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A Descriptive Study to Assess the Knowledge Regarding Anemia among Antenatal Mothers Attending Antenatal OPD at Civil Hospital, Jalalabad(W), Fazilka, Punjab

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ABSTRACT

Introduction: Anemia is one of the most frequent complications related to pregnancy. Normal physiologic changes in pregnancy affect the hemoglobin, and there is a relative or absolute reduction in Hb concentration. The most common true anemia during pregnancy are iron deficiency anemia (approximately 75%) and folate deficiency megaloblastic anemia, which are more common in women who have inadequate diets and who are not receiving prenatal iron and folate supplements. Severe anemia may have adverse effects on the mother and the fetus. Anemia with hemoglobin levels less than 6 gm/dl is associated with poor pregnancy outcome. Prematurity, spontaneous abortions, low birth weight, and fetal deaths are complications of severe maternal anemia. Nevertheless, a mild to moderate iron deficiency does not appear to cause a significant effect on fetal hemoglobin concentration. An Hb level of 11 gm/dl in the late first trimester and also of 10 gm/dl in the second and third trimesters is suggested as lower limits for Hb concentration. In an iron-deficient state, iron supplementation must be given and follow-up is indicated to diagnose iron-unresponsive anemia

Aim of study: The study aimed at assess the knowledge of anemia among antenatal mothers at civil hospitals in Jalalabad (w) Fazilka.

Material and method: Non experimental research approach and descriptive research design was used. Total 100 antenatal mothers were selected by convenience sampling technique from civil hospitals of Jalalabad (w) Fazilka. Structured knowledge questionnaire and self-reporting checklist was used to assess the knowledge and incidences of anemia among antenatal mothers and analyzed by using descriptive and inferential statistics.

Results: The findings of the study revealed that the mean knowledge score of antenatal mothers was 11.38±3.38. Good knowledge regarding anemia 34(68%) Excellent knowledge 07(14%) Average knowledge regarding 09(185) .

Conclusion: It is concluded that mothers has good knowledge regarding anemia in pregnancy.

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INTRODUCTION AND NEED OF STUDY

Introduction: Anemia during pregnancy is a public Health problem especially in developed countries and is associated with adverse outcome in pregnancy. WHO Has defined anemia in pregnancy as the Hemoglobin concentration of less than 11gm/dl. In a non pregnant state an adult women has about 200mg of iron in her body .However when she became pregnant, the demand of the iron increases by an additional 1000mg.[1] In India ,anemia during pregnancy is a significant public health problem, with 45.7%of pregnant women in Urban area 52% in Rural areas having Hemoglobin level 11gm/dl. Anemia is the underlying cause or contributing factors for 20-

40% maternal death in India which account 80% of maternal death attributed to anemia in South Asia.[2]

Among 200 pregnant women the age of the study varied from 21 years to 45 years. Mean age was 28 years out of 200 pregnant women, 168 were anemia and 32 Have Hb level with Normal Range. The Hb level in different age group were analyzed as normal, mild ,moderate and severe and it was seen that severe anemia was Reliability More prevalent in pregnant women.[3] Non-pregnant women have a lowest circulating blood volume. Iron deficiency is the most common cause of anemia worldwide and affects approximately billion people. It is the leading cause of tears lived in disability burden in women. Worldwide anemia is thought to affect 29% of non-pregnant women and 38% of pregnant women. Maternal anemia is considered a risk factor for pregnancy and can besides being related to highest miscarriage, prematurity, fetal death and anemia in the first year of life due to low iron stores. The predisposing factors include low socioeconomic status, HIV infection, and inadequate child spacing.

