

## **A Study To Evaluate The Effectiveness of Structured Teaching Programme on Knowledge And Attitude Regarding The Teenage Pregnancy Among Early Adolescent Girls in Selected School At Bangalore, Karnataka**

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**Abstract:** *The study was conducted with an aim to evaluate the effectiveness of structured teaching programme on knowledge and attitude regarding teenage pregnancy among early adolescent girls in selected school, Bangalore, with the objectives, to assess the pretest knowledge and attitude, evaluate the effectiveness of structured teaching programme on the knowledge and attitude and to determine the association between pretest level of knowledge and attitude regarding teenage pregnancy with their selected socio-demographic variables. Evaluative approach with quasi-experimental design was used; the structured knowledge questionnaire and five point attitude scale was administered to randomly selected samples of 60 early adolescent girls at selected school Bangalore. The collected data was analysed and interpreted based on descriptive statistics and inferential statistics. The result revealed that the pre test knowledge and attitude mean percentage was 45.5%, 66.4% and in post test it was 78.3%, 86.0% and the mean difference was 32.9%, 19.6% and SD was 12.3%, 7.3% in the pretest and 8.5%, 6.1% in the post test respectively which establishes the effectiveness of STP regarding teenage pregnancy on the knowledge and attitude of the respondents, accepting hypotheses (H1). There was significant association, between the pre test knowledge level and attitude level with some socio-demographic variables at 0.05 levels accepting the hypothesis (H2). These findings indicate that the STP was effective in enhancing the knowledge and developing positive attitude of the adolescent girl students regarding teenage pregnancy.*

**Keywords:** *Knowledge, attitude, STP, teenage pregnancy, early adolescent girl*

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### **I. Introduction**

Adolescence is a transitional stage of physical and mental human development that occurs between childhood and adulthood. This transition involves biological (i.e. pubertal), social, and psychological changes, though the biological or physiological ones are the easiest to measure objectively. A teenager, or teen, is a young person whose age is between thirteen and nineteen (13-19 yrs). They are called teenagers because their age number ends in "teen". Teenage pregnancy is pregnancy in a female under the age of 20 yrs. A pregnancy can take place as early as two weeks before menarche (the first menstrual period), which signals the possibility of fertility, but usually occurs after menarche. In healthy, well-nourished girls, menarche normally takes place around the ages 12 or 13. Whether the onset of biological fertility will result in a teenage pregnancy depends on a number of personal and societal factors <sup>3</sup>.

Adolescent mothers and their offspring are a high risk group both physically and emotionally. Poverty, malnutrition, complications of pregnancy, emotional problems such as depression, drug and alcohol use, is all risks for the mother. Children are also at greater risk for physical, cognitive and emotional problems. Fertility rates in South Asia range from 71 to 119 births per 1000 women aged 15-19. 30% of all Indian induced abortions are performed on women who are under 20. According to the World Health Organization, in several Asian countries including Bangladesh and Indonesia, a large proportion (26-37%) of deaths among female adolescents can be attributed to maternal causes. In Karnataka 21 per cent of women in rural areas begin child-bearing at an early age. Early marriage of women continued to be high, 42 per cent of those in the age group of 20-24 were married before the legal minimum age (18 years), while 15 per cent of men in the age group of 25-29 got married before the minimum marriageable age (21). Teenage pregnancies among those aged between 15-17 years are higher in Karnataka (17 per cent) against the national average (16 per cent) <sup>6</sup>.

In India it is estimated that 1/3<sup>rd</sup> of the total population is under the age group of 20 years, and adolescent are at the risk of sexual and reproductive health problems. More than 15 million girls aged between 15-19 years give birth every year. Adolescent girls who get pregnant before 18 years may be five times more likely to die than a woman aged 20-28 years. <sup>7</sup>

Teen pregnancy in India is high with 62 pregnant teens out of every 1,000 women.

In comparison, 24 British teens get pregnant before their 19<sup>th</sup> birthday while the figure is 42 in the US. In India, issues like early marriage and high infant mortality are possible causes for high number of young girls getting pregnant between the ages of 15-19.<sup>8</sup>

A study done on the factors associated with teenage pregnancy in South Asia, out of the seven countries, most of the studies were related to Nepal, Bangladesh, India and Sri Lanka where socio-economic factors, low educational attainment, cultural and family structure were all consistently identified as risk factors for teenage pregnancy. Majority of teenage girls are reported with basic knowledge on sexual health however, very few of them have used the knowledge into practice. Both social and medical consequences of teenage pregnancies are reported consistently. Utilization of health services, which is a protective factor, remains low and consistent. However, teenagers agreed to delay the indexed pregnancy if they would know its consequences.

