



Original Research Article

Prevalence of Anemia in Pregnancy

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Abstract

Background: Anemia among pregnant women is a serious global health concern. According to WHO report, about 32.4 million pregnant women suffer from anemia worldwide, of which 0.8 million women are severely anemic. The aim of the present study is to find out the prevalence of anemia in antenatal women.

Methods: This cross-sectional study was conducted in the department of obstetrics and gynecology of civil hospital Jaisinghpur, Kangra, HP, India for a period of three months between January 2020 to March 2020. A total 299 pregnant women coming to our antenatal OPD were screened for anemia.

Results: Maximum number of anemic patients are seen in age group of 25-29 years (42.45%) and least in age group <20 years (3.60%). Of all the anemic antenatal women 12.23% were illiterate, primary and secondary educated 28.78% and 28.85% respectively and 20.14% were graduate and above. Maximum percentage of anemia was seen in the lower socio-economic status (46.76%) followed by middle (35.25%) and was lowest in the higher socio-economic status group (17.99%)

Conclusion: Distributing iron tablets, healthy dietary habits, spacing among children and educating women are some of the modalities which can decrease the incidence of anemia.

Introduction

Anemia among pregnant women is a serious global health concern. According to WHO report, about 32.4 million pregnant women suffer from anemia worldwide, of which 0.8 million women are severely anemic. Moreover, 50% cases of anemia are attributable to iron deficiency anemia.¹

It is projected that India has the utmost prevalence of anemia i.e. 57.96% among the South Asian countries². Anemia during pregnancy increases the risk of low birth weight, preterm birth, maternal and perinatal mortality and poor apgar score.³

The aim of the present study is to find out the prevalence of anemia in antenatal women and analyze the distribution of the age, education, socio economic status and parity in pregnant anemic women.

Methods

This cross-sectional study was conducted in the department of obstetrics and gynecology of civil hospital Jaisinghpur, Kangra, HP, India for a period of three months between January 2020 to March 2020. A total 299 pregnant women coming

to our antenatal OPD were screened for anemia. Each participant was explained in detail about the study and informed consent was obtained prior to the data collection. Each patient were asked about age, parity, socioeconomic status, education.

Inclusion Criteria

- Pregnant women
- Hb% less than 11 gm%

Anemia was classified as per WHO classification-

Mild anemia: 9-11gm%

Moderate anemia: 7-9 gm%

Severe anemia: less than 7 gm%

Results

Out of 299 OPD pregnant women, 160 had Hb% above 11 gm/dl. So, the prevalence of anemia was 42.48% of which 37.79% were mildly anemic, 8.36% were moderately anemic and 0.72% were severely anemic.

Table 1: Age Distribution

Age	Mild anemia	Moderate anemia	Severe anemia	Total
<20 years	4(3.54%)	1(4%)	0	5(3.60%)
20-24	32(28.32%)	6(24%)	0	38(27.34%)
25-29	48(42.48%)	10(40%)	1(100%)	59(42.45%)
>=30	29(25.66%)	8(32%)	0	37(26.61%)
Total	113	25	1	139

Maximum number of anemic patients are seen in age group of 25-29 years (42.45%) and least in age group <20 years (3.60%).

Table 2: Educational Status

Education	Mild anemia	Moderate anemia	Severe anemia	Total
Illiterate	11(9.73%)	6(24%)	0	17(12.23%)
Primary	27(23.89%)	12(48%)	1(100%)	40(28.78%)
Secondary	50(44.25%)	4(16%)	0	54(38.85%)
Graduate/PG	25(22.12%)	3(12%)	0	28(20.14%)
Total	113	25	1	139

Of all the anemic antenatal women 12.23% were illiterate, primary and secondary educated 28.78% and 38.85% respectively and 20.14% were graduate and above. Anemia was seen more in the

secondary educated women (38.85%) followed by primary educated women (28.78%) and Graduate/PG (20.14%). Least percentage of anemias was seen in the illiterate (12.23%).

Table 3: Socioeconomic Status

Status	Mild anemia	Moderate anemia	Severe anemia	Total
Low	53(46.90%)	12(48%)	0	65(46.76%)
Middle	40(35.40%)	8(32%)	1(100%)	49(35.25%)
High	20(17.70%)	5(20%)	0	25(17.99%)
Total	113	25	1	139

Maximum percentage of anemia was seen in the lower socio-economic status (46.76%) followed by middle (35.25%) and was lowest in the higher

socio-economic status group (17.99%) as seen in table 3.

Table 4: Parity

Parity	Mild anemia	Moderate anemia	Severe anemia	Total
Primi	62(54.87%)	13(52%)	0	75(53.96%)
Multi	51(45.13%)	12(48%)	1(100%)	64(46.04%)
Total	113	25	1	139

Prevalence of anemia in primigravidae were slightly higher (53.96%) but severe anemia was more common in multigravidae (Table 4).

Table 5: Iron Supplementation

Iron Supplementation	Mild anemia	Moderate anemia	Severe anemia	Total
Yes	70(61.95%)	15(60%)	0	85(61.15%)
No	43(38.05%)	10(40%)	1(100%)	54(38.85%)
Total	113	25	1	139

Off all the anemic women 61.15% women took iron supplements.

Discussion

As per our study, anemia was most prevalent in age 25-29 years old (42.45%). Whereas in studies by Gaurah et al⁴ and Shwetha et al⁵, most anemic patients were in age group 20-24 years, 77.9% and 70% respectively. Regarding educational qualification anemia was more prevalent in primary and secondary educational level, 28.78% and 38.85% respectively.

In our study of socio-economic status, anemia was more common in lower strata of women (46.76%). This finding correlates with that of Ahmad N et al.⁶

Comparing primigravida with multigravida women, anemia is almost equally distributed among both. In studies by Bison et al⁷ and Sowmya et al⁸, they have also reported the same distribution (50%).

Conclusion

Anemia is very common in pregnancy. Distributing iron tablets, healthy dietary habits, spacing among children and educating women are some of the modalities which can decrease the incidence of anemia among pregnant women which will further improve maternal and fetal outcome.

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Conflict of Interest: None declared

Ethical Approval: The study was approved by the Institutional Ethics Committee

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