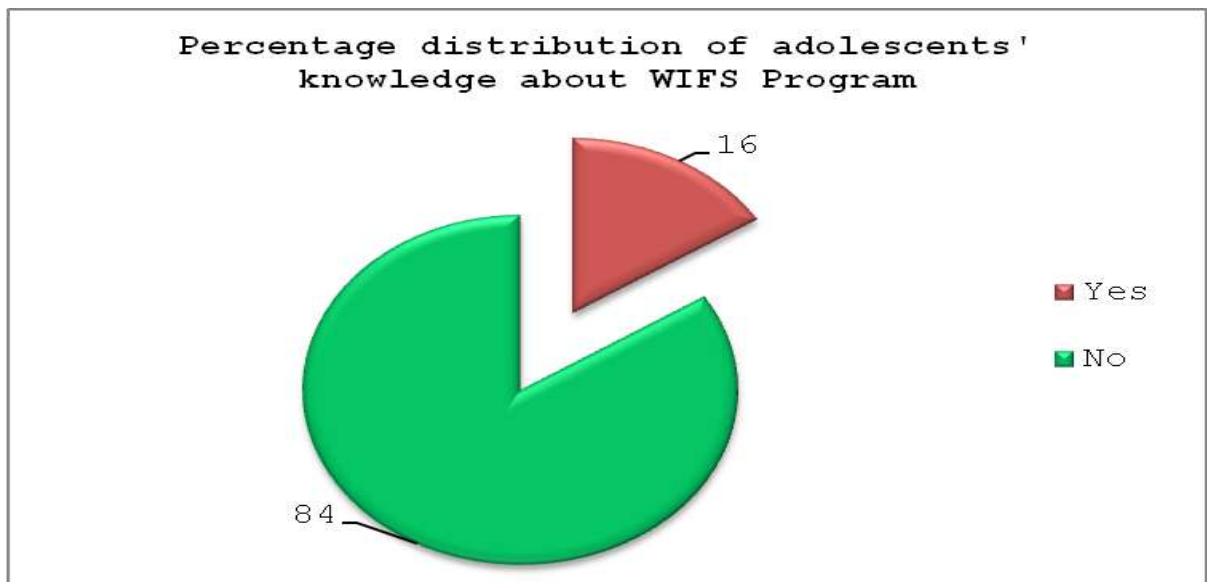


Fig.13: Pie diagram showing percentage distribution of knowledge about WIFS Program of adolescents.

SECTION-II

N=100

Variables	Pre Knowledge Level						Total
	Good		Average		Poor		
	N	%	N	%	N	%	
Age in years							
15-16	1	2	36	84	6	14	43
16-17	3	6	38	76	9	18	50
17-18	0	0	4	57	3	43	7
Sex							
Male	0	0	16	55	13	45	29
Female	4	6	62	87	5	7	71
Religion							
Hindu	2	2	70	78	18	20	90
Muslim	1	12	7	88	0	0	8
Christian	1	100	0	0	0	0	1
Others	0	0	1	100	0	0	1
Dietary pattern							
Vegetarian	1	7	11	73	3	20	15
Non-vegetarian	0	0	16	84	3	16	19
Mixed diet	3	5	46	77	11	18	60
Eggetarian	0	0	5	83	1	17	6
Meal pattern (per day)							
Once a day	0	0	1	100	0	0	1

Twice a day	0	0	11	85	2	15	13
Thrice a day	3	5	47	78	10	17	60
Small and frequent meals	1	4	19	73	6	23	26
Source of information about anemia							
Family	0	0	12	86	2	14	14
School	1	2	46	75	14	23	61
Friends	0	0	2	67	1	33	3
Mass media	3	14	18	82	1	4	22
Birth order							
Eldest	2	7	21	78	4	15	27
Elder	0	0	15	100	0	0	15
Middle	1	5	11	58	7	37	19
Younger	0	0	12	75	4	25	16
Youngest	1	4	19	83	3	13	23
Type of family							
Joint family	2	6	25	71	8	23	35
Nuclear family	2	3	50	82	9	15	61
Extended family	0	0	3	75	1	25	4
Number of family members							
4	1	4	22	78	5	18	28
4-6	1	2	42	84	7	14	50