While poverty and lack of awareness are the deciding factors in early marriages and teenage pregnancies in rural areas, it is the early sexualisation of children that seems to be playing havoc with the health of teenage girls in urban areas. "Dating has become common and teenagers are having pre-marital sex. Love affairs at school and teenage elopements are also increasing. The impact of media, especially television, is affecting the child's mind. The access to Internet is another factor. Add to this the lack of proper sex education and parental guidance and it leads to misguided sexual explorations often resulting in pregnancy."<sup>10</sup>

### **1.1 Need For Study**

Teen pregnancy is one that occurs from puberty to 19 years of age and is also known as adolescent pregnancy. Puberty is the stage of adolescence when a younger girl can reproduce. However reproduction can also take place before the first menstrual cycle.<sup>11</sup>

Teenage pregnancy is a fairly common occurrence in India, due to many factors such as early marriage, girls reaching puberty at younger ages and high specific fertility rate in the adolescent age group. In India teenage pregnancy varies from 8 to 14%. The pregnant teenager may not be quite fit to bear the burden of pregnancy and labor at a tender age, the obstetric outcome of teenage pregnancy is influenced by many socio-medical factors, maternal and prenatal morbidity mortality in teenagers.<sup>12</sup>

Teenage pregnancy causes different medical risks and realities like a) Premature birth, the earlier a baby is born, the more risk there is of respiratory, digestive, vision, cognitive, and other problems. b) Low-birth-weight baby: Teens are at higher risk of having low-birth-weight babies only 1,500 to 2,500 grams those needed to be put on a ventilator for help with breathing after birth. c) Sexually Transmitted Diseases: For teens that have sex during pregnancy, STDs such as Chlamydia and HIV are a major concern which can infect the uterus and growing baby. d) Postpartum depression: Pregnant teens may be at higher risk of postpartum depression, which can interfere with taking good care of a newborn. e) Feeling Alone and Isolated: Especially for teens who think they can't tell their parents they're pregnant, feeling scared, isolated, and alone can be a real problem. Without the support of family or other adults, pregnant teens are less likely to eat well, exercise, or get plenty of rest.<sup>13</sup>

The life-threatening complications of pregnancy that women under age 20 face: hemorrhage, sepsis, pregnancy-induced hypertension including preeclampsia and eclampsia, obstructed labor caused by cephalopelvic disproportion, complications of unsafe abortion, and iron-deficiency anemia. Young women face greater risks than older women of hypertension, cephalopelvic disproportion, iron-deficiency anemia, and unsafe abortion. Socioeconomic factors, including poverty, malnutrition, lack of education, and lack of access to prenatal care or emergency obstetrical care can further increase a young woman's risk of pregnancy-related complications.<sup>14</sup>

Adolescents see their world in for different terms than to adults. Cognitive development influences sexual decision making, most teenage pregnancies are unintended, the developmental tasks of adolescents are interrupted by pregnancy and inadequate prenatal care due to lack of knowledge related to pregnancy, poor nutrition, the adolescent take less feed to maintain physique and prevent obesity. Poverty have been implicated as factors responsible for causing physiologic consequences in the adolescent mother and her future and new born. The risk of teenage pregnancy include preterm births, lone birth weight baby, iron deficiency anemia, being forced into adult role before completing adolescent developmental tasks and drop out from schools how academic achievement, lack of education, unstable family life end in divorce and lack of financial support<sup>15</sup>.

Adolescents aged less than 16years face four times the risk of maternal death than women aged in their 20s, and the death rate of their neonates is about 50% higher. An estimated 16 million girls aged between 15 and 19give birth every year, with 95% of these births occurring in developing countries. This makes up 11% of all births worldwide. Births to adolescents as a percentage of all births range from about 2% in China to 18% in Latin America and the Caribbean .Worldwide, just seven countries account for half of all adolescent births: Bangladesh, Brazil, the Democratic Republic of the Congo ,Ethiopia, India, Nigeria and the United States of America.<sup>16</sup>

About 13 million children are born for teenage mother under the age of 18 years among this the death rate is 143 /1000 per day. 90% of this births and deaths occur in developing countries. In India, 30.9% of teenage girls marry below the age of 15 years. The fertility rate of the population under 15-18 years of age is 73/1000. Between 14 million and 15 million adolescent girls give birth each year. Adolescents aged 15-19 are more likely than older mothers to die in childbirth and very young mothers aged 14 and under are at highest risk. For every young woman who dies in childbirth, 30-50 others are left with an injury, infection or disease.<sup>18</sup>

