

A Study To Assess Effectiveness of Health Awareness Program on Knowledge Regarding Management of Anemia Among Antenatal Mother

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ABSTRACTS

Background: Anaemia in pregnancy is a major health problem in developing countries. More than two third of the pregnant women in India are anaemic and most of the times it is due to deficiency of iron and folic acid.

Material Methods: In this research study an evaluative research approach with pre- experimental one group pre-test-post-test design was used. The sampling technique was non probability convenience sampling is used to collect the 60 samples of antenatal mother and data collection done by administering the structured questionnaire. Data was analyzed by using descriptive and inferential statistics such as standard deviation, chi- test, and paired' test.

Results: With regards to the pre-test assessment, the score of (41.7 %) antenatal mother having moderate level of knowledge and (58.3%) antenatal mother having inadequate knowledge while in post-test (38.3%) of antenatal mother having moderate level of knowledge and (61.7%) having adequate level of knowledge nobody was found at the inadequate level. The obtained pre-test mean score was 10.16 and after HAP it increased up to 20.68 , the mean difference of the pre-test and post-test is 10.52 The pre-test SD was 2.42 and post-test SD 3.03. The obtained "t" test value 33.68, DF=99 significant at 0.05 level. It indicates that there is increased in the level of knowledge regarding management of anaemia after providing HAP. So we accept H_1 and conclude that there is significant difference between pre-test and post-test knowledge score of antenatal mother. The association of pretest knowledge score was only associate with the age, education, family income, No .of children others are not associate. Hence, H_2 is rejected and conclude that the pre-test knowledge score is not associated with the demographic variable of the samples in this study.

Conclusion: The awareness programme was effective among antenatal mother improving knowledge (t (99) =33.68) significant at 0.05 level regarding management of anaemia.

Keywords: Effectiveness, Health Awareness Programme, Knowledge, Antenatal mother, Management of anaemia.

1. INTRODUCTION

“It is health that is real wealth and not pieces of gold and silver”

- Mahatma Gandhi

Anemia in pregnancy is a major health problem in developing countries. More than two third of the pregnant women in India are anemic and most of the times it is due to deficiency of iron and folic acid. Study of anemia is a important because it is directly or indirectly responsible for maternal death (20 – 30 %) and it is associated with high perinatal loss. Anemic Patient have a poor tolerance for potential blood loss during delivery and are poor subject for surgery. For this purpose, screening for anemia is routine in all antenatal clinics.¹

According to WHO, anemia in pregnancy is present when the hemoglobin concentration in the peripheral blood is 11gm/100 ml or less..²

Anaemia is the commonest haematological disorder that may occur in pregnancy. It is reduction in the oxygen carrying capacity of the blood, which may due to (1) A reduce a number of red blood cells (2) A low concentration of haemoglobin (3) A combination of both. In 1972 the WHO expert group recommended that during pregnancy, only women with Hb level below 11gm% is considered anaemic. During pregnancy approximately 1,500 mg iron is needed for the increase in maternal haemoglobin (400-500 mg) The placenta and fetus (300 – 400mg) and Replacement of daily loss through urine, stools, and skin (250) Replacement of blood loss at delivery (200mg) and during lactation (1mg/day).¹

Anemia during pregnancy can easily be treated by adding iron or vitamin supplements to your daily routine. Preventing anemia during pregnancy is as easy as changing, or making additions, to your diet. Medical professionals recommend a pregnant woman eat 30 mg (at least three servings) of iron each day.³ According to WHO Non pregnant women Hb<12gm%. In pregnant women Hb level is <11 gm %.. 1st & 3rd trimester Hb level <11 gm necessary to pregnant women and 2nd trimester Hb <10.5 gm necessary. There are a 4 classification of anemia according to Hb concentration Mild Anemia (9– 10.9 %), Moderate anemia (7- 9 gm %), Severe anemia (<7 gm %), Very severe anemia (<4 gm %).³ Anemia a condition in which the number of red bold cell or the amount of hemoglobin is low. Iron is a necessary mineral for body function and good health. Every red blood cell in the body contains iron in its hemoglobin, the pigment that carries oxygen to the tissues from the lungs. a lack of iron in the blood can lead to iron- deficiency anemia, which is a very common nutritional deficiency in children& adolescents and Pregnant women.⁴

