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# A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Food Supplementation During Antenatal Period among Pregnant Women Attending an OPD at Villupuram District.

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**ABSTRACT:**

**Aim:** to assess the effectiveness of planned teaching programme on knowledge regarding food supplementation during antenatal period among pregnant women attending AN OPD at Villupuram district.

**Objectives:** To assess the pre test and post test level of knowledge regarding food supplementation during antenatal period among pregnant women. To assess the effectiveness of planned teaching programme on knowledge regarding food supplementation during antenatal period among pregnant women. Find association between post test level of knowledge regarding food supplementation during antenatal period among pregnant women with their selected demographic variables.

**Methodology:** The total samples of 50 Antenatal Mother's were selected by non-probability purposive sampling technique .Data was collected by using structured knowledge questionnaire The data was analysed by using descriptive and inferential statistics.

**Results:** The finding of the study Shows that in In the pre test out of 50 samples, 19 (38%) of them had adequate knowledge, 31(62%) of them had moderately adequate knowledge and 4(8%) of them had inadequate level of knowledge. In the post test ,out of 50 samples 39 (78%) of them had adequate level of knowledge, 8(16%) of them had moderately adequate knowledge and 3(6%) of them had inadequate level of knowledge. The pre-test mean was 9.92with the standard deviation of 5.29 and the post-test mean was 17.42 with the standard deviation of 6.54. The mean difference of pre-test and post-test was 7.5 with the standard error of 0.49. The 'T' value was 1.677 it shows highly significant at P value of <0.05. Hence it indicates that the knowledge regarding food supplementation during antenatal period among pregnant women level of Knowledge of pregnant women is improved after teaching programme.

**Conclusion:** The finding clearly analyze that there is a significant difference between pre and post level of knowledge with t value 1.677 representatively. Hence the study concluded that planned teaching programme was effective in promoting knowledge regarding food supplementation during antenatal period among pregnant women.

**Key words :** Food supplementation, Pregnant women , Antenatal period, Planned teaching programme.

## INTRODUCTION

Pregnancy is a truly magical experience to bring a life into the world. It is a wonderful physiological phases in which rapid fetal development takes place within the mother womb and a zygote develop into 3.175 kg of newborn baby within 40 weeks.UNICEF says antenatal care is essential for protecting the health of women and there unborn children. Through this antenatal care women gain knowledge regarding pregnancy period like nutritional supplementation, immunization etc. Nutritional act a major role in maternal and child health . To meet nutritional needs pregnant women need to consume a diet rich in vegetables, fruits, wholegrain and mineral supplements.

Adequate nutrition status during pregnancy give a successful outcome of pregnancy in terms of healthy baby and maintenance of a mother health. During course of pregnancy adequate food supplementation is an benefit healthcare for maternal and child health. Intake of fluids, fibers , sodium and salt, protein, vitamins, fat- soluble vitamins ( vitamin A, D, E, K), water soluble vitamin (vitamin B12, B6, Thiamine, Riboflavin, Niacin) Vitamin C, folate, minerals it helps a pregnant women to maintain good health and to bear a healthy babies. Based on the trimesters of fetus nutritional requirements are need in order to maintain a safe full antenatal periods. During fetal development, there is a increased need to provide nutritional demands in sequence to overt nutritional deficiencies. Nutrition persistence can be encountered by an serviceable consumption of food in a healthy diet, and use of food supplements.

In first trimester folic acid intake a notable role in pregnancy span. It is accessible in the form of leafy vegetables such as spinach as well as citrus fruit to insure that you have sufficient folate in your diet. Folate (or folic acid ) is dominant in the time of embryonic development of nervous system, which typically / conventionally take place in the time of first few weeks of fetal development.In second and third trimesters calcium support to mold, preserve and enhance the bones. If a pregnant mother fails to take appropriate amount of calcium then, the developing fetus may start to pull calcium from the mothers bones. This can be a causes ( or ) risk for developing osteoporosis in mothers later life. Each day there should be a intake of at least 1000 mg of calcium. Go through 2 glasses of low fat high calcium milk ( 500 mg / 250 ml ) to composite regular calcium requirement vitamin D helps the body to better soak the ingested.