Early marriage among women is high in Karnataka and 42 per cent of women in the age group of 20-24 were married before the legal minimum age of marriage for women (18 years of age) while 15 per cent of men in the age group of 25-29 yrs got married before the minimum marriage age (21 yrs). The report stated that 21 per cent of young women in rural areas and 11 per cent in urban areas had begun child bearing at the young age. "Young women with no education are six times (43 %) as likely to have had a live birth or to be pregnant than women with 10 or more years of schooling (7 %). Since our society is changing rapidly, it is our moral duty to educate the urban and rural adolescent girls regarding teenage pregnancy and we have to understand them that they need to sit down and have friendly discussion with their problem and impart the knowledge regarding the sex education. As the gap in knowledge and attitude are growing risks and other sides necessitate the need to systematically investigate the knowledge and attitude of teenage girls regarding teenage pregnancy. It is also anticipated that this study may increase awareness among teenagers regarding consequences of teenage pregnancy. Likewise during clinical posting the researcher also have come across lots of teenage pregnant women facing different types of complications. Hence the researcher is interested to study the knowledge and attitude of early adolescent girls regarding teenage pregnancy and to impart structured teaching on knowledge and attitude of teenage pregnancy.

### **Objectives**

The objectives of the study are:

- To assess the pretest knowledge and attitude regarding teenage pregnancy among early adolescent girls in selected school at Bangalore.
- To evaluate the effectiveness of structured teaching programme on the knowledge and attitude regarding teenage pregnancy among early adolescent girls in selected school at Bangalore.
- To determine the association between pretest level of knowledge and attitude of early adolescent girls regarding teenage pregnancy with their selected socio-demographic variables.

### **Operational definitions:**

- **EVALUATE:** In this study, it refers to the method of estimating and interpreting the effectiveness of structured teaching programme on the knowledge and attitude of early adolescent girls regarding teenage pregnancy.
- **EFFECTIVENESS :** In this study, it refers to desired changes brought about by the structured teaching programme on the knowledge and attitude of early adolescent girls regarding teenage pregnancy in selected school.
- **STRUCTURED TEACHING PROGRAM:** In this study, it refers to systematically developed teaching module designed for educating the students regarding teenage pregnancy.
- **KNOWLEDGE:** In this study, it refers to appropriate response received from students to the items elicited through a structured knowledge questionnaire.
- **ATTITUDE:** In this study, it refers to the students' opinion towards the teenage pregnancy elicited by attitude scale, in selected school, Bangalore.
- **EARLY ADOLESCENT GIRLS:** In this study, it refers to the girls who are with the age group of 13 – 15 years (i.e. girl students from class 9 and 10).
- **TEENAGE PREGNANCY:** In this study, it refers to the pregnancy that occurs from puberty to 19 years of age.

### **Hypotheses:**

- H<sub>1</sub>. The mean post-test knowledge and attitude score will be more than mean pre-test knowledge and attitude scores of early adolescent girls regarding teenage pregnancy in selected school, Bangalore, Karnataka.
- H<sub>2</sub>. There will be significant association between the mean pre-test knowledge and attitude level of adolescents regarding teenage pregnancy with selected socio-demographic variables.

**Variables under study**

- Dependent variables: Knowledge and attitude of early adolescent girls regarding teenage pregnancy
- Independent variable: Structured teaching program regarding teenage pregnancy among the early adolescent girls at selected school, Bangalore.
- Socio demographic variables: Age, Birth order, Place of residence, Dietary pattern, Religion, Educational status of parents, Occupation of parents, Income of the family, Type of family, source of information.

**II. Conceptual framework of the study:**

The conceptual framework of the present study is based on Ernestine Weidenbach’s Helping art of clinical nursing theory. It consists of three steps that are, central purpose, prescription and realities. Weidenbach proposes prescriptive theory for nursing which is described as conceiving of a desired situation and the ways to attain it. Prescriptive theory directs action to word as explicit goal. A nurse develops a prescription based on a central purpose and implements it according to the reality of the situation.<sup>20</sup>

In current nursing practice, Weidenbach’s helping art of clinical nursing theory is modified and has been utilized. According to Weidenbach model, nursing practice consists of three steps:-

- Identifying the patients (students) need for help.
- Ministering the needed help
- Validating the provided help.