Iron-deficiency anemia doesn't develop immediately. Instead, a person progresses through stages of iron deficiency, beginning with iron depletion, in which the amount of iron in the body is reduced while the iron in RBCs remains constant. If iron depletion isn't corrected, it progresses to iron deficiency, eventually leading to Iron deficiency anemia.⁵

To prevent this iron deficiency anemia is to diagnose and correct the underlying cause of anemia and treat the iron deficit through diet and supplemental iron preparation. Supplemental iron is usually administered to increase iron available in the blood. Teaching the basics of a nutritionally balanced diet red meats, green vegetables, eggs, whole wheat products, and iron-fortified measures goes hand in hand with properly planned management such as life style modification, dietary management as well as medical management.⁶

Anemia is a major health problem in developing countries. Based on much literatures and investigators experience, it is felt that it is essential to give adequate knowledge regarding iron deficiency anemia and its prevention to pregnant women.⁷ Globally, anemia affects 1.62 billion people (95% CI: 1.50–1.74 billion), ratio of anemia affects 38% of pregnant women (32 Million women) 2011. The Prevalence Rate of Anemia 41.8 % among pregnant women and 56 million pregnant women is affected from anemia.⁸

India is on top of the list of nations with most anemic children and women. Anemia is the highest cause of maternal mortality (50%) in India and the associated cause is 20% of maternal death. Last year data in India, reported 45% of pregnant women suffering from the anemia. As might be expected, the prevalence of anemia is influenced by socioeconomic and geographic factors (e.g., poverty, marginal or famine diets, pregnancy rates, prevalence of malaria and haemoglobinopathies).⁹

Anaemia is public health problem Anaemia is a global public health problem affecting both developing and developed countries with major consequences for human health as well as social and economic development. It occurs at all stages of the life cycle, but is more prevalent in pregnant women and young children. In 2002, iron deficiency anaemia (IDA) was considered the most important contributing factors to the global burden of disease.¹⁰

2. OBJECTIVES

- To assess the pre test knowledge regarding management of anemia among antenatal mother.
- To assess the effectiveness of the Health awareness program regarding management of anemia among antenatal mother.
- To determine the association between pretest score with demographic variable.

3. MATERIAL AND METHODS

The research design used for the study was pre-experimental one group pre test post test design. The participant included 60 antenatal mother selected by using Non probability Convenient sampling Technique and according to inclusive criteria. The investigator used Self-Structured Questionnaire. In this tool there are 30 Questions from which the subject is asked to select one response. After obtaining formal administrative approval from the authorities and informed consent from sample the investigator personally collect the demographic data. The data analysis was done with the use of differential and inferential statistics. Chi square test was used to find put association of selected demographic variable with knowledge level of Management of anemia.

4. FINDINGS

Distribution of demographic variables: In this study, the highest percentage (65%) of antenatal mother were in the age group of 25-29 years, (23.3%) were in the age group of 20-24 years, (6.7 %) were age in the group of <20 year and (5 %) of antenatal mother were in the age group of >30 year. About education level: the highest number (80%) of antenatal mothers has taken primary education, (11.7%) of antenatal were illiterate, (8.3%) were studied up to secondary education and

none of them were graduated. Data pertaining to occupation depicted that the majority (58.30%) of antenatal mothers were house wife, (21.70%) was working in agriculture field and least (20%) numbers of antenatal mothers were working as a laborer. About religion, data indicate the highest percentage (71.70%) of antenatal mother were Hindu, (23.3%) of antenatal mother were Muslim, (5%) of antenatal mother belongs to other religion, none of them were Christian. Total (43.30%) of antenatal mother were nulliparous, (40%) of antenatal mother having 1 child, (16.70%) antenatal mother having 2 children.

Comparison of Pre Test and post Test Knowledge score

Out of 60 samples, in pre-test- 58.3% of the samples had Inadequate, 41.7% of the mothers had moderate and 0% of them had adequate knowledge, whereas in post-test- 61.7% of the samples had adequate, 38.3% of the mothers had moderate and 0% of them had inadequate knowledge.

