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**A Study to Assess The Effectiveness of Preventive Education Programme on Knowledge Regarding Maternal Complications among Teenage Antenatal Mothers At Selected Primary Health Centre, Villupuram District**

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**Abstract**

**Aim:** To assess the effectiveness of preventive education programme on knowledge regarding Maternal Complications among Teenage Antenatal Mothers. **Objectives:** 1.To assess the pre-test and post –test level of knowledge regarding maternal complications among Teenage Antenatal Mothers. 2.To determine the effectiveness of preventive education programme on knowledge regarding Maternal Complications among Teenage Antenatal Mothers. 3.To find out the association between post -test level of knowledge and selected demographic variables. **Methodology:** A pre experimental one group pre and post -test research design was adopted for this study. 50 samples were selected by using Non probability convenient sampling techniques. The pre and post -test level of knowledge assessed with the help self -structured knowledge questionnaires. **Results:** The findings of the study shows that the Pre-test Mean, the score was 9.86 with the standard deviation of 2.19 and the post-test mean score was 32.06 with the Standard Deviation of 2.75 and the Mean difference is 21.56 with a standard error of 0.47. The t value is 45.87 shows highly significance at  $p < 0.05$ . **Conclusion:** The study concluded that the Preventive Education Programme was effective in improving the knowledge of Teenage Antenatal Mothers.

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## **1. INTRODUCTION**

Maternal health is referred to health of women throughout pregnancy, childbirth and postpartum. To make certain those girls and their unborn children attain their maximum potential for fitness and health, every level must be enjoyable. **(WORLD HEALTH ORGANIZATION 2020)**

Pregnancy is a process that starts with conception to delivery of baby. This stage is called gestation and lasts 9 months, or about 40 weeks. The time between one's last period and delivery can be measured in terms of trimesters. There are 3 parts to pregnancy: the first trimester (1-12 weeks), the second trimester (13-28 weeks) and the third trimester (19-40 week). **(MOSBY 2009)**

**The WORLD HEALTH**

**ORGANIZATION (2022)** says Teenager, Teen or "Adolescents" "Adolescents" are defined as those between the ages of 10 and 19 and "Youth" as defined as people between the ages of 15 and 24. While "Young People" refers to people between the ages of 10 and 24. As a person reaches their teenage years, they become 13 years old, and then turn 20 years old. Growth and development occur during adolescence period and a transitional stage between childhood to adulthood. Generally, during this period, physical and cognitive development takes place.

**WORLD HEALTH ORGANIZATION (2017)** stated that Teenage pregnancy is defined as being pregnant between the ages of 13-19, with the mother's actual age at the time of delivery. Teenage

pregnancy is otherwise called as adolescent pregnancy. Teenage pregnancy period is a valuable stage of teenage antenatal mothers. Teenage pregnancy is highly dangerous or at danger during Antenatal, Intranatal, Postnatal period which affects in increase maternal mortality and morbidity rate.

In developing countries Teenage pregnancy is a high risk because complications occur during pregnancy and child bearing and cause of death in teenage mothers aged between 15 – 19 years. According to an estimate 70,000 female teenagers die each year because they are pregnant before they are physically mature enough for successful motherhood. **(MAYOR.S - 2004)**

**SYLVIA KIRCHENGAST-**

**2016** says that Early childbearing is creating a maternal problem throughout the period of Antenatal, Intranatal, Postnatal period. Maternal problems like anaemia, premature rupture of membrane, preterm labour, pregnancy induced hypertension, gestational diabetic mellitus, unsafe abortions, intrauterine infection, sexually transmitted disease, obstructed labour, labour dystocia, postpartum haemorrhage, postpartum depression and uterine prolapse.

Teenage pregnancy is a significant public health concern in both developed and developing countries, as it constitutes a high-risk or "at-risk" pregnancy due to its association with various adverse maternal and fetal outcomes which leads to increased mortality and morbidity for the mother and child.

