



A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING IRON FOLIC ACID SUPPLEMENTS AMONG PREGNANT WOMEN IN SELECTED AREAS OF DISTT. MANDI (H.P)

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ABSTRACT Knowledge regarding iron folic acid supplements play a vital role in pregnant women. **Aims and objectives:** the study aim to assess the effectiveness of structured teaching programme on knowledge regarding iron folic acid supplements among pregnant women in selected areas of distt. Mandi (H.P).the objectives of the study was to assess knowledge regarding iron folic acid supplements among pregnant women, to assess the effectiveness of structured teaching programme on knowledge regarding iron folic acid supplements among pregnant women and to find out the association between knowledge regarding iron folic acid supplements among pregnant women and their selected socio-demographic variables. **Material and methods:** pre experimental design(one group pre-test post –test) was used to collect data from pregnant women. A total of 30 pregnant women were enrolled into the study by using purposive sampling technique (non probability). The self structured questionnaire was used to assess the knowledge regarding iron folic acid supplements. **Result:** the results of the study dealt that majority 25(83.3%) pregnant women in pre test had inadequate knowledge regarding iron folic acid supplements. After post test majority of 28(93.3%) pregnant women had adequate knowledge regarding iron folic acid supplements associated with age (0.033), residential area (0.513), religion (0.513), occupation status (0.696), type of family (0.016), dietary habits(0.276), number of pregnancy(0.016). The chi square value shows that there is significant association between score level and socio demographic variable (age in year and no. of pregnancy). the calculated chi square are more then the table value at the 0.05 level of significant.

KEYWORDS :

INTRODUCTION

Folic acid is a nutrient in the vitamin B complex that the body needs in small amounts to function and stay healthy. Folic acid helps to make red blood cells. It is found in whole-grain breads and cereals, liver, green vegetables, orange juice, lentils, beans, and yeast. Folic acid is water-soluble (can dissolve in water) and must be taken in every day. Not enough folic acid can cause anemia (a condition in which the number of red blood cells is below normal), diseases of the heart and blood vessels, and defects in the brain and spinal cord in a fetus. Folic acid is being studied with vitamin B12 in the prevention and treatment of cancer. Also called folate.¹

World health organization(WHO) has define iron folic acid supplement as “a nutrient in the B complex that the body need in small amounts to function and stay healthy”.

Folate and folic acid are forms of vitamin B9 used for deficiency and to prevent pregnancy complications. Folic acid is used for preventing and treating low blood levels of folate (folate deficiency) and high blood levels of homocysteine (hyperhomocysteinemia). Women who are pregnant take iron folic acid to prevent serious birth defects such as spina bifida. Iron folic acid is also used for many other conditions including depression, stroke, decline in memory and thinking skills etc.²

Iron is one of the micronutrients which is involved in numerous enzymatic processes that plays essential roles in the transfer of oxygen to tissues. Iron deficiency causes anemia. Anemia is a very common condition worldwide, affecting 22% of women of childbearing age in Europe and as much as 50% in developing countries.³

Pregnancy is a period of significant increase in iron requirement over and above the non-pregnant state because during pregnancy, maternal iron requirements include 300-350mg for the fetus and the placenta, 500mg for the expansion of the maternal RBC mass, and 250mg associated with blood loss during labour and delivery.⁴

The requirement for iron increases gradually from 0.8mg/d in the first trimester to 7.5mg/d in the third trimester. yet the average daily absorption of iron from diets is only 1-5mg. Due to increase iron requirement pregnancy is also a period of increase risk for anemia. Thus high proportion of women become anemic during pregnancy. According to recent studies, folic acid supplementation during pregnancy reduce the risk of congenital heart disease and support proper development of the placenta, The world health organization (WHO) recommends folate supplementation for pregnant women, 400µg/d from early pregnancy till 3 months . The U.S. Public Health Service and CDC recommend the same for all women of childbearing age (15-45) to prevent spinal bifida and anencephaly. A higher supplementation dose, 5 mg/day is recommended in women who have increased demands for folate (multiple pregnancies, hemolytic disorders, folate metabolism disorders) and in women who are at an increased risk of NTDs

(personal or family history of NTD, pre-gestational diabetes, epilepsy on valproate or carbamazepine). Iron folic acid helps the development of neural tube growth. The neural tube is what develops into the baby's brain and spinal cord.

Each year, approximately 4000 pregnancies result in spina bifida or anencephaly. Folic acid supplementation has been shown to reduce the annual number of NTDs affected pregnancies by 50 to 70%. Despite evidence, most women are no aware that folic acid prevents neural tube defects and its supplementation rates have remained too low. Vitamin B9 (folic acid and folate) is essential to numerous bodily functions.⁵

To prevent these defects, a daily supplement of 400 micrograms iron folic acid is recommended starting a month before conception to the end of the first trimester. A mother with a previous NTD's offspring should consume 4000 micrograms of iron folic acid per day .Adequate folate intake during the preconception period (which is the time right before and just after a woman becomes pregnant) helps protect against a number of congenital malformations, including neural tube defects (which are the most notable birth defects that occur from folate deficiency).⁶

The necessity of this study was to create awareness in community regarding the hidden hunger by creating awareness regarding importance of this micronutrient deficiency (folic acid) especially in the most vulnerable group that is women of child bearing age (21-42 years of age) visiting community areas.

Need For The Study.

The main needs of increasing awareness for folic acid supplements are: It help in educating the pregnant women.

It help in preventing the risk of several birth defects, including neurologic, cardiac, urinary and other congenital anomalies in the newborn.