Need of study: Anemia is a associated with increased morbidity and mortality, poor birth outcomes, and impaired cognitive development. It is a widespread global health challenge in 2019, anemia prevalence was 29.9% in women of Reproductive age, equivalent to over half a Billion women aged 15-49 years.[4] Health Survey-4 (NFHS-4), the prevalence of anemia among antenatal women was 50.3% while it was 57.9% for postnatal women. India is home to the largest number of anemic pregnant women. Maternal anemia adversely impacts Maternal, neonatal, and child health outcomes.[5] Moreover, anemia and its related conditions have an intergenerational effects, characterized by repeating cycles of malnutrition and poverty in the long run. According to National Family accounting for about 80% of maternal death caused by anemia.[6] Maternal anemia is considered as risk factor for poor pregnancy outcomes. Studies have established that women with anemia are at increased risk of having Low birth (LBW) infants.[7] LBW is associated with poor health and nutritional outcomes later in life, such as poor growth and development. As well as increased morbidity and mortality in children. Furthermore, severe iron –deficiency anemia has been associated with preterm birth, poor anthropometric measures, fetal neural development, birth asphyxia and increased maternal mortality.[8]

Very few researches are done in India regarding knowledge and practice of anemia in pregnant women. This research will be fruitful to formulate the policy regarding the vulnerable group of society.

During our community posting we observed that most of the antenatal mothers were anemic, and most of the antenatal mothers have hemoglobin level less than 10gm/dl because of lack of knowledge regarding followed during pregnancy. So we decided to check the knowledge regarding anemia and provide diet education to prevent anemia in antenatal mothers that attending antenatal OPD at Civil Hospital, Jalalabad(w), Fazilka, Punjab.

MATERIALS AND METHODS :-

A quantitative non experimental and descriptive research approach and design was used to assess the knowledge regarding anemia in pregnancy from 50 antenatal mother attending antenatal opd by non-probability purposive sampling technique. Permission was taken from research committee of UION, Jalalabad(W), Fazilka, Punjab and SMO of Civil Hospital, jalalabad, Punjab. Self-structured questionnaire was the used for collection of data from samples. Analysis of data was done in accordance with objective laid down for the study using descriptive statistics.

RESULTS :-

Description of selected variables of antenatal mother attending opd at Civil Hospital, Jalalabad (W), Fazilka, Punjab.

N=50

S.NO.	Demographic Variables	Frequency(n)	Percentage(%)
1.	Age(in years)		
	a) ≤20	07	14%
	b) 21 – 25	13	26%
	c) 26 – 30	21	42%
	d) ≥ 30	09	18%
2.	Age at time of marriage (in years)		
	a) 18-20	19	38%
	b) 21 – 25	17	34%
	c) 26 – 30	13	26%
	d) ≥ 30	01	02%

3.	Residence a) Urban b) Rural	 39 11	 78% 22%
4.	Religion a) Sikh b) Hindu c) Muslim d) Christian	 31 15 02 02	 62% 30% 04% 04%
5.	Education a) Uneducated b) Matric c) Senior d) Graduate or above	 03 19 10 18	 06% 38% 20% 36%
6.	Occupation a) Housewife b) Self employee c) Government employee d) Other employee	 42 04 04 00	 84% 08% 08% 00%
7.	Socio economic status a) Below poverty line b) Lower class c) Middle class d) Upper class	 04 14 29 03	 08% 28% 58% 06%
8.	Gravida a) One b) Two c) Three d) Four or above	 42 06 01 01	 84% 12% 02% 02%
9.	Age of last child a) No child b) 1 c) 2 d) 3 or above	 25 05 06 14	 50% 10% 12% 28%
10.	Gestational age a) First trimester b) Second trimester c) Third trimester	 03 13 34	 06% 26% 68%