8-10	2	12	10	59	5	29	17
10	0	0	4	80	1	20	5
Family income(₹)/ month							
5,000/-	0	0	0	0	3	100	3
5,000-15,000/-	0	0	3	50	3	50	6
15,000-25,000/-	1	8	8	67	3	25	12
25,000-35,000/-	1	3	20	78	5	19	26
35,000/-	2	4	47	89	4	7	53
Knowledge about WIFS Program							
Yes	0	0	12	75	4	25	16
No	4	5	66	78	14	17	84
Total	4	4	78	78	18	18	100

The above table illustrated the adolescents' level of knowledge as per the demographic characteristics depicting the following:

N=100

Variables	Post Knowledge Level						Total
	Good		Average		Poor		
	N	%	N	%	N	%	
Age in years							
15-16	17	40	26	60	0	0	43
16-17	18	36	32	64	0	0	50
17-18	1	14	6	86	0	0	7
Sex							
Male	9	31	20	69	0	0	29
Female	27	38	44	62	0	0	71
Religion							
Hindu	31	35	59	65	0	0	90
Muslim	4	50	4	50	0	0	8
Christian	1	100	0	0	0	0	1
Others	0	0	1	100	0	0	1
Dietary pattern							
Vegetarian	6	40	9	60	0	0	15
Non-vegetarian	8	42	11	58	0	0	19
Mixed diet	19	32	41	68	0	0	60
Eggetarian	3	50	3	50	0	0	6
Meal pattern (per day)							

Once a day	0	0	1	100	0	0	1
Twice a day	4	31	9	69	0	0	13
Thrice a day	19	32	41	68	0	0	60
Small and frequent meals	13	50	13	50	0	0	26
Source of information about anemia							
Family	4	29	10	71	0	0	14
School	19	31	42	69	0	0	61
Friends	2	67	1	33	0	0	3
Mass media	11	50	11	50	0	0	22
Birth order							
Eldest	14	52	13	48	0	0	27
Elder	5	33	10	67	0	0	15
Middle	5	26	14	74	0	0	19
Younger	4	25	12	75	0	0	16
Youngest	8	35	15	65	0	0	23
Type of family							
Joint family	9	26	26	74	0	0	35
Nuclear family	25	41	36	59	0	0	61
Extended family	2	50	2	50	0	0	4
Number of family members							
4	12	43	16	57	0	0	28
4-6	15	30	35	70	0	0	50

8-10	6	35	11	65	0	0	17
10	3	60	2	40	0	0	5
Family income(₹)/ month							
5,000/-	1	33	2	67	0	0	3
5,000-15,000/-	1	17	5	83	0	0	6
15,000-25,000/-	5	42	7	58	0	0	12
25,000-35,000/-	7	27	19	73	0	0	26
35,000/-	22	42	31	58	0	0	53
Knowledge about WIFS Program							
Yes	35	36	61	64	0	0	96
No	1	25	3	75	0	0	04
Total	36	36	64	64	0	0	100

The above table illustrated the adolescents' level of knowledge as per the demographic characteristics depicting the following:

Section III

Figure 16: Knowledge of adolescents regarding anemia before the administration of STP

N=100

Knowledge Score	Frequency	Percent
Poor (0-8)	18	18
Average (9-17)	78	78
Good (≥ 18)	4	4
Total	100	100