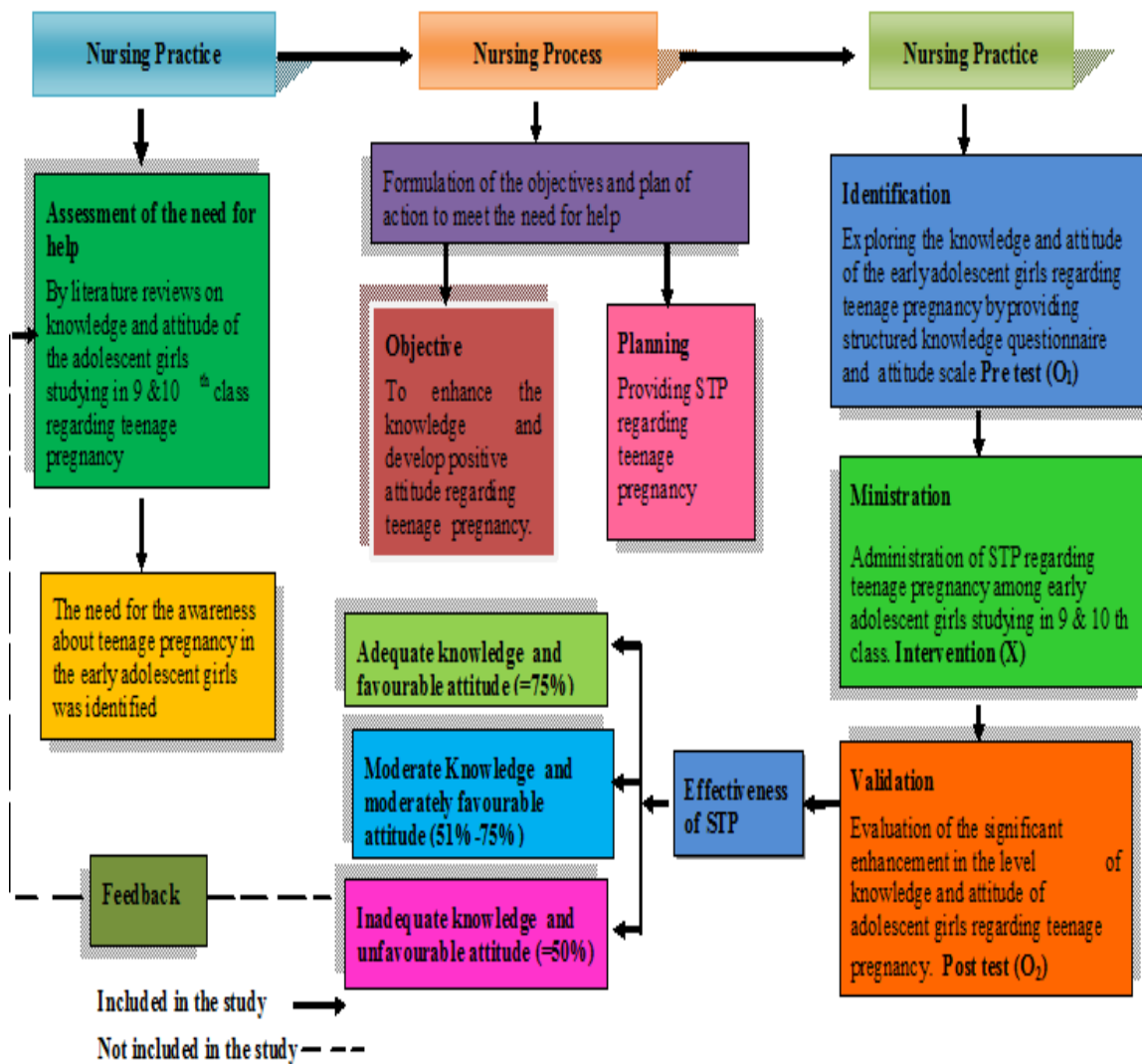


Figure 1: CONCEPTUAL FRAME WORK BASED ON WEIDENBACH'S HELPING ART OF CLINICAL NURSING THEORY

### III. Methodology

In this study quasi-experimental design (One group pre-test post-test design) was chosen for assessing the knowledge and attitude of adolescent girls regarding the teenage pregnancy in Amrutha English High School under Amrutha Educational Society, Bangalore. A sample size of 60 students were selected using simple random sampling technique (lottery method)

**Inclusion criteria:**

This study included:

- Only girls who are willing to participate in the study.
- Adolescents who are studying in 9 & 10<sup>th</sup> Class.
- Who can read and write in English.

**Data Collection Instrument**

Data collection tools are the procedures or instruments used by the researcher to observe or measure the key variables in the research problem<sup>54</sup>. A structured knowledge questionnaire and attitude scale on teenage pregnancy was prepared by the investigator to collect the data.

Structured knowledge and attitude questionnaire

- i. Section A – Sociodemographic data.
- ii. Section B – Structure knowledge questionnaire on teenage pregnancy
- iii. Section C- Structured attitude questionnaire regarding teenage pregnancy

**Scoring Technique**

**Section B:** The structure knowledge questionnaire consists of 18 close ended multiple choice questions with a single correct answer. Each correct answer was accorded a score of one (1) and every incorrect/ unanswered item was accorded zero (0). The maximum score on knowledge questionnaire was eighteen (18).

The different levels of knowledge are categorized as follows:

Inadequate knowledge  $\leq 50\%$

Moderately adequate knowledge = 51-75%

Adequate knowledge  $\geq 75\%$

**Section C:** The structured attitude questionnaire consists of 18 questions related to attitude towards teenage pregnancy. In this five point attitude scale was adopted. Every question was given the score after students answered. For the positive questions, the score is: strongly agree=5, agree=4, no opinion=3, disagree=2, strongly disagree=1. For the negative questions, strongly agree=1, agree=2, no opinion=3, disagree=4, strongly disagree=5.