Table- 1 depicts that out of 50 antenatal mothers, Maximum 21 (41%) were in age group of 26-30 years and minimum was 7 (14%) in the age group ≤ 20 years followed by 13 (26%) in the age group of 21-25 years and 9(18%) in the age group of ≥ 30 years. According to age at the time of marriage, maximum 19(38%) antenatal mothers were married at age of the 18-20 years. And minimum am were 1(2%) Married at age of ≥30 years followed by 17(34%) antenatal mothers married at age of 21-25 years and 13(26%) antenatal mothers at age of 26-30 years. As per Residence, maximum 39 (78%) antenatal mothers from Urban area and 11(22%) were from rural area. According to religion, maximum 31 (62%) antenatal mothers were Sikh, a minimum antenatal mothers were Muslim and 2 (4%) and Christian 2 (4%) followed by 15 (30%) were Hindu. Regarding education, maximum 19(38%) antenatal mothers were matric and minimum 3 (6%) antenatal mothers were uneducated followed by 18(36%) graduated and 10(20) were senior. According to Occupation, maximum 42 (84%) antenatal mothers were housewife and there was no antenatal mothers were followed by 4(8%) were self-employee and 4 (8%) were government employees. Based on socioeconomic status, maximum 29 (58%) antenatal mothers were belong to middle class and minimum antenatal mothers 3 (6%) were up belong to upper class followed by 14(28%) were belong to lower class and 4 (8%) were belong to below poverty line. In accordance with Gravida, maximum 42 (84%) antenatal mothers were one gravida, minimum antenatal mothers were There gravida followed by 6(125%) with two gravida. According to age of last child maximum 25 (50%) antenatal mothers were no child minimum 5 (10) were antenatal mothers were one child followed by 14 (28%) antenatal mothers were 3 or above child and 6 (12%) were two child. According as per Gestational age Maximum antenatal

Mothers 34 (68%) Maximum antenatal Mothers were in third trimester, minimum antenatal mothers in 3(6%) in first trimester followed by 13(26%) second trimester.