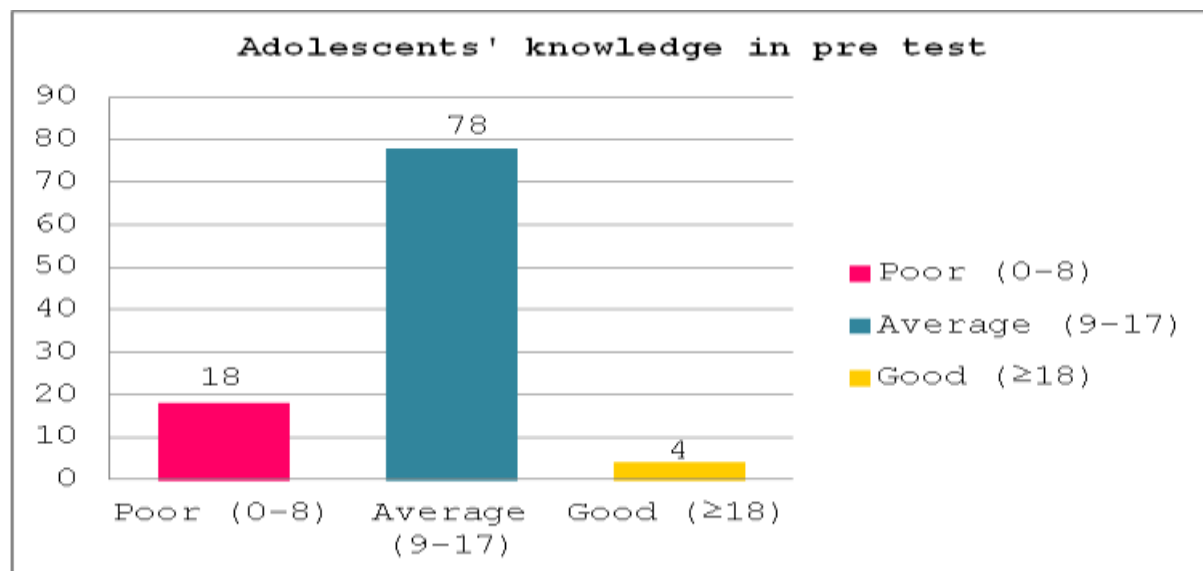


Fig.14: Bar diagram showing percentage distribution of adolescents' regarding anemia before the administration of STP.

The above table showed that maximum 78% adolescents' average score was between 9-17, followed by 18% adolescents scoring between 0-8 i.e. poor, and minimum 4% adolescents scoring ≥ 18 which is good.

SECTION IV

LE 17: Knowledge of adolescents regarding anemia after the administration of STP.

N=100

Knowledge Score	Frequency	Percent
Poor (0-8)	0	0
Average (9-17)	64	64
Good (≥ 18)	36	36
Total	100	100

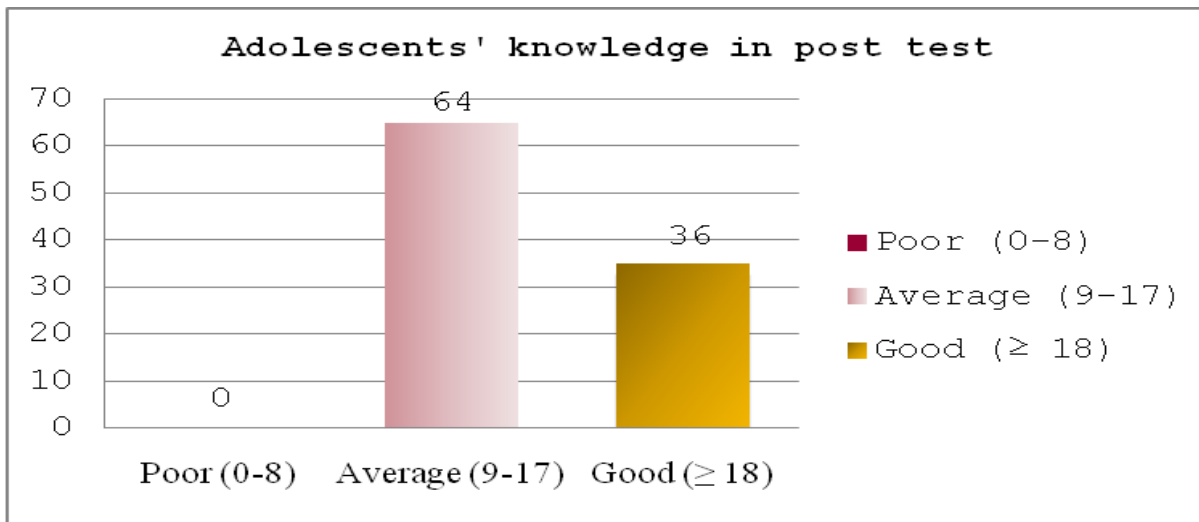


Fig.15: Bar diagram showing percentage distribution of adolescents' knowledge regarding anemia after the administration of STP.

The above table depicts that maximum 64% adolescents scored average between 9-17, followed by 36% adolescents scoring ≥ 18 i.e. good and not a single student scored between 0-8 i.e. poor.

SECTION V

18: Distribution of samples regarding the knowledge related to the characteristics of anemia.

