Original Research Paper

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A Study To Estimate The Prevalence of Anemia At The Antenatal Clinic of Sut Academy of Medical Sciences

Medical Science

KEYWORDS : Prevalence, Anemia, Antenatal

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ABSTRACT

Background . Anemia in pregnancy is a common problem in most developing countries. Nutritionalanemia, due to iron and folic acid deficiency, is directly or indirectly responsible for about 20% of maternal deaths in India. Objective. To estimate the percentage of anemia among the pregnant women attending the antenatal clinic at SUTAMS Trivandrum Methodology A cross sectional study to estimate the prevalence of anemia was conducted at the antenatal clinic of SUTAMS during the study period of June- July 20th 2014 by using pre-designed ,pre-tested structured schedule .A total of 100 pregnant women were personally interviewed and their serum Hb levels were obtained from the laboratory investigation report at SUTAMS. Statistical analysis were done by percentage and proportions, and the prevalence computed. Results :. A total of 64% of the study sample was found to be anaemic. Of this 85.90% suffered from mild anaemia,12.50% from moderate anaemia and 1.50% from severe anaemia. The anaemai prevalence was significantly higher among those subjects who were in there second trimester of pregnancy or belonging to 21-25 years of age . Conclusion A high prevalence of anaemia in pregnancy needs mandatory regular supply of iron and folic acid tablets to adolescent and pregnant women from fourth month of gestation onwards 3-6 months postpartum along with correction of other nutritional deficiencies and timely intervention for reducing the burden of related diseases.

Introduction Anemia is the condition in which the hemoglobin level/content in the blood is lower than the normal for age and sex of that individual[1] .According to WHO, normal hemoglobin level in the blood of males is 13-18g/dL and for females is 11.5-16.5g/dL.[2]The cut off value for pregnant adult women is 11g/dL.[3]Iron deficiency anemia is the most common form malnutrition in the world.[4]It is a leading cause of disease in girls and pregnant women in developing countries, leading to low birth weight which is in turn an important risk factor for infant mortality.[5]Prevalence of anemia in all the groups is higher in India as compare to other developing countries [6].

Objective .

To estimate the prevalence of anemia among the pregnant women attending the antenatal clinic of SUTAMS / Trivandrum.

Review of literature

In developing regions of the world, the prevalence of anaemia among pregnant women has been eliminated as 59% as ag ainst 14% in the developed regions.[7] Anaemia also increases with increasing parity; The study, 'Prevalence of Anaemia in Pregnancy conducted in Navodaya Medical College and Hospital and Govt. District Hospital, Raichur, during the period 01-09-2008 to 31- 10-2008 on 185 patients who visited the Obstetrics and Gynecology showed that the prevalence of anaemia is high (88.64%) and severe degree of anaemia is also seen in its incidence. [8]The knowledge about anaemia' and its complications during pregnancy was found to be very poor i.e. only 6.48% of cases have this kn owledge & 93.5% do not have this knowledge. A study by Nutrition Foundation of India & Defence Colony Maternity Centre, New Delhi, Detection & management of anaemia in pregnancy in an urban primary health care institution, during 2005-2006, revealed that over 80 percent of 3698 women who attended the antenatal clinic were anaemic.[9]The Prevalence of anaemia during pregnancy in district Burdwan, West Bengal', conducted by CARE, West Bengal, showed that 80% of the pregnant women in Kanksha and Ausgram II were anemic and 67% took iron and folates till varied periods.[10] The habit of iron and folates consumption improved with increasing duration of pregnancy.

Material and methods

Study Design Cross-Sectional Study

Study Setting SUT Academy of Medical Sciences, Vattappara

Study Subjects All the pregnant women attending the antenatal clinic at SUTAMS during the study period.

Study Period June- July 2014.

Sample Population 100 pregnant women.

Sampling method - Systematic random sampling.

Inclusion CriteriaAll pregnant women admitted to the obstetrics ward and/or attending the antenatal clinic at SUTAMS during the study period, willing to be interviewed

Data analysis Data was entered in SPSS 16.0 and analysed. The ICMR grading of severity of anaemia was used to classify anaemia as:

Grades of Anaemia	Haemoglobin value (g dl)
Mild	9-10.9
Moderate	7-9
Severe	<7
Very severe	<4

Results and discussion

Table 1. Prevalence of anaemia in the study population

	NO. OF CASES	PERCENTAGE
ANAEMIC	64	64%
NON-ANAEMIC	36	36%

Inference: Of the total study population comprising 100 pregnant women, 64 were found to be anaemic. This constitutes 64% of the study population

Table 2. Distribution of anaemia in the study poplation according to age

Age Group	Number of anaemic cases			Total	Percentage
	Mild	Moderate	Severe		
18-20	16	4	1	21	32.81%
21-25	31	3	0	34	53.12%
26-30	8	1	0	9	14.06%
31-35	0	0	0	0	0%
Total	55	8	1	64	100%

Inference: 53.12% of the total anaemia is distributed among the women belonging to the age group of 21-25 years,32.81% of anaemic cases belong to 18-20 years age group while 14.06% are in the age group of 26-30 years, no cases found in 31-35 age group.

Table 3. Distribution of study population according to trimester

	NO OF CASES HAVING ANAEMIA				PERCENTAGE
	MILD (10 - 10.9)	M0DERATE (7-9.9)	SEVERE (4-6.9)	TOTAL	
TRIMESTER First	14	3	0	17	26.56%
Second	22	3	1	26	40.62%
Third	19	2	0	21	32.81%
TOTAL	55	8	1	64	100%

Inference: 40.62% of the total anaemia is distributed among the women in the second trimester of their pregnancy ,32.81%of the total anaemic cases are in their third trimester of pregnancy, only 26.56% of total anaemia are found in the first trimester

Conclusion

A high prevalence of anaemia in pregnancy needs mandatory regular supply of iron and folic acid tablets to adolescent and pregnant women from fourth month of gestation onwards 3-6 months postpartum along with correction of other nutritional deficiencies and timely intervention for reducing the burden of related diseases.

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