



FETOMATERNAL OUTCOME OF ANEMIA IN PREGNANCY

Dr. Sanjaya Sharma

Professor Department of Obstetrics and Gynaecology of M.L.B. Medical College, Jhansi

Dr. Nidhi Dubey*

Junior Resident, Department of Obstetrics and Gynaecology of M.L.B. Medical College, Jhansi *Corresponding Author

ABSTRACT

Objective: To determine the frequency of women having pregnancy with severe anemia, its maternal complications and feto-maternal outcome.

Study Design: D A total of 186 pregnant women was included from Obstetrics and Gynecology Department of M.L.B. Medical College Jhansi. The study was conducted from March 2019 to August 2019 to all the women admitted for delivery with gestational age \geq 34 weeks.

Results: Thirty-five (19%) women were diagnosed with anemia among which 12(6.5%) women had severe anemia, 4(2.2%) had mild, and 19(10.2%) had moderate anemia. The frequency of PIH (37.14%), PPH (17.14%), Low birth weight (62.68%) and APGAR score $<$ 7 (60%) was noted higher in anemic patients.

Conclusion: There were significantly higher maternal complications among anemic women as compared with non-anemic women. The fetal complications that is Low Birth Weight and APGAR $<$ 7 at 5 minute has also been found significantly associated with maternal anemia.

KEYWORDS : Apgar Score, Fetomaternal Outcome, Induced Hypertension, Low Birth Weight., Pregnancy, PostPartum Heamorrhage, Severe Anemia

INTRODUCTION

Pregnancy is a vital part of a woman's life but it is period of greater risks of different complications for mother and fetus. One of the most prevalent complication is anemia, which is being faced throughout the world. It is more common in developing countries due to poor nutritional status. The average prevalence rate of anemia is 56% in developing countries with a range of 35% to 100%.

According to WHO definition the women having hemoglobin level of 11 gm/dl or less is considered as anemic during pregnancy.

The frequency of maternal complications is very high among sever anemic pregnant women in comparison with normal pregnant women.

AIMS AND OBJECTIVES

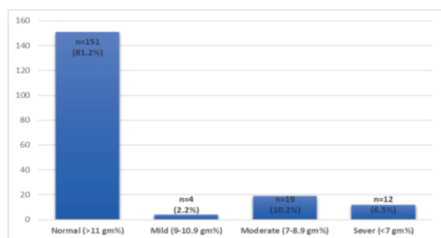
- To determine the frequency of women having pregnancy with severe anemia, its maternal complications and feto-maternal outcome.

MATERIALS AND METHODS

A total of 186 pregnant women was included from Obstetrics and Gynecology Department of M.L.B. Medical College Jhansi. The study was conducted from March 2019 to August 2019 to all the women admitted for delivery with gestational age \geq 34 weeks.

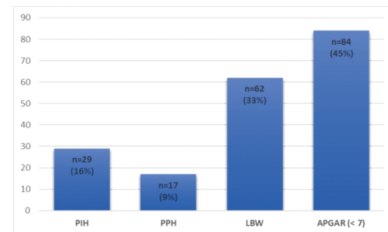
The WHO's anaemia classification was adopted for functional definition of haemoglobin conditions; anaemic (serum Hb 5-11g/dL), and nonanaemic (serum Hb $>$ 11g/dL) the anemic group was further divided into Mild (9-10.9 g/dL), Moderate (7-8.9 g/dL) and severe anemia ($<$ 7 g/dL).

RESULTS



Distribution of Different Categories of Anemia

Showing distribution of patients with different categories of anemia



Maternal Complications & Fetal Outcome

There were 29(16%) women with pregnancy induced hypertension. Post-Partum heamorrhage was seen in 17(9%) women. There were 62(33%) fetus who had low birth weight. APGAR score $<$ 7 was observed in 84(45%) babies.

Maternal Complications in the Cases of Pregnancy with Anemia

Complications	Anemia		P value
	Pregnancy with anemia (n=35)	Pregnancy with normal Hb (n=151)	
Pregnancy induced hypertension (n=29)	13 (37.14%)	16 (10.60%)	0.000
Post partum hemorrhage (n=17)	6 (17.14%)	11 (7.28%)	0.068

A statistically significant (p value= 0.000) association was present between anemia and pregnancy induced hypertension and Insignificant association between anemia and Post-Partum Hemorrhage (p-value=0.068).

Perinatal Complications in Pregnancy with Anemia

Complications	Anemia		P value
	Pregnancy with anemia (n=35)	Pregnancy with normal Hb (n=151)	
Low birth weight (n=62)	22 (62.86%)	40 (26.49%)	0.000
Apgar score (<7) (n=84)	21 (60%)	63 (41.72%)	0.050

No statistically significant (p-value=0.05) association

between anemia and APGAR score <7 at 5 minutes.

CONCLUSION

There were significantly higher maternal complications among anemic women as compared with non-anemic women. The fetal complications that is Low Birth Weight and APGAR <7 at 5 minute has also been found significantly associated with maternal anemia.

REFERENCES:

1. Ravishankar Suryanarayana, Muninarayana Chandrappa, [...], and S. R. Sheela. Prospective study on prevalence of anemia of pregnant women and its outcome: A community based study. *J Family Med Prim Care*. 2017 Oct-Dec; 6(4): 739–743.
2. Tandon R, Jain A, Malhotra P. Management of Iron Deficiency Anemia in Pregnancy in India. *Indian J Hematol Blood Transfus*. 2018;34(2):204–215. doi:10.1007/s12288-018-0949-6
3. Shweta Kumari, Neelima Garg, [...], and Mohammad Sohail. Maternal and severe anaemia in delivering women is associated with risk of preterm and low birth weight: A cross sectional study from Jharkhand, India. Received 2019 Feb 21; Revised 2019 Jul 23; Accepted 2019 Jul 23.
4. WHO. Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva, World Health Organization, 2011 (WHO/NMH/NHD/MNM/11.1)
5. Grace Stephen, 1 Melina Mgongo, 2,3 Tamara Hussein Hashim, 2,4 Johnson Katanga, 1,5 Babill Stray-Pedersen, 3,6 and Sia Emmanuelli Msuya, 1,2,7. Anemia in Pregnancy: Prevalence, Risk Factors, and Adverse Perinatal Outcomes in Northern Tanzania. *Hindawi Anemia Volume 2018*, Article ID 1846280, 9 pages <https://doi.org/10.1155/2018/1846280>
6. Dr Ashram Khatana, Dr Kanti Yadav. Study of Fetomaternal Outcome in Patients of Moderate and Severe Anaemia in > 28 Week Pregnancy. *Category: Volume 05 Issue 07 July 2017 Hits: 791*