N=100

S. No.	Content	Frequency	Percent
1.	Knowledge on general information about the anemia:		
	Anemia is defined as-	98	98
	Normal hemoglobin level of adolescent females-	71	71
	Normal hemoglobin level of adolescent males-	74	74
	Knowledge regarding causes and types of anemia:		
	Age group more prone to anemia-	78	78
	Anemia arises due to deficiency of-	74	74
2.	Main cause for anemia is-	88	88
	Cause for iron deficiency anemia is-	71	71
	Cause for decrease iron absorption is-	36	36
	Anemia affects the body in the form of-	62	62
	Knowledge regarding clinical features and diagnosis of anemia:		
	Common symptoms of anemia is-	67	67
	Common signs of anemia is-	55	55

3.	Common test to detect anemia is-	74	74
4.	<p>Knowledge regarding treatment of anemia:</p> <p>Suitable intervention to detect anemia is-</p> <p>Oral iron supplementation should be taken-</p> <p>According to ICMR, the daily requirement of iron intake in adolescent girls-</p> <p>According to ICMR, the daily requirement of iron intake in adolescent boys-</p>	<p>80</p> <p>50</p> <p>50</p> <p>33</p>	<p>80</p> <p>50</p> <p>50</p> <p>33</p>
5.	<p>Knowledge regarding prevention of anemia:</p> <p>Food that enhances iron absorption-</p> <p>The dietary source of iron are-</p> <p>The preventive measures of anemia are-</p> <p>Main complication of anemia is-</p> <p>A person having family history of anemia should-</p> <p>Adverse effect of prolonged anemia-</p> <p>Availability of IFA supplement, free of cost is from the</p>	<p>70</p> <p>90</p> <p>60</p> <p>49</p> <p>66</p> <p>45</p>	<p>70</p> <p>90</p> <p>60</p> <p>49</p> <p>66</p> <p>45</p>

	following except-	62	62
	Side effects of IFA supplement-	33	33
	The best action available during the side effects while taking IFA supplement is-	62	62
	Cooking palak and paneer together-	56	56

Related to knowledge regarding prevention of anemia, 70% adolescents had knowledge about food that enhances iron absorption, majority 90% of adolescents knew the dietary sources of iron, 60% adolescents had knowledge about the preventive measures of anemia, 49% adolescents knew the main complication of anemia, 66% adolescents knew about what should be done with a family history of anemia, 45% adolescents knew the adverse effect of prolonged anemia, 62% adolescents knew the places from where IFA supplement is distributed free of cost, 33% adolescents had knowledge about the side effects of IFA supplement, 62% adolescents knew the best action available during the side effects while taking IFA supplement, and 56% adolescents had knowledge about the consequences of cooking palak and paneer together.

SECTION VI

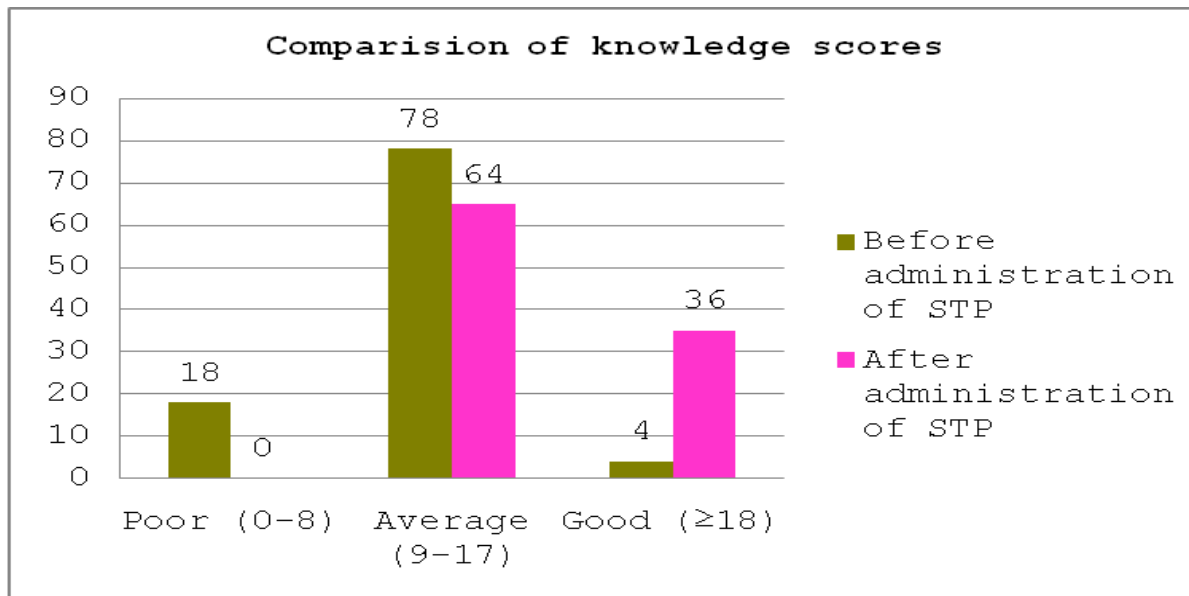
Figure 19: Knowledge of adolescents regarding anemia before and after the administration of STP

