

MATERNAL AND FOETAL OUTCOME OF ANEMIA IN PREGNANCY

DR.NISHU BHUSHAN
GMC JAMMU

INTRODUCTION

- WHO defines anemia in pregnancy as hemoglobin level below 11g/dl and hematocrit value less than 33%.
- WHO data shows that 40.1% of pregnant women worldwide were anemic in 2016.
- Anemia is highly prevalent in India & contributes to about 80% of the maternal death due to anemia in South Asia.
- Maternal anemia is commonly considered as a risk factor for poor pregnancy outcome.
- The NFHS-5 data shows 57.2% women are anemic , a rise from 49.7% in NFHS-4. In urban areas , anemia rates are slightly lower than rural areas.

- Despite the high prevalence of anemia in women , the condition is still under diagnosed and therefore underrated, with serious clinical consequences.
- Irrespective of the etiology, maternal anemia has been associated with increased risks of both maternal and neonatal adverse outcomes.
- In a study conducted in Israel , maternal anemia was found to increase the risk of cesarean sections and the need for blood transfusions.
- The incidence of anemia has been as high as 35-75% in developing countries compared with only 19% in developed countries.

Aims and Objectives

This study was done to analyse the:

- maternal outcomes
- neonatal outcomes

in women with third trimester anemia.

MATERIAL AND METHODS

- This is a retrospective study conducted in the department of obstetrics and gynecology, GMC Hospital, Jammu over a period of one year
- **STUDY PERIOD-** January 2020 to December 2020.
- **STUDY POPULATION-** Pregnant women in the third trimester of pregnancy (29 weeks onwards) and the babies born to them.

- **INCLUSION CRITERIA:**

- Singleton pregnancy
- Gestation age 29 weeks onwards

- **EXCLUSION CRITERIA:**

- Bleeding disorders
- Heart diseases
- GDM
- Chronic illnesses
- Pregnant women with Hb level below 11 mg/dl in the third trimester were categorized anemic and those with Hb level below 11 mg /dl as non anemic.
- **280 patients were taken in each group.**
- Data was reviewed and statistically analyzed.

Table 1 – Demographic Profile (n=280)

Variables	ANEMIC	NONANEMIC
Maternal age (years)		
Less than 20	38(10.71%)	40(14.28%)
20-30	180(64.28%)	184(65.71%)
More than 30	62(22.14%)	
Parity		
1	82(29.28%)	124(44.28%)
2-4	178(63.57%)	149(53.21%)
>5	20(7.14%)	7(2.5%)
Residence		
Urban	102(36.42%)	165(58.92%)
Rural	178(63.57%)	115(41.01%)

TABLE -2 Comparison of maternal outcome in two groups

Maternal outcome	Anemic (n=280)	Non anemic (n=280)
PPH	98 (35%)	53(18.9%)
GESTATIONAL HYPERTENSION	108(38.57%)	52(18%)
PREECLAMPSIA	88(31.42%)	46(16.42%)
APH	62(22.14%)	47(16.8%)
BLOOD TRANSFUSION	126(45%)	66(23.6%)

Table-3 MODE OF DELIVERY

MODE OF DELIVERY	ANEMIC GROUP (n=280)	NON ANEMIC GROUP (n=280)
VAGINAL DELIVERY	162 (57.85%)	189 (67.50%)
LSCS	118 (42.14%)	91 (32.5%)

Table-4 Comparison of Foetal outcome in two groups

FOETAL OUTCOME	ANEMIC GROUP (n=280)	NON ANEMIC GROUP (n=280)
LOW BIRTH WEIGHT (<2.5 kg)	113 (40%)	63(22.5%)
PRETERM DELIVERY	92(32%)	74(26.4%)
IUD	43(15.35%)	41(14.6%)
NICU ADMISSIONS	135 (48.21%)	94 (33.57%)

DISCUSSION

- Anemia complicating pregnancy is a known menace to both mother and fetus.
- In our study 57.14% of mothers suffered from mild anemia, 39.28% from moderate anemia and 3.57% from severe anemia.
- Baig Ansari et al found that 0.7%, whereas Bentley & Griffiths has discovered that 2.2% pregnant women suffered from severe anemia in Andhra Pradesh.
- WHO statistical data shows that 25% of maternal deaths occur due to PPH.
- In present study PPH was seen in 35% of women in anemic group.
- Kavle et al found that blood loss at delivery was slightly elevated in mild anemic women as compared to non anemic women.

- In the present study 31.42% women suffered from preeclampsia in anemic group. Ali et al in their study revealed that women suffering from antenatal anemia had 3.6 times higher risk of preeclampsia as compared to non anemic mothers.
- In the present study 38.57% women suffered from gestational hypertension whereas in a study done by Mahmood T et al. gestational hypertension was seen in 56% vs 27%; in anemic as compared to non anemic group.
- In the present study 22.14% women in anemic group had APH .

- In a Scottish retrospective cohort, maternal anemia increased the risk of APH, severe obstetric hemorrhage & the need for blood transfusion as reported by Rukuni et al.
- In present study 40% of babies has low birth weight in anemic mothers.
- According to Ali et al women with mild / moderate anemia are 2.5 times at risk of delivering low birth weight babies and women with severe anemia have 8 times higher risk of low birth weight
- Kidanto H et al. found that risk of lowbirth weight & preterm delivery were increased with severity of anemia.

CONCLUSION

- Anemia amongst pregnant women imposed a significant spectrum of health problems to both mother and child.
- It is important to identify women at risk and ensure that sufficient and timely care is provided at each level by health providers.
- Routine screening and general awareness programmes about anemia at community levels should be done.
- Awareness campaigns must be conducted to educate women about the need to take care of their health and well being during pregnancy in order to have healthy mothers & babies.
- Pre conceptional evaluation along with planned pregnancy is important for the good outcome.

THANK
YOU!