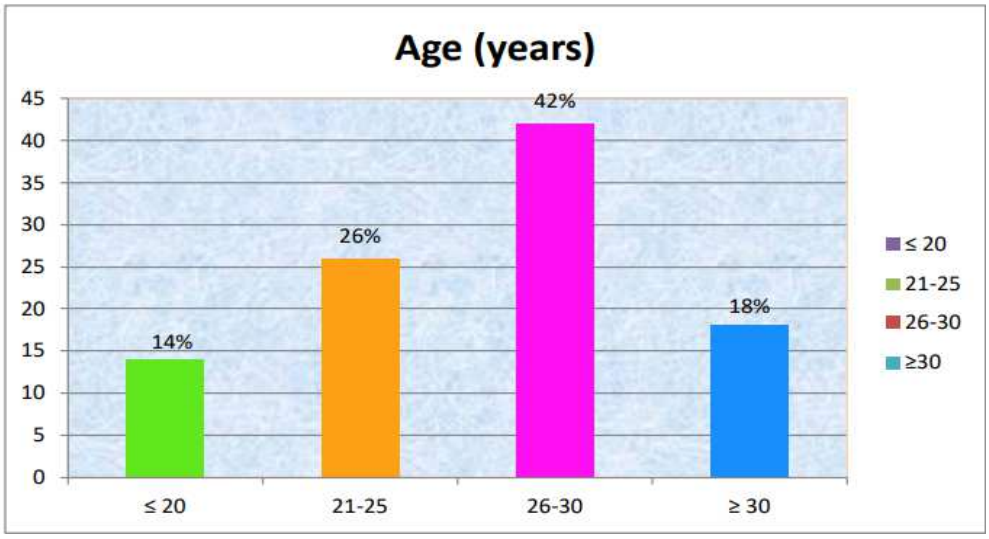

Figure 1: Bar graph showing percentage distribution of subjects according to age

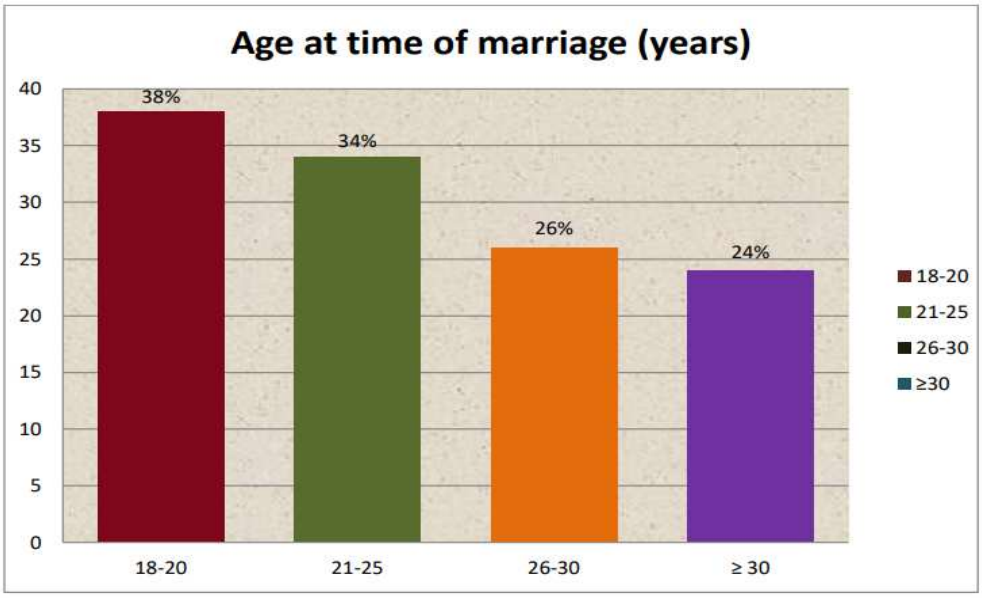

Figure 2: Bar graph showing percentage distribution of subjects according to age at time of marriage.

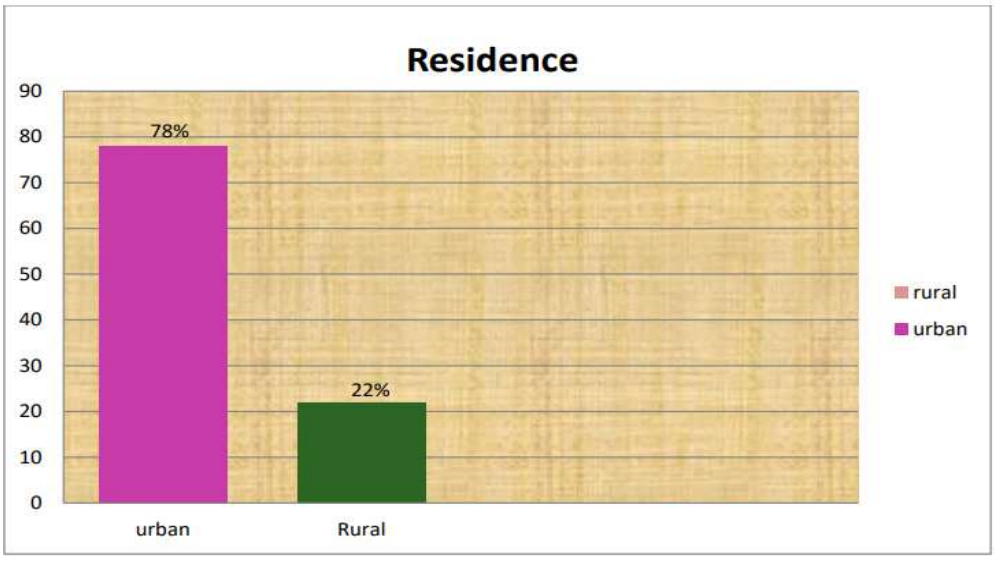

Figure 3: Bar graph showing percentage distribution of subjects according to residence.