N=100

Knowledge Score	Before administration of STP		After administration of STP	
	Frequency	Percent	Frequency	Percent
Poor (0-8)	18	18	0	0
Average (9-17)	78	78	64	64

Good	4	4	36	36
(≥ 18)				
Total	100	100	100	100

The above table depicted that maximum 78% adolescents scored average between 9-17 in the pre test before the administration of STP in comparison to 64% scoring average between 9-17 in the post test after administration of STP.



16: Bar diagram showing percentage distribution of adolescents’ knowledge regarding anemia before and after the administration of STP.

The knowledge scores of adolescents showed a marked increase in the post test after the administration of Structured Teaching Program with the help of audio visual aids, in comparison to pre test i.e. before the administration of STP. Thus, it indicated that though the STP was effective in increasing the knowledge of the adolescents related to anemia yet there is an urgent need to reinforce the knowledge further of the adolescents to improve their knowledge level regarding anemia to gain mark increase in knowledge scores.

SECTION VII

Figure 20: Description of mean and S.D. of knowledge scores of adolescents regarding anemia (pre test).

N=100

Knowledge Score	Mean	Std. Deviation	Std. Error Mean
Poor (0-8)	5.83	1.21	0.29
Average (9-17)	12.17	1.98	0.22
Good (≥ 18)	18.5	0.50	0.25

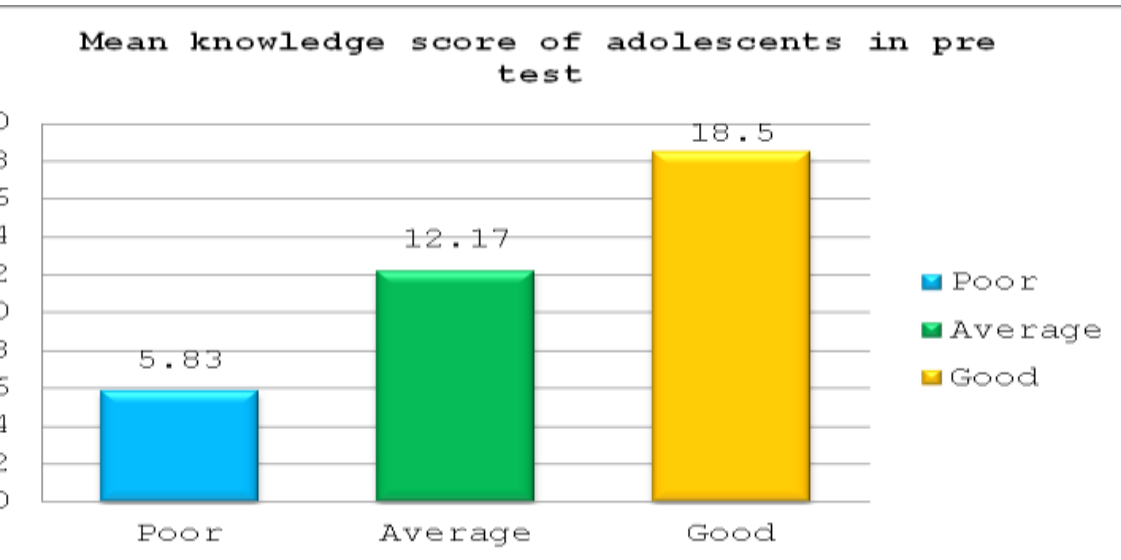


Figure 17: Bar diagram showing mean knowledge scores of adolescents regarding anemia in pre test.

