ORIGINAL RESEARCH PAPER
Volume-6 | Issue-10 | October-2017 | ISSN No 2277 - 8179 | IF : 4.176 | IC Value : 78.46
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

A study to assess the knowledge and practices regarding prevention of anaemia among antenatal women attending a tertiary level hospital in Pune

Nursing

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ABSTRACT

Background: Anaemia is one of the potentially lethal complications of pregnancy leading to large number of maternal and foetal loses but it is preventable and curable disease. Antenatal women should equip themselves with adequate knowledge about the prevention of anaemia and routine beneficial diet, hygiene and treatment practices to prevent the consequence of anaemia in pregnancy. The aim of this study was to find out the level of knowledge and practices regarding prevention of anaemia antenatal women and the correlation of knowledge and practice level with selected variables such as age, educational qualification, occupation, obstetrical score, no of antenatal visits and haemoglobin at first visit.

Method: Descriptive study was conducted on randomly selected 200 antenatal women of a selected tertiary level hospital of Pune. Knowledge and practice were analysed by structured interview schedule which included questionnaire on knowledge and self reported rating scale on practice.

Result: 69% had good knowledge about prevention of anaemia. 59.5% antenatal women were following good practices to prevent anaemia in pregnancy. There is a significant positive correlation between knowledge and practice. There is a significant relation between knowledge and practice with age, educational qualification and family income of study participants.

Conclusion: The current emphasis on health for all demands that every individual should be self sufficient and self reliant. Assessments of knowledge and practice and health education are essential step towards prevention of anaemia in pregnancy.

KEYWORDS

Acute Coronary Syndrome, Uric Acid, Prognostic Value

Introduction :

Anaemia in pregnancy is one of the leading causes responsible for maternal and perinatal morbidity and mortality. WHO has estimated that prevalence of anaemia among pregnant women is 14 % in developed and 51 % in developing countries. 65 -75% of population in India is affected with anaemia.

In India, anaemia is directly or indirectly responsible for 40 per cent of maternal deaths. There is 8 to 10 fold increase in MMR when the Hb falls below 5 g/dl. Early detection and effective management of anaemia in pregnancy can contribute substantially to reduction in maternal mortality. Maternal anaemia is associated with poor intrauterine growth and increased risk of preterm births and low birth weight rates.

The present study was descriptive in nature. The objectives of the study was to assess the knowledge and practice regarding prevention of anaemia among antenatal women, find the relationship between knowledge and practices regarding prevention of anaemia among antenatal women and assess the relationship between knowledge and practice with selected demographic variables.

Materials and methods:

Non experimental cross sectional descriptive study conducted in antenatal clinics of a selected tertiary care hospital in Pune. Hospital ethical committee permission was obtained. After taking informed consent 200 antenatal women were selected by systematic random sampling method. Knowledge and practice was assessed using structured interview schedule which included questionnaire on knowledge and self reported rating scale to assess the practice regarding prevention of anaemia.

Descriptive and inferential statistics was used to analyze the data

Results:

The results were computed using descriptive statistics such as mean, median, standard deviation, and inferential statistics such as Z test, ANOVA and Man Whitney 'U' test and co – relation coefficient to find out the correlation between knowledge and practice regarding prevention of anaemia

(I) Sample distribution as per demographic and baseline variables

Majority of the subjects belonged to 21 – 25yrs, educated up to X standard and house wives. 96.5% antenatal women have done registration in the first trimester. 75% of the study participants had more than 4 antenatal visits. Only 47.5% had Hb more than 11 gm% at the time of registration. Only 1 .5% of the study participants has done de-worming within 6 months before the present pregnancy

(ii) Knowledge regarding anaemia and its prevention

62(31%) antenatal women had average and 138 (69%) had good knowledge about prevention of anaemia. Most of the antenatal women, 128 (64%) had good knowledge and 71 (35.5%) had average knowledge on disease aspect of anaemia. 99% study participants had average or good knowledge on diet aspect of anaemia. All the antenatal women had average or above average knowledge regarding prophylactic treatment of anaemia.

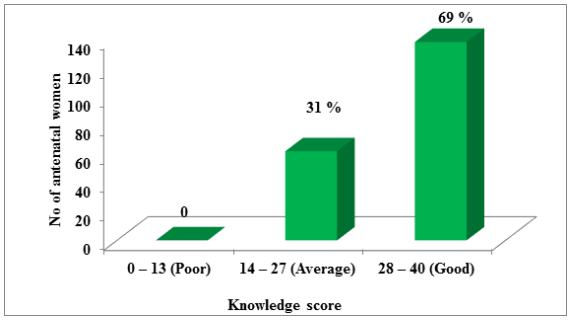


Fig 1:Distribution of antenatal women based on knowledge score

Tab 1 : Distribution of women based on knowledge about various important aspects of prevention of anaemia

Various aspects of anaemia	No of antenatal women f	%
Anaemia is reduced level of Haemoglobin	122	61
Minimum Hb required during pregnancy is 11 gm/dl	97	48.5
Birth spacing should be minimum 2 yrs	189	94.5
Anaemia can be prevented by iron rich food and iron tablets	199	99.5
Lemon increases iron absorption	10	5
Jaggery is the richest source of iron	150	75

Iron tablets prevent anaemia	189	94.5
Continue iron tablets till 6 weeks after delivery	33	16.5
Antenatal registration has to be done within 3 months	199	99.5

(i)\Practice regarding anaemia and its prevention

All the antenatal women were in the category of average or good practice. 119 (59.5%) antenatal women were following good practices to prevent anaemia in pregnancy. Average practices were found in 81 (40.5%) antenatal women.