Iron is a significant nutrition for the forming of the placenta and fetus. Pregnant women need to take about 30 mg/ day of iron during pregnancy to avert iron deficiency anemia . Iron plays a major role in increasing the number of erythrocytes in the mother. Iron deficiency is one of the most common causes of anemia worldwide, particularly among women in developing countries. In developed countries, 10%–30 % of postnatal women are anemic, while in India, the prevalence of anemia among postnatal women ranges from 26.5 % to 96.4 % across different states. Although the iron requirement after childbirth is lower than during pregnancy, it is still imperative to replenish the Iron lost during pregnancy and childbirth. If left untreated, postnatal anemia can have severe consequences for both the mother and her infant. Physical symptoms such as fatigue, altered endocrine functioning, and low immunity to infection impede lactation. Cognitive impairment, irritability, and postpartum depression associated with anemia can also negatively impact maternal-infant bonding and reduce the mother's overall quality of life. Postpartum anemia is a significant public health concern that can be prevented and treated with IFA supplementation. The World Health Organization(WHO) recommends oral iron supplementation alone or a combination of Iron with Folic Acid for postpartum women for a duration of 6–12 weeks after childbirth to reduce the risk of anemia in Low and Middle-Income Countries. India has implemented various government programs to address anemia. However, despite these efforts, the prevalence of postnatal anemia in India remains unacceptably high. The efficacy of these programs relies on the adherence of postnatal women to IFA supplementation. According to the National Family Health Survey (NFHS)-5, only 26.0 % of pregnant women in India adhered to IFA supplementation. However, no data on adherence to IFA among postnatal women are available.

While many Studies have focused on the prevalence of anemia and compliance with IFA during pregnancy, very few have examined postnatal women. Postnatal care is a crucial component of maternal and child health programs. Implementing strategies to promote adherence among poorly compliant women can prevent long-term complications of anemia among postnatal women and their children. Therefore, the present study aimed to assess postpartum women's compliance with IFA supplementation and identify their barriers. This study is the first of its kind in India.

## OBJECTIVES:

- To assess the pre test and post test level of knowledge regarding food supplementation during antenatal period among pregnant women.
- To assess the effectiveness of planned teaching programme on knowledge regarding food supplementation during antenatal period among pregnant women.
- Find association between post test level of knowledge regarding food supplementation during antenatal period among pregnant women with their selected demographic variables.

## NULL HYPOTHESIS:

**$NH_1$:** There is no significant difference between the pre test and post test level of knowledge regarding food supplementation during antenatal period among pregnant women.

**$NH_2$:** There is no significant difference between the post test level of knowledge regarding food supplementation during antenatal period among pregnant women with their selected socio-demographic variables.

## METHODOLOGY

A quasi-experimental research design study was carried out in this study. The subjects were selected by non-probability purposive sampling technique. Total sample 50 participants (Antenatal mothers attending AN OPD). To assess the level of knowledge regarding food supplementation before and after planned teaching programme was assessed by using self-structured questionnaire.

**TABLE 4.1:** Frequency and percentage distribution of demographic variables among pregnant women**.**

**N=50**

| S.NO | DEMOGRAPHIC VARIABLE | FREQUENCY (N) | PERCENTAGE (N%) |
|---|---|---|---|
| 1. | **Age** | | |
| | a. 18 – 25years | 25 | 50% |
| | b. 26 – 30 years | 19 | 38% |
| | c. 31 – 35 years | 6 | 12% |
| | d. 35 above | 0 | 0% |
| 2. | **Educational status** | | |
| | a. No formal education | 1 | 2% |
| | b. Primary school | 1 | 2% |
| | c. Secondary school | 4 | 8% |
| | d. Higher secondary school | 14 | 28% |
| | e. Graduate and above | 30 | 60% |
| 3 | **Occupation** | | |
| | a. Unemployed | 35 | 70% |
| | b. Daily wage labour | 5 | 10% |
| | c. Self employed | 5 | 10% |
| | d. Private sector employee | 5 | 10% |
| | e. Government employee | 0 | 0% |
| 4. | **Weeks of gestation** | | |
| | a. 1– 4weeks | 5 | 10% |
| | b. 5– 8weeks | 5 | 10% |
| | c. 9– 12week | 40 | 80% |
| 5. | **Number of pregnancies** | | |
| | a. First pregnancy | 28 | 56% |
| | b. Second pregnancy | 22 | 56% |
| | c. Third pregnancy | 0 | 0% |
| 6 | **Family monthly income status** | | |
| | a. BelowRs.10,000 | 26 | 52% |
| | b. Rs.10,001– Rs.20,000 | 19 | 38% |
| | c. AboveRs.20,001 | 5 | 10% |

| S.NO | DEMOGRAPHIC VARIABLE | FREQUENCY (N) | PERCENTAGE (N%) |
|---|---|---|---|
| 7 | **Type of family** | | |
| | a. Nuclear family | 18 | 36% |
| | b. Joint family | 32 | 64% |
| | c. Extended family | 0 | 0% |
| 8 | **Dietary pattern** | | |
| | a. Vegetarian | 11 | 22% |
| | b. Non– vegetarian | 39 | 78% |
| 9 | **Any past history of nutritional deficiencies** | | |
| | a. Yes | 1 | 2% |
| | b. No | 49 | 98% |
| 10 | **Previous knowledge about nutritional supplementation** | | |
| | a. Yes | 18 | 36% |
| | b. No | 32 | 64% |
| **11** | **If yes, the source of information** | | |
| | a. Healthcare provider | 6 | 12% |
| | b. Family/ Friends | 12 | 24% |
| | c. Internet / Social media | 0 | 0% |
| | d. TV/Radio | 0 | 0% |
| | e. Previous exposure | 0 | 0% |

In age in years Among 50 sample 25(50%) belongs to 18 – 25years, 30 (60%) belongs to Graduate and above, 35(70%) belongs to Unemployed, 40(80%) belongs to 9– 12weeks of gestation, 28(56%) belongs to First pregnancy, 26 (52%) belongs to Below Rs.10,000, 32 (64%) belongs to Joint family, 39(78%) belongs to Non– vegetarian, 49 (98%) belongs to no any past history of nutritional deficiencies and If yes, the source of information 12 (24%) were from Family/ Friends.