The above table showed that there is a significant difference in the mean knowledge scores of adolescents regarding anemia. There is a significant difference in the good, average and poor mean knowledge scores of adolescents. The good knowledge mean scores of adolescents was 18.5 while the average mean knowledge scores of adolescents was 12.17 followed by the poor mean knowledge score was 5.83.

le 21: Description of mean and S.D. of knowledge scores of adolescents regarding anemia (post test).

N=100

Knowledge Score	Mean	Std. Deviation	Std. Error Mean
Poor (0-8)	0	0	0
Average (9-17)	14.80	2.05	0.26
Good (≥ 18)	19.64	1.32	0.22

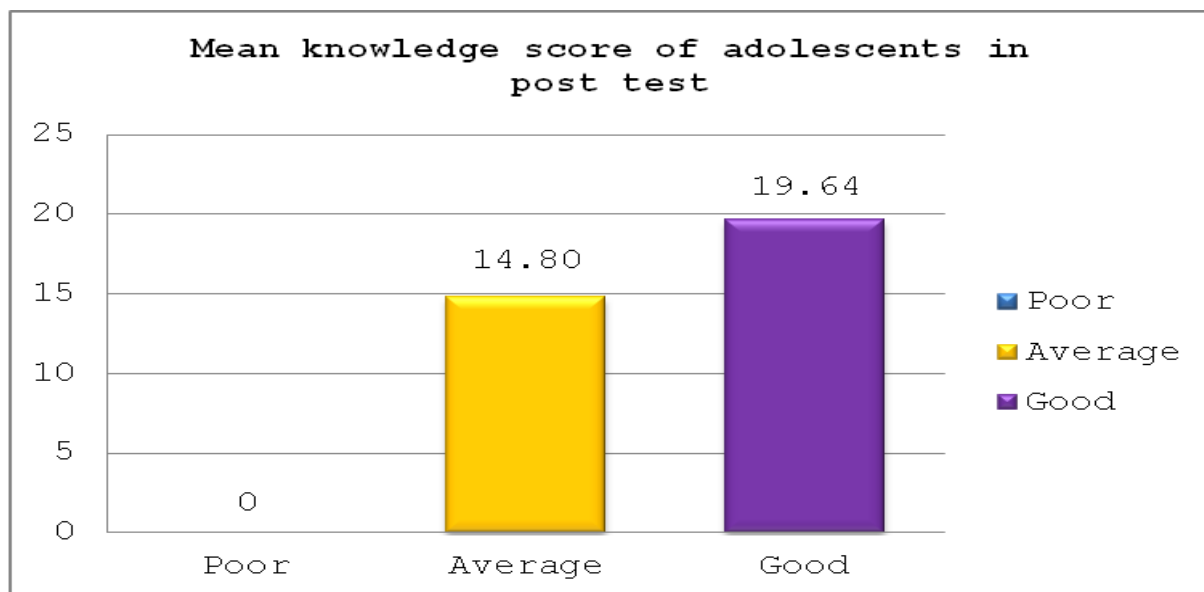


Fig.18: Bar diagram showing mean knowledge scores of adolescents regarding anemia in post test.

The above table showed that there is a significant difference in the mean knowledge scores of adolescents regarding anemia. There is a significant difference in the good, average and poor mean knowledge scores of adolescents. The good knowledge mean scores of adolescents was 19.64 while the average mean knowledge scores of adolescents was 14.80 followed by the poor mean knowledge score which was 'zero'.

TABLE 22: Description of mean, S.D. of pre test and post test.

(Paired samples statistics).