## **SHOBANSURI -2020**

reported that in India, at least 42% of teenage girls with <18.5 are underweight. The cycle of famine is directly exacerbated by pregnancy in such a fragile state, which also causes neonatal and infant deaths. Children born to adolescent mothers have greater rates of stunting and underweight, according to a recent study. The vicious cycle is further exacerbated by the low levels of schooling, poor nutritional status, and high prevalence of anaemia. Poor nutritional status in women is exacerbated by low dietary intake, a diet lacking in fruits and milk and vast variations in state-by-state food consumption patterns.

Prevention of complication is a major part of maternal life. According to WHO guidelines

encompasses the specific recommendations such as investigation, ultrasound, antenatal visit, registration, antenatal advices (diet), rest and sleep, bowel, immunization, travelling, personal hygiene, drugs, warning signs.

### **OBJECTIVES:**

1. To assess the pre-test and post-test level of knowledge regarding maternal complications among teenage antenatal mothers.
2. To determine the effectiveness of preventive education programme on knowledge regarding maternal complications among teenage antenatal mothers.
3. To find out the association between post-test level of knowledge and selected demographic variables

### **HYPOTHESIS:**

**H1-**There is a significant difference in pre and post-test level of knowledge regarding Maternal complications among teenage antenatal mothers.

**H2-**There is a significant association between the post -test level of knowledge regarding maternal complications among teenage antenatal mothers with their selected demographic variables.

sampling technique. The pre and post test level of knowledge assessed through Self structured questionnaires regarding prevention of maternal complications among teenage antenatal mothers.

#### **METHODOLOGY:**

A Pre - experimental one group pre-test and post -test research design was adopted for this study. 50 samples were selected by using non probability convenient

#### **RESULTS:**

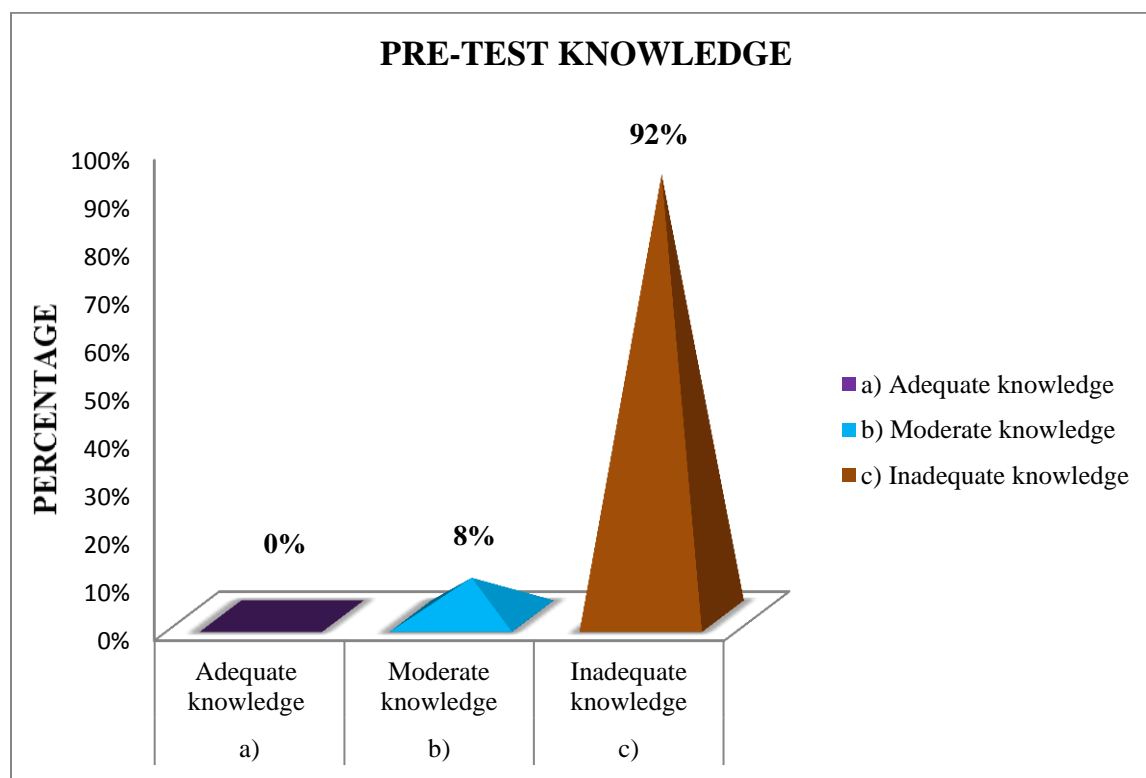
**TABLE:4.1** Frequency and percentage distribution of pre-test knowledge regarding maternal complications among teenage antenatal mothers.

