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A Study of Drug Uses Evaluation of Anti Anemic Drugs in Pregnancy Patients at a Tertiary Care Teaching Hospital

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ABSTRACT

Background: Anemia is a common condition among pregnant women and can have adverse effects on both maternal and fetal health. The use of antianemic drugs in pregnancy is essential to manage and treat anemia, but their efficacy and safety remain a topic of significant interest and concern.

Objective: To study the drug use evaluation of anti anemic drugs in pregnancy patients in hospital. Cases were collected from OBG ward

Methodology: A prospective observational study was conducted for three months from December 2023 to February 2024 in Navodaya medical college, hospital & research centre with a sample size of 100. Data were collected from OBG ward.

Result: Among the 100 cases collected, most of the anemic patients were in the age group of (18-25) years. Most common anti anemic drugs prescribed in anemic patients are Ferrous ascorbate and Folic acid.

Conclusion: in evaluation of antianemic drug use in pregnancy is essential for ensuring the effective management of maternal anemia while minimizing risks to the fetus. By assessing prescribing practices, safety considerations, and adherence to clinical guidelines, healthcare providers can enhance the quality of care provided to pregnant women and contribute to better maternal and child health outcomes

INTRODUCTION

Pregnancy is a crucial period during which maternal health directly impacts fetal development and well-being. Anemia, characterized by a deficiency in red blood cells or hemoglobin, is a common concern during pregnancy due to increased maternal blood volume and the demands of fetal growth. Antianemic medications play a vital role in managing anemia in pregnant women, aiming to optimize maternal health and prevent adverse outcomes for both the mother and the fetus.

Significance of Antianemic DUE:

The evaluation of antianemic drug use in pregnancy is of paramount importance for several reasons:

1. Maternal Health:Anemia in pregnancy can lead to complications such as fatigue, weakness, shortness of breath, and increased susceptibility to infections. Antianemic medications are essential for improving maternal well-being and reducing the risk of maternal morbidity and mortality.
2. Fetal Health:Maternal anemia has been associated with adverse fetal outcomes, including preterm

birth, low birth weight, and developmental abnormalities. Optimal management of maternal anemia through appropriate antianemic drug use can help ensure favorable outcomes for the fetus.

3. Drug Safety:The safety of antianemic medications during pregnancy is a critical concern, as certain drugs may pose risks to the developing fetus. Evaluating the use of antianemic drugs allows healthcare providers to assess the balance between the benefits of treatment for the mother and the potential risks to the fetus.
4. Clinical Guidelines:Despite the importance of managing anemia in pregnancy, there is often variability in clinical practice regarding the choice, dosing, and duration of antianemic therapy. Drug use evaluation provides valuable insights into adherence to clinical guidelines and identifies areas for improvement in prescribing practices.
5. Public Health Impact:Anemia affects a significant proportion of pregnant women globally, particularly in resource-limited settings. Evaluating the use of antianemic medications can inform public health strategies aimed at reducing the burden of anemia and improving maternal and child health outcomes on a broader scale.

Objectives of Drug Use Evaluation:

The primary objectives of evaluating antianemic drug use in pregnancy include:

1. Assessing the prevalence and severity of anemia among pregnant women in clinical practice.
2. Examining the appropriateness of antianemic drug prescribing practices, including drug selection, dosing regimens, and treatment duration.
3. Evaluating the safety and efficacy of antianemic medications in pregnancy based on available evidence and clinical guidelines.
4. Identifying potential gaps or areas for improvement in the management of maternal anemia through targeted interventions and education initiatives.
5. Promoting evidence-based decision-making and quality improvement efforts to optimize maternal and fetal outcomes in pregnant women with anemia.

In conclusion, the evaluation of antianemic drug use in pregnancy is essential for ensuring the effective management of maternal anemia while minimizing risks to the fetus. By assessing prescribing practices, safety considerations, and adherence to clinical guidelines, healthcare providers can enhance the quality of care provided to pregnant women and contribute to better maternal and child health outcomes.

MATERIALS AND METHODS

A prospective observational study was carried out for 3 months in Navodaya Medical College Hospital & Research Centre, Raichur. 100 cases were collected . Data was pooled and analyzed. Ethical permission to conduct the study was granted by the institutional ethics committee.

Study Population:

Data were collected from the case sheets using a specially designed data entry form from patients who are admitted in the hospital in last 3 months. pregnancy female patients are included in the study.

Ethical consideration

The ethical approval to conduct the study was obtained from the Ethical Review Committee of Hospital.

RESULTS

Demographic Data

A prospective observational study was carried out by collecting data from 100 cases who were admitted in hospital. Out of 100 cases most Anemic patients in the age group of (18– 25) years. This is depicted in Table1.