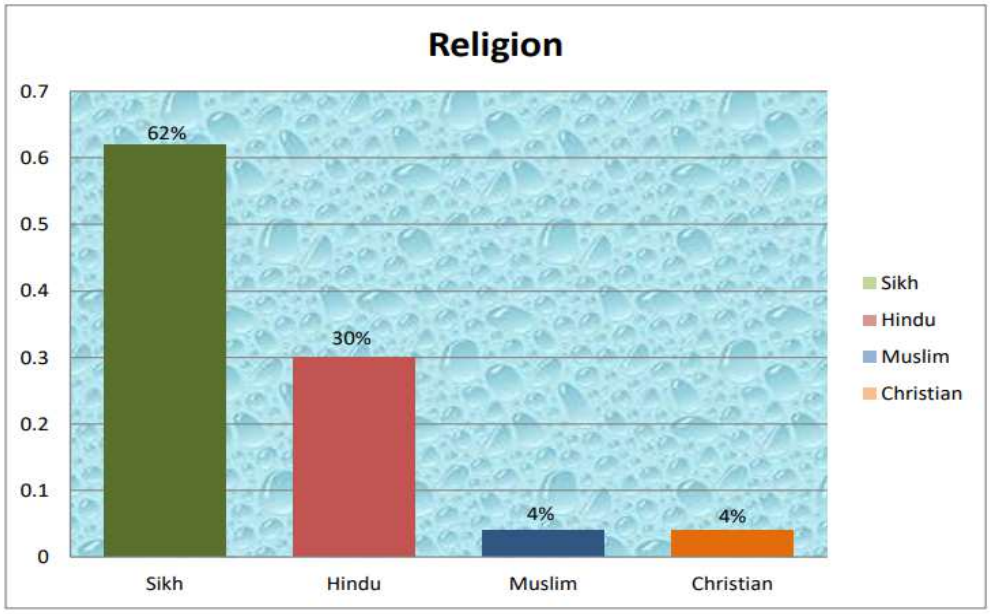

Figure 4: Bar graph showing percentage distribution of subjects according to their religion.

Table 2: Mean and standard deviation of knowledge score antenatal mothers attending OPD at civil hospital Jalalabad.

N=50

MEAN	STANDARD DEVIATION
11.38	3.38

Maximum score = 20 Minimum score = 0

The data present in table indicate that the mean score of knowledge was 11.38 with standard deviation 3.38.

Table 3: Frequency and percentage distribution of antenatal mothers attending OPD at civil hospital in Jalalabad in terms of level of knowledge regarding anemia.

Level of Knowledge	Knowledge Score	Frequency	Percentage (%)
Excellent	≥ 15	07	14%
Good	8-14	34	68%
Average	≤ 7	09	18%

Maximum Score = 20 Minimum Score = 0

Table 3 and Figure 5: Shows the maximum 34 (68%) antenatal mothers had good knowledge regarding anemia and 07(14%) having excellent knowledge and 09 (18%) having average knowledge regarding anemia. The overall knowledge showed that 34 (68%) antenatal mothers had good knowledge regarding anemia.

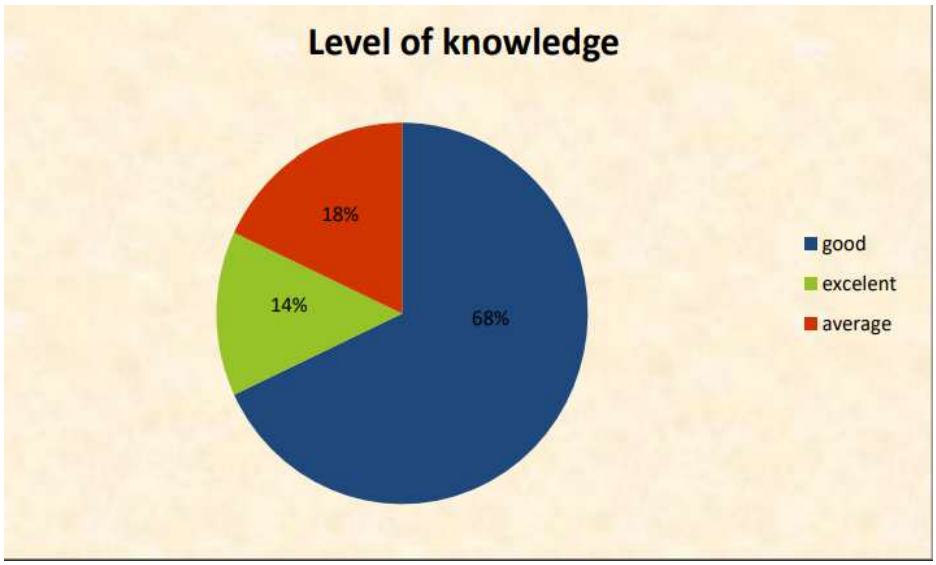

Figure 5: Pie chart showing percentage distribution of study according to knowledge

DISCUSSION

Objective: To assess the knowledge regarding anemia among antenatal mothers.

