

# Optimizing Antenatal Iron Prescriptions: A Targeted Approach to Overcome Anemia

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## INTRODUCTION

Iron deficiency anemia is prevalent worldwide, notably in low- and middle-income countries. During pregnancy, it contributes to obstetric complications such as IUGR, preterm labor, and hemorrhage. In Pakistan, a 2018 survey revealed 50% of reproductive-age women face iron deficiency, with 21.6% affected by anemia. This project focuses on identifying and correcting iron deficiency anemia during antenatal care

## OBJECTIVE

This QIP aimed to assess antenatal iron supplementation practices, identify gaps, and evaluate whether improving prescriptions and patient education could align with guidelines and increase hemoglobin levels in second-trimester pregnant women.

## METHODOLOGY

This single-center, pre-post interventional study was conducted at Benazir Bhutto Hospital, Rawalpindi, using a Plan-Do-Study-Act (PDSA) cycle to improve adherence to iron supplementation practices among pregnant women. Baseline Hb levels and iron intake habits were recorded from antenatal cards and interviews. Interventions included patient counseling on correct iron use, Urdu-language ink stamps on antenatal cards, educational pamphlets and visual aids, and banners in clinic waiting areas. Healthcare providers were briefed to reinforce these messages. Hemoglobin levels were reassessed after first cycle and second cycle, and data were analyzed to evaluate the intervention’s effectiveness.

## CONCLUSION

There was a significant increase in Hb levels after two months post-intervention. This QIP showed that anemia can be effectively treated and prevented using a low-cost, easily implementable approach.

### PHASE 1

Collect data on baseline practice from antenatal cards of n=100 patients presenting to Rooms 54 and 57 at Gyne&obs BBH rawalpindi at 12-26 wk with Hb levels between 8 and 10.5 g/dL

### PHASE 2

Advise patients on correct supplementation practice and follow up in 2 weeks

### PHASE 3

Evaluate adherence to prescription advice, measure Hb, analyze success of cycle 1

### PHASE 4

Identify areas for improvement and repeat cycle and follow up in 2 weeks

### PHASE 5

Evaluate adherence to prescription advice, measure Hb, analyze data using SPSS at the end of 2 successful cycles

| Mean Hb initially | After First cycle | After second cycle |
|-------------------|-------------------|--------------------|
| 8.8               | 9.3               | 10                 |

## REFERENCES

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## RESULTS

- Hemoglobin Increased: Average Hb levels rose significantly from 8.8-9.30 to 10.00 g/dL.
- Poor Initial Practices: Many patients initially took iron incorrectly (e.g., with milk or calcium).
- Intervention Success: 40% of participants improved after education and intervention.
- Provider Barrier: Time constraints limited consistent patient counseling by healthcare providers.