N=100

Knowledge Score	Mean	Std. Deviation	Std. Error Mean
Before Structured Teaching Program	11.28	3.39	0.34
After Structured Teaching Program	16.54	2.97	0.3

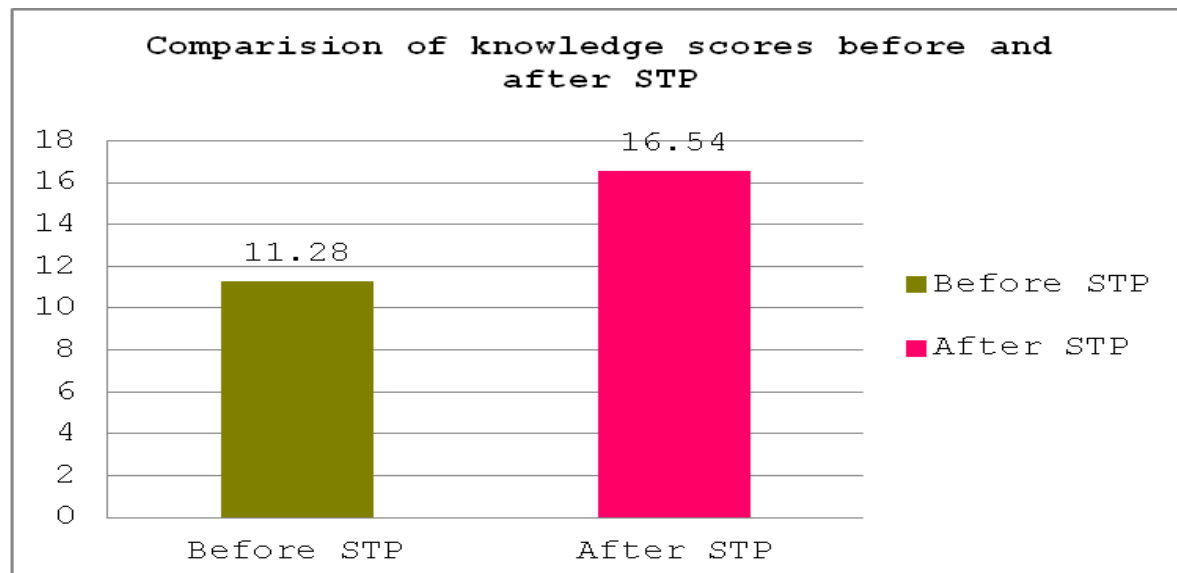


Fig.19: Bar diagram showing comparison of mean score in pre test and post test (knowledge scores of adolescents regarding anemia in post test) before and after the administration of STP.

The above table showed that there is a significant difference in the mean scores of knowledge of adolescents before and after the administration of Structure Teaching Program. The knowledge scores of adolescents related to anemia increased after the Structured Teaching Program. Hence, the test of significance showed that the difference was significant.

SECTION VIII

23: Statistical Difference between mean and S.D. of pre test and post test (Paired sample t-test).

Paired sample test

N=100

Knowledge scores	Paired difference		t-test	df	p-value	Significance
	mean	SD				
Before and after STP	5.26	3.234	16.26	99	<0.001	HS*

*HS= Highly significant

The above table elicits that the knowledge scores of adolescents before and after the administration of STP to 100 adolescents with a mean difference of 5.26, standard deviation of 3.234, computed "t" statistics equals 16.26 which is highly significant. Since the p value is less than 0.01, the null hypothesis is rejected at the 99% confidence level.

SECTION IX

24: Association between the knowledge of adolescents regarding anemia with selected demographic variables (pre test).

N=100

Demographic variables	Chi-square value	df	p- value	Significance
Age in years	4.472	4	0.346	NS
Sex	20.694	2	0.000	HS*
Religion	15.030	4	0.005	HS*
Dietary pattern	1.683	6	0.946	NS
Meal pattern/day	1.439	4	0.837	NS
Source of information about anemia	10.429	6	0.108	NS
Birth order	11.452	8	0.177	S*
Type of family	1.743	4	0.783	NS
Number of family members	5.997	6	0.424	NS
Family income (₹)/ month	23.037	8	0.003	S*
Knowledge about WIFS Program	1.302	2	0.521	NS

NS= Not Significant

*HS= Highly Significant

*S= Significant

Above table showed that the 'p' value is less than 0.05 for the demographic variables such as sex, religion, birth order, and family income per month in pre test and hence the results are significant at 5% level. From the analysis, it is concluded that since calculated Chi-square(χ^2) is greater than the tabulated Chi-square(χ^2) value at $p < 0.05$ (5%) there is significant relationship between the demographic variables of the adolescents with the level of knowledge prior to the implementation of STP regarding anemia among adolescents. Thus, the null hypothesis is rejected.

TABLE 25: Association between the knowledge of adolescents regarding anemia with selected demographic variables (post test).