The different levels of attitude are categorized as :

Unfavourable attitude  $\leq 50\%$

Moderately favourable attitude = 51% - 75%

Favourable attitude  $\geq 75\%$

### IV. Results

**Section-1: Socio-demographic Characteristics of Adolescent Girls in Selected School**

**Table – 1:** Frequency and percentage distribution of personal characteristics of the students. n=60

Characteristics	Category	Frequency (f)	Percentage (%)
Age group	13 years	0	0.0
	14 years	26	43.3
	15 years	34	56.7
Educational status	IX <sup>th</sup> Std	29	48.3
	X <sup>th</sup> Std	31	51.7
Birth order	First	31	51.7
	Second	21	35.0
	Third	8	13.3
Place of Residence	Urban	36	60.0
	Semi urban	10	16.7
	Rural	14	23.3
Dietary pattern	Vegetarian	17	28.3
	Non-vegetarian	43	71.7
Family history of Teenage pregnancy	Yes	4	6.7
	No	56	93.3
Source of Information	TV/Radio	34	56.7
	Family members/Relatives	12	20.0

	Health personnel	5	8.3
	Peer group/Neighbors	9	15.0
Come across/seen any abusive activities	Yes	8	13.3
	No	52	86.7
Total		60	100.0

Table-1 depicts the classification of the students by the personal characteristics. The findings indicate the majority (56.7%) of adolescents were aged 15 years. Likewise the majority of the students were of Xth standard (53.3%), major number of the students were of first birth order (51.7%). Regarding the place of residence, majority of the students were of urban area (60.0%). In context of dietary pattern, the majority of the adolescents were non-vegetarian (71.7%). Likewise the majority of the adolescents had no family history of teenage pregnancy (93.3%). Regarding the source of information, majority of the adolescents got the information regarding teenage pregnancy through TV/Radio (56.7%). Finally the majority of the adolescents haven't come across/seen any abusive activities (86.7%).

**Table – 2:** Frequency and percentage distribution of related characteristics of the students. n=60

Characteristics	Category	Frequency (f)	Percentage (%)
Religion	Hindu	42	70.0
	Muslim	18	30.0
	Christian	0	0.0
Type of family	Nuclear	43	71.7
	Joint	17	28.3
Educational status of Father	No formal education	12	20.0
	Primary	18	30.0
	High school	19	31.7
	PUC	7	11.7
	Graduate	4	6.6
Educational status of Mother	No formal education	12	20.0
	Primary	17	28.3
	High school	18	30.0
	PUC	9	15.0
	Graduate	4	6.6
Occupational status of Father	Private	15	25.0
	Government	11	18.3
	Business	12	20.0
	Daily wages	22	36.7
Occupational status of Mother	Private	11	18.3
	Government	7	11.7
	Daily wages	4	6.6
	House wife	38	63.4
Family Income/month	≤ Rs.5,000	11	18.3
	Rs.5,001-10,000	21	35.0
	Rs.10,001-15,000	19	31.7
	Above Rs.15,000	9	15.0
Total		60	100.0

Table 2 reveals the classification of the students by related characteristics. Here regarding the religion the majority of the adolescents belong to Hindu religion (70.0%). Likewise for the type of family, the majority of the adolescents belong to nuclear family (71.7%). Regarding to father's educational status the majority 31.7% of adolescent's fathers had high school education. Similarly, majority 30.0% of adolescent's mother had high school education. Regarding the father's occupational status, the majority 36.7% of adolescents fathers were daily wages worker. Similarly, the majority 63.4% of adolescents mother were housewife. Finally regarding the family income per month, majority of adolescent's family income/month was between Rs. 5000 – 10,000 (35.0%).

## Section – II: Overall and Aspect wise Pre test Knowledge and Attitude Scores of Students on Teenage Pregnancy.

**Table – 3:** Frequency and Percentage Distribution of Pre test Knowledge Level of Students on Teenage Pregnancy n=60

Knowledge Level	Category	Frequency (f)	Percentage (%)
Inadequate	≤ 50 % Score	40	66.7
Moderate	51-75 % Score	20	33.3
Adequate	> 75 % Score	0	0.0
Total		60	100.0

Table 3 depicts that majority of the students had inadequate knowledge (66.7%) and 33.3% had moderate knowledge regarding teenage pregnancy in the pre test.