SR. NO	Categories of knowledge score	Percentage	Pre test	Post test
1	Inadequate	<33%	58.3%	00%
2	Moderate	34-66%	41.7%	38.3%
3	Adequate	>67%	00	61.7%

Over all Pre test and Post test mean Knowledge scores, standard deviation & t- value: Among the respondents, mean value in pre-test was 10.16 which was increased to 20.68 in post-test after implementation of health awareness programme regarding management of anemia. The mean difference between pre-test and post-test was 10.52 Standard deviation found as 2.42 & 3.03 in pre-test and post-test respectively. The calculated “t” value 33.68 was greater than the tabulated “t” value at 0.05 levels. Data represent that there was significant difference between pre test and post test level of knowledge score and shows that the health awareness programme was effective.

Variable		Mean	Mean Difference	Std. Deviation	t- Value
Knowledge regarding Management Of Anemia	Pre-test	10.16	10.52	2.42	33.68
	Post-Test	20.68		3.03	

5. DISCUSSION

Ms. SWAPNA M K (2017) A Descriptive study on conducted on assess the knowledge and practices regarding Prevention of Anemia among antenatal Women attending selected Health Centres of Haryana, 100 Antenatal women participate in these study regarding Prevention on Anemia, The study revealed that 38% had good knowledge about prevention of anemia and 36% antenatal women were following good practices to prevent anemia in pregnancy.¹¹ Similar findings observed in present study, the study concluded that majority of antenatal mother were having inadequate level knowledge. The health awareness programme was effective among antenatal mother in improving knowledge (t=33.68) significant at 0.05 level regarding management of

anemia. Findings reveals the health awareness programme is effective to increase the knowledge of respondent and

Similar study was conducted by **Mulambalah ChrispinusSiteti, Siamba Donald Namasaka, et al in 2014** on prevalence of anaemia in pregnant mothers of various age groups and at different gestation periods visiting antenatal clinic.. A total of 320 blood samples were collected during the first and subsequent visits to antenatal. Out of all blood samples analyzed, 128 (40%) were anaemic of which 62.5% (n=80) were mildly anaemic cases whereas 37.5% (n=48) were moderately anaemic and no severe anaemic cases were detected. Anaemia was more prevalent (33.3% -60%) in second and third trimesters of pregnancy.¹²

A systematic random sampling also done by **Lokare, ViPushpa nod D Karanjekar** in 2012 on prevalence of anemia and the various socio demographic factors associated with anemia among pregnant women at an urban health center in Aurangabad city, India. A total of 352 pregnant women were selected in this study. Overall prevalence of anemia among the pregnant women was found to be 87.21%. Factors such as religion, level of education of women and their husbands and socioeconomic status were found to be significantly associated with the prevalence of anemia in pregnancy ($P < 0.05$).¹³ In present study also, finding reveals there is association between pre-test knowledge score with demographic variable of Age, Education, Occupation, Family income, Religion, Number of Children.

6. CONCLUSION

In the light of the study findings, it can be conducted that there was a statistically significant improvement in antenatal mother knowledge score after intervention, The implementation of an educational intervention was effective and significantly improved antenatal mother knowledge about management of anemia during pregnancy. Furthermore, the above mentioned findings proved and support the research hypothesis. the purpose of the study is evaluate the effectiveness of health awareness programme among 60 antenatal mother. The findings of the study concluded that majority of antenatal mother were having inadequate knowledge. The health awareness programme was effective among antenatal mother in improving knowledge (t (99) =33.68) significant at level 0.05 level regarding management of anemia. Finding reveals there effective to increase the knowledge of respondent and another findings reveals there is association between pre-test knowledge score with demographic variable of Age, Education, Occupation, Family income, Religion, Number of Children.

Ethical Approval

Informed consent was obtained from participant and assured for anonymity. since the study involved human subject, a formal ethical approval was received from institutional ethical committee.

Conflict of Intrest

The authors declare that there is no conflict to interest statement.

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