N=100

Demographic variables	Chi-square value	Df	p-value	Significance
Age in years	1.666	2	0.435	NS
Sex	0.437	1	0.509	HS*
Religion	0.945	2	0.634	HS*
Dietary pattern	1.411	3	0.703	NS
Meal pattern/day	3.036	2	0.219	NS
Source of information about anemia	4.055	3	0.256	NS
Birth order	4.619	4	0.329	NS
Type of family	2.605	2	0.272	NS
Number of family members	2.606	3	0.456	NS
Family income (₹)/ month	2.778	4	0.596	NS
Knowledge about WIFS Program	0.019	1	0.892	NS

NS: Not Significant

*HS: Highly Significant

The above data given in the table showed that the 'p' value is less than 0.05 for the demographic variables such as sex, religion in post test. Hence, the results are significant at 5% level. From the analysis, it is concluded that since, calculated Chi-square(χ^2) is less than the tabulated Chi-square(χ^2) value at $p < 0.05$ (5%) there is no significant relationship between the demographic variables of sex, religion with the level of knowledge after the implementation of STP regarding anemia among adolescents. Thus, null hypothesis is accepted.

E 26: Chi-square test- Pre test and Post test for level of knowledge.

N=100

Test	Knowledge level			Total	Chi square	df	P
	Poor	Average	Good				
Pre	18	78	4	100	44.98	2	< 0.001**
Post	0	64	36	100			

The above table showed that calculated Chi-square(χ^2) is greater than tabulated Chi-square value at $p < 0.001$ hence, null hypothesis is rejected establishing highly significant association found between the level of knowledge and Pre-Post test. Thus, it is concluded that STP is more effective.

DISCUSSION-

Discussion can be framed as follows.

1. Effectiveness of Structured Teaching Program in terms of gain in knowledge in the adolescents regarding anemia.

The findings of the present study showed that the mean post test knowledge scores (16.54) in all the areas were higher than the mean pre test knowledge score (11.28) after administration of Structured Teaching Program. The data were computed using the paired "t" test which showed that the research hypothesis was accepted depicting that the gain in knowledge in the adolescents was not by chance instead the adolescents significantly gained knowledge on anemia.

2. Association between the knowledge of adolescents regarding anemia with selected demographic variables.

The present study revealed that there is an association between the knowledge of adolescents related to anemia with selected demographic variables since $p < 0.05$ (5%). There was a definite

significant association of demographic variables viz. sex, religion, birth order and family income(₹)/month in the pre test whereas in post test there was significant association of sex and religion only with the level of knowledge since p value is less than 0.05 for the specified demographic variables. The following studies supported the present study:

Knowledge of adolescents regarding anemia before the administration of STP.

In this, maximum 78% adolescents' average score was between 9-17, followed by 18% adolescents scoring between 0-8 i.e. poor, and minimum 4% adolescents scoring ≥ 18 which is good.

Knowledge of adolescents regarding anemia after the administration of STP.

The findings depict that maximum 64% adolescents scored average between 9-17, followed by 36% adolescents scoring ≥ 18 i.e. good and not a single student scored between 0-8 i.e. poor.

Knowledge of adolescents regarding anemia before and after the administration of STP.

Knowledge regarding anemia before and after the administration of STP: The findings depicted that maximum 78% adolescents scored average between 9-17 in the pre test before the administration of STP in comparison to 64% scoring average between 9-17 in the post test after administration of STP.

Difference between mean and standard deviation of pre test and post test.

Statistical Difference between mean and S.D. of pretest and posttest (paired sample t-test): The knowledge scores of adolescents before and after the administration of STP to 100 adolescents with a mean difference of 5.26, standard deviation of 3.234, computed "t" statistics equals 16.26 which is highly significant. Since the p value is less than 0.01 the null hypothesis is rejected at the 99% confidence level.

CONCLUSION

The following conclusions can be drawn on the basis of the study:-

1. Interactive method of teaching with the help of Structured Teaching Program was an effective method of enhancing the knowledge of the subjects under study.

2. All the subjects of the study group became aware and learned to prevent and control anaemia with the help of eating healthy diet; results supporting the Wiedenbach's Theory indicating that there is a restoration of functional ability to learn and perform through the implementation of healthy actions with successful administration of STP.

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