**Table -4:** Aspect wise Analysis of Pretest Knowledge Scores of Students on Teenage Pregnancy n =60

No.	Knowledge Aspect	No. of Statement	Max. Score	Mean	SD	Mean (%)	SD (%)
I	Introduction and Causes of Teenage pregnancy	9	9	4.28	1.4	47.6	15.5
II	Effects and Prevention of Teenage pregnancy	9	9	3.90	1.5	43.3	16.9
	Overall	18	18	8.18	2.2	45.5	12.3

Table 4 depicts that the maximum mean percentage obtained by the adolescent in the aspect of introduction and causes of teenage pregnancy (47.6%) and least mean knowledge score (43.3%) found in the aspect of effects and prevention of teenage pregnancy. Therefore overall knowledge scores of students were found to be 45.5% with the standard deviation 12.3

**Table – 5:** Frequency and Percentage Distribution of Pre test Attitude Level of Students on Teenage Pregnancy n =60

Attitude Level	Category	Frequency (f)	Percentage (%)
Unfavorable	≤ 50 % Score	0	0.0
Moderate	51-75 % Score	50	83.3
Favorable	> 75 % Score	10	16.7
Total		60	100.0

Table 5 depicts that majority of the students had moderately favourable attitude (83.3%) and 16.7% had favourable attitude regarding teenage pregnancy in the pre test.

### **Section – III: Overall and Aspect wise Post test Knowledge and Attitude Scores of Students on teenage pregnancy**

**Table – 6:** Frequency and Percentage Distribution of Post test Knowledge level of Students on Teenage Pregnancy n=60

Knowledge Level	Category	Frequency (f)	Percentage (%)
Inadequate	≤ 50 % Score	0	0.0
Moderate	51-75 % Score	25	41.7
Adequate	> 75 % Score	35	58.3
Total		60	100.0

Table 6 depicts that majority of the students had adequate knowledge (58.3%) and 41.7% had moderate knowledge regarding teenage pregnancy in the post test.

**Table – 8:** Frequency and Percentage Distribution of Post test Attitude Level of Students on Teenage Pregnancy n=60

Attitude Level	Category	Frequency (f)	Percentage (%)
Unfavorable	≤ 50 % Score	0	0.0
Moderate	51-75 % Score	12	20.0
Favorable	> 75 % Score	48	80.0
Total		60	100.0

Table 8 depicts that majority of the students had favourable attitude (80.0%) and 20.0% had moderately favourable attitude regarding teenage pregnancy in the post test.

**Section- IV: Comparison of Pre test and Post test Knowledge and Attitude Scores of Students on Teenage Pregnancy.**

**Table – 9:** Comparison of pre test and post test knowledge scores on teenage pregnancy to know the effectiveness of STP. n=60

Aspects	Max. Score	Mean	SD	Mean (%)	SD (%)	Paired 't' Test
Pre test	18	8.18	2.2	45.5	12.3	20.07*
Post test	18	14.10	1.5	78.3	8.5	
Enhancement		5.92	2.3	32.9	12.7	

\* Significant at 5% level, (P < 0.05 level) t (0.05,59df) = 1.96

The mean pre test knowledge was 45.5% with SD 12.3%, the mean post test knowledge found to be 78.3% with SD 8.5%. However, the enhancement was proved as mean 32.9% and SD 12.7%. Further, the paired t-test value (20.07\*) shows statistical significance at the level of p< 0.05 with df (59), establishing the effectiveness of Structured Teaching Programme. Therefore the research hypothesis is accepted.

**Table – 11:** Over all Pre test and Post test Attitude Scores on Teenage Pregnancy to know the effectiveness of STP n=60

Aspects	Max. Score	Mean	SD	Mean (%)	SD (%)	Paired 't' Test
Pre test	90	59.77	6.6	66.4	7.3	22.66*
Post test	90	77.42	5.5	86.0	6.1	
Enhancement		17.65	6.0	19.6	6.7	

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

The above table shows the overall pretest, post test and enhancement of mean attitude scores regarding teenage pregnancy.

The mean pre test attitude was 66.4% with SD 7.3%, the mean post test attitude found to be 86.0% with SD 6.1%. However, the enhancement was proved as mean 19.6% and SD 6.7%. Further, the paired t-test value (22.66\*) shows statistical significance at the level of p< 0.05 with df (59), establishing the effectiveness of Structured Teaching Programme. Therefore the research hypothesis is accepted.