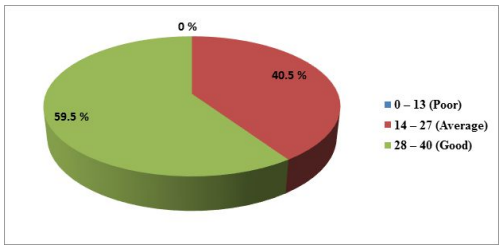


Fig 2: Distribution of practice score among antenatal women in study group

Detailed analysis revealed that majority of the women followed beneficial practices such as including green leafy vegetables and jaggery in diet, using iron utensils, hand washing before meals and after defecation, following regular antenatal visits and drug compliance. The data showed that most of women were taking iron and calcium tablets together or with milk products. Only 1.5% women have done de-worming.

Table 2: Distribution of antenatal mothers according to practices regarding diet n = 200

Diet Practices	Beneficial practices		Non beneficial practices	
	Frequency	Percentage	Frequency	Percentage
Made improvement in meal pattern in pregnancy	156	78	44	22
Use iron utensils for cooking	110	55	90	45
Includes jaggery in diet	142	71	58	29
Includes green leafy vegetables in diet	196	98	4	2
Skip meals	182	91	18	9
Habit of eating mud and charcoal	185	92.5	15	7.5
Avoid iron rich food	157	78.5	43	21.5

Table 3: Distribution of antenatal women according to practices regarding treatment

Treatment	No of antenatal women	Percentage
Regular antenatal visits	197	98.5
Intake of iron tablets	169	84.5
Take Vitamin C tablets along with iron tablets	3	1.5
Take iron tablets with lemon juice	1	0.5

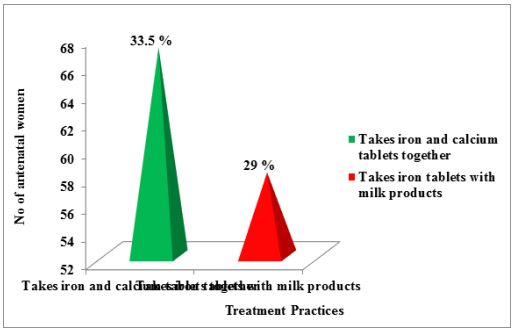
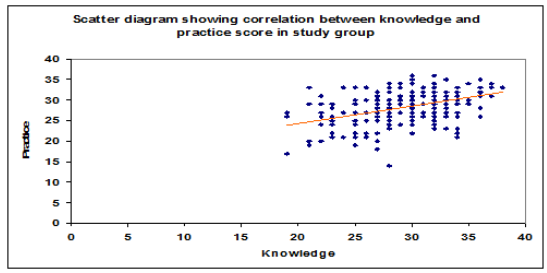


Fig 3 :Distribution of antenatal women according to non beneficial treatment practices

67 (33.5%) of antenatal women were taking iron and calcium tablets together. 58 (29%) of women were taking iron tablets with milk products that inhibits absorption of iron.

(i)Association between knowledge & practice regarding prevention of anaemia:

There was significant positive correlation between knowledge and practice score among the subjects (r = + 0.41) with p <0.01 implying that as knowledge increased, the practice is also proportionally increased.



(i)Association between knowledge and practice with selected variables

There is significant relation between knowledge and practice with age, educational qualification, family income i.e., p <0.05. But there was no statistically significant association between knowledge and practice with obstetrical score, number of antenatal visits and haemoglobin on registration as p value >0.05

Interpretation and conclusion:

This was a cross sectional descriptive study to assess the knowledge and practice regarding prevention of anaemia among antenatal women. All the participants were having average and above knowledge and practice regarding diet and disease aspect. There is positive correlation between knowledge and practices among study subjects. Knowledge and practice comparison with selected demographic data strongly emphasis that there is increase in knowledge and practice according to age, education qualification and family income. No correlation of knowledge and practice was found with selected variables such as obstetrical score, no of antenatal visit, Hb during first visit in study group.The findings were supported by a study conducted by Massawe S, Urass E, Lindmark G, Nystrom L in Dar-es-Salaam strongly support the present study findings that 88% of the subjects considered anaemia as a major health problem and 85% were aware of the causes and ways of preventing anaemia. 90% were aware of the advantages of early booking for antenatal care. The most frequently mentioned causes of anaemia were related to nutrition while intestinal parasites were mentioned by a few women.

The present study highlighted the importance of providing information to all the antenatal women in the clinics regarding beneficial and non beneficial practices to prevent anaemia in pregnancy. Even though drug compliance was good, faulty drug intake habits such as taking iron and calcium tablets together or with milk decreased the absorption and ultimately the desired outcome of the treatment. Only less number of the antenatal women has done de-worming before or during pregnancy. There should be mandatory preconception and antenatal counselling sessions of structured teachings to the antenatal women to identify the risk factors in pregnancy to reduce the enormous burden of anaemia in pregnancy.

The present study revealed that most of the antenatal women had average and good knowledge regarding diet and hygiene practices but they lag behind in knowledge and practice in prophylactic treatment to prevent anaemia. Hence the nurses must increase their efforts to impart more knowledge and create awareness on treatment to prevent anaemia in pregnancy. The current emphasis on health for all demands that every individual should be self sufficient and self reliant. There should be mandatory preconception and antenatal counselling sessions for the women to identify the risk factors in pregnancy and structured teachings to reduce the enormous burden of anaemia in pregnancy.

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