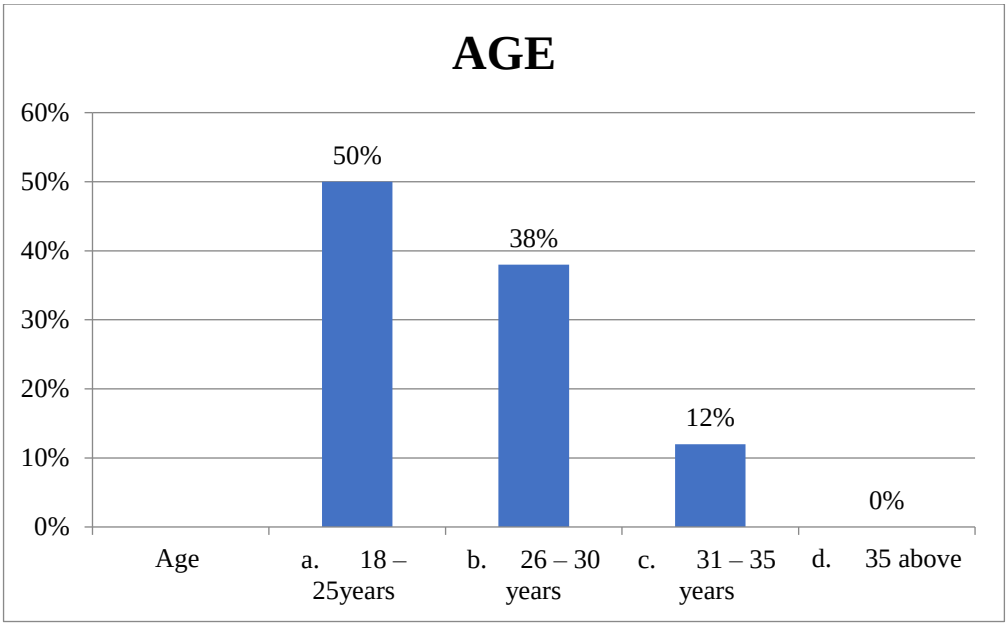


**Diagram 4.1.1** depicts the percentage distribution of Age

**Table 4.3: Effectiveness of planned teaching program on knowledge regarding food supplementation during antenatal period.**

**N=50**

| **Pre test** | | **Post test** | | **Mean difference** | **Standard error** | **T Value** |
|---|---|---|---|---|---|---|
| **Mean** | **Standard deviation** | **Mean** | **Standard deviation** | | | |
| 12.78 | 4.4 | 22.74 | 5.202 | 9.96 | 0.95 | 1.677 |

**** p<0.05 significant**

This table 4.3 depicts that pre test mean score was 12.78 with standard deviation of 4.4 and the post test mean score was 22.74 with standard deviation of 5.202. The mean difference is 9.96 with a standard error of 0.95. The t value is 1.677 shows significance at the $p < 0.05$ level. So there is significant difference between pretest and post knowledge.

## RESULT:

The study fining reveled that, the mean difference in level of knowledge regarding food supplementation between before and after planned teaching programme difference was assessed to be highly statistically significant (p value <0.05) and there is significant association between post test level knowledge with age, educational qualification, weeks of gestation, no.of pregnancies, monthly family income, type of family, dietary pattern, any past history of nutritional deficiencies, previous knowledge about nutrition supplementation and source of information and there is no significant association between post test level knowledge with occupation.

## DISCUSSION:

Quasi-experimental Pre-test post-test design was used in this study. Non-probability Purposive sampling technique was used and 50 Pregnant women were selected on the basis of inclusion criteria as participants. The study was conducted for period of 4 weeks at Radhapuram PHC, Villupuram district. Questionnaire was given to the participants. The investigator introduced herself, explained the purpose of the study and the investigator obtained written contents from the participants. Planned teaching programme was given for the participants for eight days. Post test was done after 7 days.

## CONCLUSION

The finding of the study Shows that the pre-test mean was 9.92 with the standard deviation of 5.29 and the post-test mean was 17.42 with the standard deviation of 6.54. The mean difference of pre-test and post-test was 7.5 with the standard error of 0.49. The 'T' value was 1.677 it shows highly significant at P value of <0.05. The study concluded that planned teaching programme was effective in promoting knowledge regarding food supplementation during antenatal period among pregnant women.

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