**Section - V: Association between Demographic variables and Pre test Knowledge and Attitude level on Teenage Pregnancy**

**Table – 12:** Association between Sociodemographic Variables of Students with Pre test Knowledge level on Teenage Pregnancy n=60

Demographic Variables	Category	Sample	Knowledge Level				χ <sup>2</sup> Value	P Value
			Inadequate		Moderate			
			f	%	(f)	%		
Age group	14 years	26	13	50.0	13	50.0	5.74*	P<0.05
	15 years	34	27	79.4	7	20.6		
Educational status	IXth Std	29	15	51.7	14	48.3	5.64*	P<0.05
	X th Std	31	25	80.7	6	19.4		
Birth order	First	31	19	61.3	12	38.7	0.87 NS	P>0.05
	Second	21	15	71.5	6	28.6		
	Third	8	6	75.0	2	25.0		
Place of Residence	Urban	36	23	63.9	13	36.1	3.15 NS	P>0.05
	Semi urban	10	9	90.0	1	10.0		
	Rural	14	8	57.1	6	42.9		
Dietary pattern	Vegetarian	17	8	47.1	9	52.9	4.10*	P<0.05
	Non-vegetarian	43	32	74.4	11	25.6		
Family history of Teenage pregnancy	Yes	4	3	75.0	1	25.0	0.13 NS	P>0.05
	No	56	37	66.1	19	33.9		
Source of Information	TV/Radio	34	20	58.8	14	41.2	5.82 NS	P>0.05
	Family members/	12	7	58.3	5	41.7		



	Relatives							
	Health personnel	5	5	100.0	0	0.0		
	Peer group / Neighbors	9	8	88.9	1	11.1		
Come across/seen any abusive activities	Yes	8	6	75.0	2	25.0	0.29 NS	P>0.05
	No	52	34	65.4	18	34.6		
Religion	Hindu	42	27	64.3	15	35.7	0.36 NS	P>0.05
	Muslim	18	13	72.2	5	27.8		
	Christian	0	0	0.0	0	0.0		
Type of family	Nuclear	43	25	57.1	18	41.9	4.97*	P<0.05
	Joint	17	15	88.2	2	11.8		
Educational status of Father	No formal education	12	8	66.7	4	33.3	2.33 NS	P>0.05
	Primary	18	11	61.1	7	38.9		
	High school	19	11	61.1	7	38.9		
	PUC	7	4	57.1	3	42.9		
	Graduate	4	2	50.0	2	50.0		
Educational status of Mother	No formal education	12	9	75.0	3	25.0	4.35 NS	P>0.05
	Primary	17	10	58.8	7	41.2		
	High school	18	10	55.6	8	44.4		
	PUC	9	7	77.8	2	22.2		
	Graduate	4	4	100.0	0	0.0		
Occupational status of Father	Private	15	9	60.0	6	40.0	1.53 NS	P>0.05
	Government	11	9	81.8	2	18.2		
	Business	12	8	66.7	4	33.3		
	Daily wages	22	14	63.6	8	36.4		
Occupational status of Mother	Private	11	7	63.6	4	36.4	4.32 NS	P>0.05
	Government	7	7	100.0	0	0.0		
	Daily wages	4	3	75.0	1	25.0		
	House wife	38	23	60.5	15	39.5		
Family Income/month	≤ Rs.5,000	11	9	81.8	2	8.2	2.60 NS	P>0.05
	Rs.5,001-10,000	21	12	57.1	9	42.9		
	Rs.10,001-15,000	19	12	63.2	7	36.8		
	Above Rs.15,000	9	7	77.8	2	22.2		
Combined		60	40	66.7	20	33.3		

\* Significant at 5% Level,

NS: Non-significant

The table 12 shows  $\chi^2$  value computed between the pretest knowledge level of adolescents on teenage pregnancy and selected demographic variables. Variables such as age, educational status, dietary pattern and type of family were significant at 0.05 levels. Thus it can be inferred that there is significant association between pretest knowledge level of the adolescents' girls regarding teenage pregnancy and selected variables. Therefore the hypothesis stated there will be significant association between pretest knowledge of adolescents' girls regarding teenage pregnancy and selected demographic variables is accepted.

**Table – 13:** Association between Sociodemographic Variables of the Students with Pre test Attitude level on Teenage Pregnancy n=60

Demographic Variables	Category	Sample	Attitude Level				$\chi^2$ Value	P Value
			Moderate		Favorable			
			(f)	%	(f)	%		
Age group	14 years	26	25	96.2	1	3.8	5.43*	P<0.05
	15 years	34	25	73.5	9	26.5		
Educational status	IXth Std	29	27	93.1	2	6.9	3.86*	P<0.05
	X th Std	31	23	74.2	8	25.8		
Birth order	First	31	25	80.7	6	19.4	0.35 NS	P>0.05
	Second	21	18	85.7	3	14.3		
	Third	8	7	87.5	1	12.5		
Place of Residence	Urban	36	34	94.4	2	5.6	8.14*	P<0.05
	Semi urban	10	7	70.0	3	30.0		
	Rural	14	9	64.3	5	35.7		