<b>LEVEL OF KNOWLEDGE</b>	<b>PRE-TEST</b>	
	<b>N</b>	<b>%</b>
Adequate knowledge	0	0%

Moderate knowledge	4	8%
Inadequate knowledge	46	92%

**TABLE: 4.1** The findings Shows the Frequency and percentage distribution of pre-test knowledge regarding maternal complications among teenage antenatal mothers. In the pretest outof 50 samples, 46 (92%) of them had inadequate knowledge

**N=30**



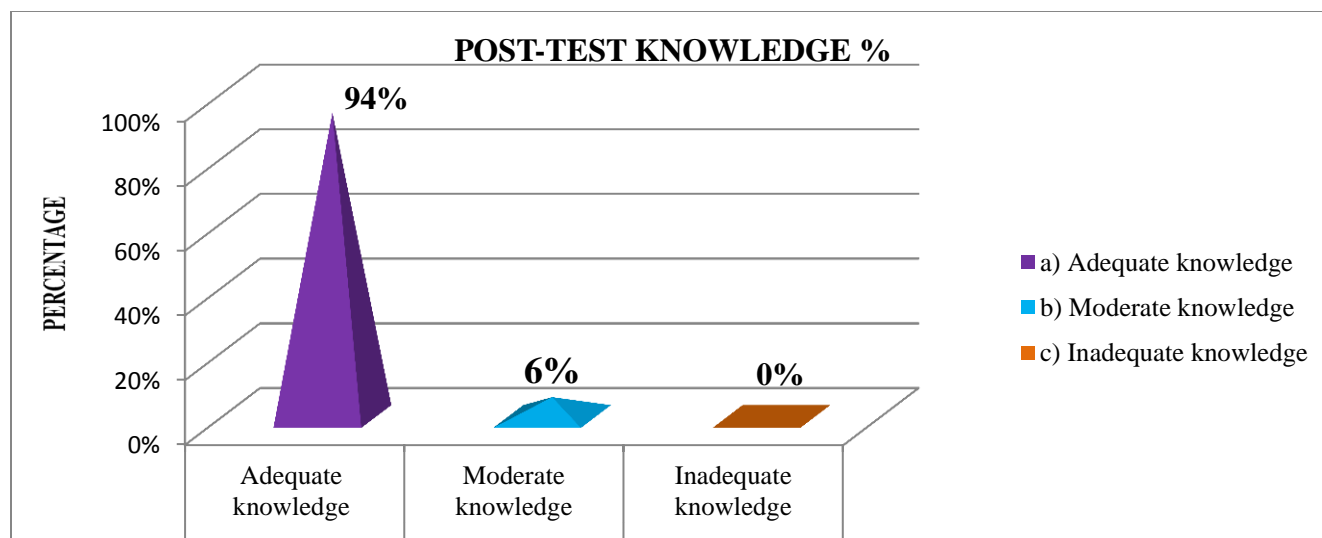
**FIGURE:4.1** The findings Shows the Frequency and percentage distribution of pre-test knowledge regarding maternal complications among teenage antenatal mothers. In the pretest out of 50 samples, 46 (92%) of them had inadequate knowledge

and 4 (8%) of them had moderate knowledge regarding maternal complications among teenage antenatal mothers.

**TABLE:4.2** Frequency and percentage distribution of Post-test knowledge

N-50

LEVEL OF KNOWLEDGE	POST-TEST	
	N	%
Adequate knowledge	47	94%
Moderate knowledge	3	6%
Inadequate knowledge	0	0%



**Figure:4. 2** shows In the post test out of 50 samples, 47(94%) of them had adequate knowledge and 3(6%) of them had moderate, none of them had inadequate knowledge regarding maternal complications.