In the present study, investigator found that majority of mothers i.e. 34(68%) had good knowledge regarding anemia,07(14%) having excellent knowledge and 09(18%) having average knowledge. This was similar to the findings of the study done by priyesh kumar gautam et.al.(2023) which shown majority 34 (56.6%) of them had moderately adequate knowledge, 24(40%) of them had adequate level of knowledge and 2 (3.3%) of them had inadequate knowledge. Our study is supported by similar study conducted by Bhuvneshwari G (2014) The study result showed that antenatal mothers 6(12%) of them had in a adequate knowledge & 32(64%) mother had moderately knowledge&12(24%) of them had adequate knowledge on anemia. Our study is supported by similar study conducted by V. Inda (2015) The study result shows among 100 samples (21%) were having inadequate knowledge (71%)were having moderate knowledge (8%) were having adequate knowledge.

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

SUMMARY :-The study was conducted in civil hospital of Jalalabad Punjab. The sample was 50 antenatal mothers attending antenatal OPD at civil hospital, Jalalabad(w), Fazilka, Punjab. Antenatal mothers had mean knowledge score 11.38 and standard deviation 3.38.

CONCLUSION

The present study conducted that the antenatal mothers had mean knowledge score 11.38 ±3.38.

IMPLICATION

The findings of the present study suggest many implication for the nursing services, education, administration and research.

Nursing Education:

1. Nurses must aware of high prevalence of anemia among pregnant women and create awareness of anemia in pregnancy
2. Nurses should be equipped to provide comphresive nutritional counseling to pregnant women, educating them on iron rich foods, dietary modification to improve iron rich absorption.
3. Nursing education should emphasize te importance of patience education regarding the sign & symptoms of anemia.
4. Workshops, symposium, lectures, conferences, seminars, and discussion programmed should be organized for student nurses.

Nursing Practice

1. Regularly assess hemoglobin levels during antenatal visits to identify anemia early.
2. Address concern related to fatigue, shortness of breaks and other symptoms associated with anemia.
3. Advice appropriate iron supplemnts based on individual needs and monitor compliance.
4. It is the community health nurse, who is core member in spending most of the time within the community, hence it is the responsibility of the nurses to provide antenatal care during anemia in antenatal mothers.
5. Workshop, demonstration by nursing personal or anemia among antenatal mothers. Should be made ongoing process in clinical area.
6. Inservice education/ continuing education should be planned at regular interval for enhancing their knowledge and skills. So that they can provide better care.

Nursing administration

1. The nurses as an administrator should plan and organize continuing education programme for nursing personal working in labour room/ antenatal OPD which help them to update their knowledge and skills.
2. Nursing administration should take interest in providing information on anemia among antenatal mothers to staff nurses working in antenatal OPD.
3. Hospital management should develop standards protocol for managing anemia, in antenatal mothers, including dosage adjustments based on hemoglobin levels.
4. Hospital management collaborates with plans for pregnant women with anemia.

Nursing research

1. The finding of the study serve as a basis for nursing student to conduct further studies knowledge regarding anemia among antenatal mothers. The study will motivate the initial researcher to conduct study on large scale.
2. Nurses neglect activities such as health education and providing information an anemia among so ongoing research is necessary to know other knowledge activities that are being neglected

RECOMMENDATION

1. The study can be conducted on small sample.
2. The study can be done in difference setting.

LIMITATIONS

This study is limited to;

1. Assess the knowledge among antenatal mothers.
2. 50 antenatal mothers only.
3. Mother who attending antenatal OPD.

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