Dietary pattern	Vegetarian	17	17	100.0	0	0.0	4.74*	P<0.05
	Non-vegetarian	43	33	76.7	10	23.3		
Family history of Teenage pregnancy	Yes	4	4	100.0	0	0.0	0.86 NS	P>0.05
	No	56	46	82.1	10	17.9		
Source of Information	TV/Radio	34	29	85.3	5	14.7	0.93 NS	P>0.05
	Family members/ Relatives	12	9	75.0	3	25.0		
	Health personnel	5	4	80.0	1	20.0		
	Peer group / Neighbors	9	8	88.9	1	11.1		
Come across/seen any abusive activities	Yes	8	6	75.0	2	25.0	0.46 NS	P>0.05
	No	52	44	84.6	8	15.4		
Religion	Hindu	42	35	83.3	7	16.7	0.00 NS	P>0.05
	Muslim	18	15	83.3	3	16.7		
Type of family	Nuclear	43	35	90.7	4	9.3	5.93*	P<0.05
	Joint	17	11	64.7	6	35.3		
Educational status of Father	No formal education	12	9	75.0	3	25.0	2.34 NS	P>0.05
	Primary	18	14	77.8	4	22.2		
	High school	19	17	89.5	2	10.5		
	PUC	7	6	85.7	1	14.3		
	Graduate	4	4	100.0	0	0.0		
Educational status of Mother	No formal education	12	9	75.0	3	25.0	5.42 NS	P>0.05
	Primary	17	16	94.1	1	5.9		
	High school	18	15	83.3	3	16.7		
	PUC	9	8	88.9	1	11.1		
	Graduate	4	2	50.0	2	50.0		
Occupational status of Father	Private	15	12	80.0	3	20.0	1.32 NS	P>0.05
	Government	11	10	90.9	1	9.1		
	Business	12	9	75.0	3	25.0		
	Daily wages	22	19	86.4	3	13.6		
Occupational status of Mother	Private	11	8	72.7	3	27.3	3.70 NS	P>0.05
	Government	7	7	100.0	0	0.0		
	Daily wages	4	4	100.0	0	0.0		
	House wife	38	31	81.6	7	18.4		
Family Income/month	≤ Rs.5,000	11	9	81.8	2	18.2	2.17 NS	P>0.05
	Rs.5,001-10,000	21	17	81.0	4	19.0		
	Rs.10,001-15,000	19	15	79.0	4	21.0		
	Above Rs.15,000	9	9	100.0	0	0.0		
Combined		60	50	83.3	10	16.7		

Significant at 5% Level,

NS : Non-significant

The table 13 shows  $\chi^2$  value computed between the pretest attitude level of adolescents on teenage pregnancy and selected demographic variables. Variables such as age, educational status, place of residence, dietary pattern and type of family were significant at 0.05 levels. Thus it can be inferred that there is significant association between pretest attitude level of the adolescents' girls regarding teenage pregnancy and selected variables. Therefore the hypothesis stated there will be significant association between pretest attitude of adolescents' girls regarding teenage pregnancy and selected demographic variables is accepted.

### V. Conclusion

Based on the finding of the study the following conclusions were drawn:

- Majority of the students had inadequate knowledge (66.7%) and 33.3% had moderate knowledge, similarly the majority had moderately favourable attitude (83.3%) and 16.7% had favourable attitude regarding teenage pregnancy in the pre test.
- Majority of the students had adequate knowledge (58.3%) and 41.7% had moderate knowledge similarly, majority had favourable attitude (80.0%) and 20.0% had moderately favourable attitude regarding teenage pregnancy in the post test.
- The pre test knowledge mean percentage was 45.5% and in post test it was 78.3% and the mean difference was 32.9% and 't' value was 20.7 and SD was 12.3% in the pretest and 8.5% in the post test. Thus the

result establishes the effectiveness of Structured Teaching Programme regarding the knowledge of the students.

- The pre test attitude mean percentage was 66.4% and in post test it was 86.0% and the mean difference was 19.6% and 't' value was 22.66 and SD was 7.3% in the pre test and 6.1% in the post test . Thus the result establishes the effectiveness of Structured Teaching Programme regarding the attitude of the students.
- Hence the hypotheses (H<sub>1</sub>) the mean post-test knowledge and attitude score will be more than mean pre-test knowledge and attitude scores of early adolescent girls regarding teenage pregnancy is accepted.
- There was significant association, observed between the pre test knowledge level and socio-demographic variables such as age, educational status, dietary pattern and type of family at 0.05 levels. Thus the hypothesis (H<sub>2</sub>) there is significant association between pretest knowledge level of the adolescents' girls regarding teenage pregnancy and selected socio-deographic variables is accepted.
- There was significant association, observed between the pre test attitude level and socio-demographic variables such as age, educational status, place of residence, dietary pattern and type of family at 0.05 levels. Thus the hypothesis (H<sub>2</sub>) there is significant association between pretest attitude level of the adolescent girls regarding teenage pregnancy and selected socio-deographic variables is accepted.

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