**TABLE :4.3** Pre And Post –Test Mean, Standard Deviation, Mean Difference, Standard error, T

Value

KNOWLEDGE	Pre test		Post test		Mean difference	Standard error	t value
	Mean	Standard deviation	Mean	Standard deviation			
	9.86	2.19	32.06	2.75	21.56	0.47	45.87** HS

(\*\* Highly significant at  $P < 0.05$  )

**The Table – 4.3** :Shows that Pre-test Mean, score was 9.86 with the standard deviation of 2.19 and the post-test mean score was 32.06 with the Standard Deviation of 2.75. The Mean difference is 21.56 with a standard error of 0.47. The t value is 45.87 shows highly significance at the  $P < 0.05$  level.

**Table – 4.4** Association between Post-test level of knowledge and selected sociodemographic variables

**N-50**

S.No	Demographic Variable	Chi-Square	P-value
1	Age	0.13	0.97 NS
2	Education	1.11	0.94 NS
3	Occupation	0	1 NS
4	Religion	4.22	0.646 NS
5	Family monthly income	33.2	0.000 9*S
6	Type of family	1.79	0.74 NS
7	Residency	0.065	0.96 NS
8	Source of health information	0.065	0.99 NS



<b>9</b>	<b>Dietary pattern</b>	0.065	0.96 NS
<b>10</b>	<b>Age at Menarche</b>	0.754	0.94 NS
<b>11</b>	<b>Gravida</b>	0.354	0.83 NS
<b>12</b>	<b>Trimester</b>	0.025	0.995 NS
<b>13</b>	<b>Type of marriage</b>	0.016	0.992 NS
<b>14</b>	<b>Age at marriage</b>	17.37	0.001 *S

(\* Significant at P<0 .05 level)

**Table – 4.4.** shows that there is a significant association between level of knowledge with the family monthly income ,age at marriage at p<0.05 and no significant association between level of knowledge and age, education, occupation, religion ,type of family, residence, source of information, dietary pattern, age at menarche, gravida, trimester, type of marriage in the group.

#### **DISCUSSION:**

First objective was “To assess the pre-test and post-test level of knowledge regarding maternal complications among teenage antenatal mothers”.

In the pre-test out of 50 samples, 46 (92%) of them had inadequate knowledge and 4 (8%) of them had moderate knowledge regarding maternal complications.

In the post test out of 50 samples, 47(94%)

of them had adequate knowledge and 3(6%) of them had moderate knowledge, none of them had inadequate knowledge regarding maternal complications.

Second objective is “to determine the effectiveness of Preventive Education Programme on knowledge regarding maternal complications among teenage antenatal mothers”.

Pre-test Mean, the score was 9.86 with the standard deviation of 2.19 and the post- test

mean score was 32.06 with the Standard Deviation of 2.75 , Mean difference being 21.56 with a standard error of 0.47. The t value is 45.87 shows high significance at  $p < 0.05$  which indicates the preventive education programme was effective in improving knowledge regarding maternal complications among teenage antenatal mothers. **Hence  $H_1$  hypothesis is accepted.**

Third objective was “to find out the association between post-test level of knowledge and selected socio demographic variables”.

There is a significant association between level of knowledge with the family’s monthly income ,age of marriage at  $p < 0.05$  and there is no significant association between level of knowledge and age, education, occupation, religion ,type of family, residence, source of information, dietary pattern, age at Menarche, gravida, trimester, type of marriage in the group.**Hence  $H_2$  hypothesis is accepted.**

## **CONCLUSION:**

The result of the study shows that there is a significant difference between pre and post-test levels of knowledge with a t value of 45.87 at  $p < 0.05$  level which indicates the preventive education programme being very effective in improving knowledge regarding maternal complications among teenage antenatal mothers. Hence the study concluded that the Preventive education programme was effective in improved the knowledge of teenage antenatal mothers.

## **RECOMMENDATIONS:**

- A study may be carried out in various settings.
- This study can be conducted for a large group.
- A similar study can also conducted for adolescent girls.

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