Table 1: Age-wise distribution in Anemic patients (n=100)

Age (years)	No. of patients with ANEMIA	Percentage (%)
18-25	57	57
25-30	29	29
>30	14	14

Out of 100 patients the majority of Anemic patients were of age between 18-25

Table 2: Education background in Anemic patients (n=100)

Education	No. of patients	Percentage (%)
Primary	27	27
Secondary	52	52
Graduate	21	21

Out of 100 patients most of them were finishes their secondary education

Table 3: Prenatal care

No of Prenatal consultations

No of consultations	No. of patients	Percentage (%)
1-5	31	31
6-8	8	8
>8	44	44
None	17	17

Out of 100 patients 44 of them having more than 8 pre natal consultations.

Table 4: Planned pregnancy

Planned pregnancy	No. of patients	Percentage (%)
Yes	82	82
No	18	18

Table 5: Number of living children

Number of childrens	No. of patients	Percentage (%)
One	17	17
Two or Three	75	75
More than Three	8	8

Out of 100 patients 17 patients were primiparous and 83 were multiparous

Table 6:Practiced physical Activities

Practiced physical activites	No of patients	Percentage (%)
Yes	79	79
No	21	21

Out of 100 patients 79 were practicing physical activities and 21 were not

Table 7: Anemics before current Pregnancy

Anemics	No of patients	Percentage (%)
Yes	17	17
No	83	83

Out of 100 patients 17 were Anemics before current pregnancy

Table 8:Use of Antianemics in pregnancy

Anti anemics used	No of patients	Percentage (%)
Used only Ferrous Ascorbate	26	26
Used Only Folic acid	19	19
Used both	55	55

Out of 100 patients 26 were prescribed Ferrous Ascorbate alone ,19 were prescribed Folic acid alone and 55 were prescribed combination of both drugs

Table 9:Duration of use of antianemics in Pregnancy

Drugs	Used for 10days	Used for 10 to 30 days	Used for more than 30 days
Used only Ferrous Ascorbate	3	19	4
Used only Folic acid	-	4	15
Used Both	14	25	16

Out of 100 Anemic patients 26 Anemics who are on drug Ferrous Ascorbate in which 3 of them prescribed for 10 days ,19 of them were for 10 to 30 days and 4 for more than 30 days.19 anemics who are prescribed Folic acid alone in which 4 of them were prescribed for 10 days and 15of them were prescribed for more than 30 days.55Anemics who are on bothFerrous Ascorbate and folic acid in which 14 of them prescribed for 10 days ,25 of them were prescibed for 10 to 30 days and 16 of them were prescribed for more than 30 days

DISCUSSION

This is an prospective observational study in which the use of Anti anemic drugs in pregnacy anemics is investigated. Pregnancy is a crucial period during which maternal health directly impacts fetal development and well-being. Anemia, characterized by a deficiency in red blood cells or hemoglobin, is a common concern during pregnancy due to increased maternal blood volume and the demands of fetal growth. Antianemic medications play a vital role in managing anemia in pregnant women, aiming to optimize maternal health and prevent adverse outcomes for both the mother and the fetus.Out of 100 Anemics 57 of them were fall in age group of 18-25 that is depicted in Table 1.Out of 100 Anemics 52 of them were finishes their education upuntill secondary level that is depicted in Table 2.Out of100 patients 44 of them having more than 8 pre natal consultations followed by 31 of them having1 to 5 time and 82 of them planned pregnancy and 18 were not that is depicted in table 3 and table 4 respectively.17 of them were primiparous and 83 were multiparous which is depicted in table5. as physical activities are one of the crucial thing for both fetus and mother 79 pracitising it 21 not muchthat is depicted in Table 6.17 anemics were anemics before current pregnancy 83 of them were fresh cases of Anemia that is depicted in Table 7. The Use of Anti anemics which are prescribed for pregnancy anemics Out of 100 patients 26 were prescribed Ferrous Ascorbate alone ,19 were prescribed Folic acid alone and 55 were prescribed combination of both drugs that is denoted in Table 8 . and finally coming to the duration of usage of Anti anemics were 26 Anemics who are on drug Ferrous Ascorbate in which 3 of them prescribed for 10 days ,19 of them were for 10 to 30 days and 4 for more than 30 days.19 anemics who are prescribed Folic acid alone in which 4 of them were prescribed for 10 days and 15of them were prescribed for more

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CONCLUSION:

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CONFLICT OF INTREST: The authors have no conflicts of interest regarding this investigation**.**

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ABBREVIATIONS: OBG: Obstetrics and Gynaecology, DUE: Drug Use Evaluation.

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