It protects both the baby and mother from anemia caused due to its deficiency.

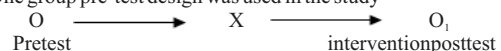
METHODOLOGY

Research approach

The research approach was quantitative in nature as it evaluate the effectiveness of structured teaching programme on knowledge regarding iron folic acid supplements among pregnant women.

Research design

One group pre-test design was used in the study



O -pretest level of knowledge regarding iron folic acid supplements among pregnant

X – the intervention was structured teaching programme on iron folic acid supplements.

O₁ –post test level of knowledge regarding iron folic acid supplements among pregnant, assessed after 7 days.

Research Variables

Independent Variable-

Structured teaching programme regarding iron folic acid supplements .

Dependent Variable-

Knowledge regarding iron folic acid supplements among pregnant women.

Socio Demographic Variable-

age, residential area, religion, educational status, occupation , type of family, dietary habits ,number of pregnancy , source of knowledge.

Research setting

The study was conducted among pregnant women of Plahi, Sorya, Dhanotu villages of Distt. Mandi.

Population

The population of our study were pregnant women of Plahi, Sorya, and Dhanotu.

Sample

The pregnant women with the following inclusive criteria were selected for the study.

Invlusive criteria

Pregnant women who were:

- Present at the time of data collection.
- Willing to participate in the study.

Sample size: 30

Sampling technique: Purposive sampling technique was used to select the sample.

Tools description

I selected socio Demographic variables of pregnant women and it includes Age, Residential area, religion, Education, Occupation, dietary habit, number of pregnancy Source of information.

II Self structured knowledge questionnaire to assess the knowledge regarding iron folic acid supplements among pregnant women. This section consisted of 30 items of self structured knowledge questionnaire, each item has 4 options and only 1 option was correct. Each correct response carried 1 score and incorrect response carried 0 score.

Scoring interpretation:

Adequate	21-30
Moderate	11-20
Inadequate	0-10

Ethical clearance

Ethical clearance for the study was obtained from the institutional ethical committee.

Findings

The study revels that Out of 30 pregnant women most (30%) of pregnant women were in the age group 28-30 years. Most 93%of pregnant women were in rural area and 6.7% in urban area. Most 93.3% of pregnant women were belonging to other religion .About 100% of women had higher secondary education. About 43.3% women were house maker , 13.3% work in private sector. About 50% women live in joint family 40% in nuclear family and 10% in extended family . About 36.6% of women were vegetarian and 33.3% were non vegetarian and 30.0% were egetarian.

23.3% of women were primigravida and others were multigravida. The pregnant women who had got information about iron folic acid supplement are 100% from health personnel.

The mean value with SD that is 8.73+1.507 for pre test and 24.23 +2.459 for post test and the mean difference id 15.500 at the level of p>0.05

A significant association between the age and number of pregnancy and their selected socio demographic variables at the significance level of P<0.05.

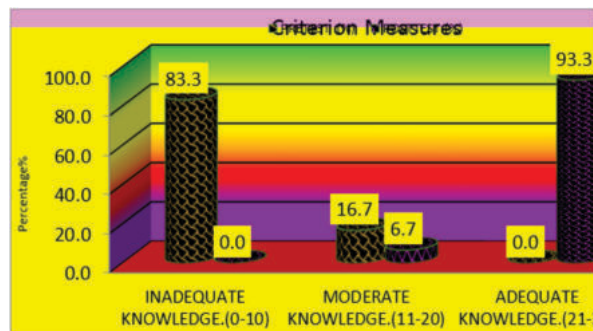


Figure 1:frequency and percentage distribution of pre test and post test level of knowledge on iron folic acid supplements

Figure 1 describe that in the pre test, a majority of pregnant women nearly 83.3% had inadequate level of knowledge only 6.7 % of the pregnant women had moderate level of knowledge and 93.3% of pregnant women had adequate level of knowledge in post test .There was a significant difference in the post test level of knowledge on iron folic acid supplements among pregnant women which was statically significant at p<0.05.

DISCUSSION

The first objective of the study was to assess knowledge regarding iron folic acid supplements among pregnant women:

the findings of the study showed that in pre test out of 30 pregnant women, most 83.3% pregnant women had inadequate knowledge regarding iron and folic acid supplements and in post test most of them 93.3% pregnant women had adequate knowledge regarding iron and folic acid supplements.

The second objective of the study was to assess the effectiveness of structured teaching programme regarding iron folic acid supplements among pregnant women

The study shows that in post test shows that the structured teaching programme regarding iron and folic acid supplements among pregnant women were effective

The third objective of the study was To find out the association between knowledge regarding iron folic acid supplements among pregnant women and their selected socio-demographic variables.

The stusy shows that out of 30 pregnant women most (30%) of pregnant women were in the age group 28-30 years. Most 93%of pregnant women were in rural area and 6.7% in urban area. Most 93.3% of pregnant women were belonging to other religion .About 100% of women had higher secondary education. About 43.3% women were house maker , 13.3% work in private sector. About 50% women live in joint family 40% in nuclear family and 10% in extended family . About 36.6% of women were vegetarian and 33.3% were non vegetarian and 30.0% were egetarian. 23.3% of women were primigravida and others were multigravida. The data shows that all the pregnant women were heard about iron folic acid supplements from health personnel's.

CONCLUSION

The result of the study revealed that knowledge regarding iron folic acid supplements among pregnant women was adequate. Also, the structured teaching programme significantly improved the knowledge of pregnant women regarding iron folic acid supplements, so other teaching strategies can used to increase knowledge regarding folic acid supplements.