



Audit of the Outcomes of Treatment of Iron Deficiency Anaemia with Monofer®

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Introduction

- Iron deficiency anaemia is the most common cause of anaemia in pregnancy and is a major cause of maternal mortality worldwide (Omotayo et al., 2021).
- In clinical practice this is treated with intravenous iron if oral iron has failed or is contraindicated, or a rapid increase in iron levels is required.
- This audit was created due to concerns that there were anecdotally a high rate of complications and side effects after administration of Monofer® in the Rosie hospital.

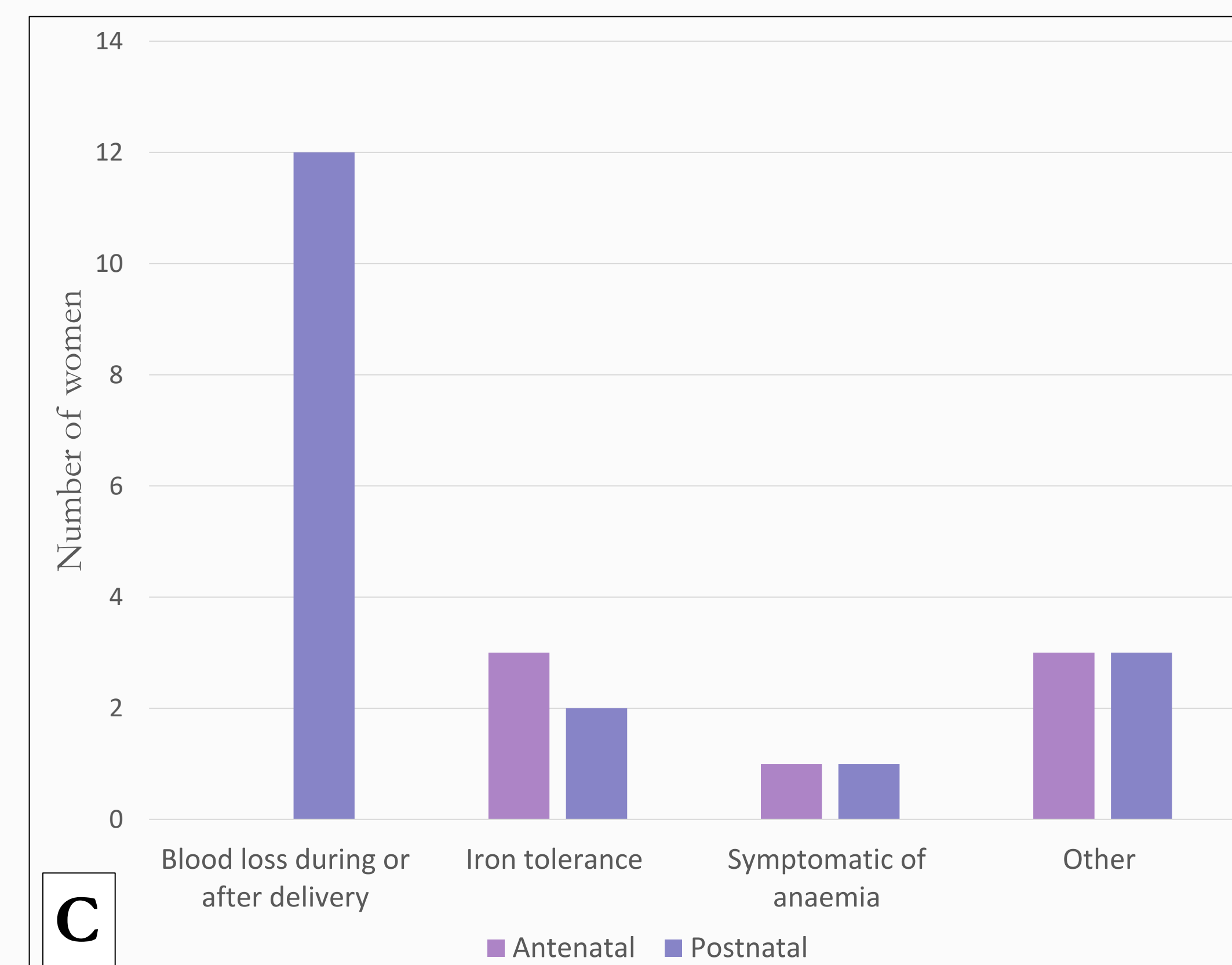
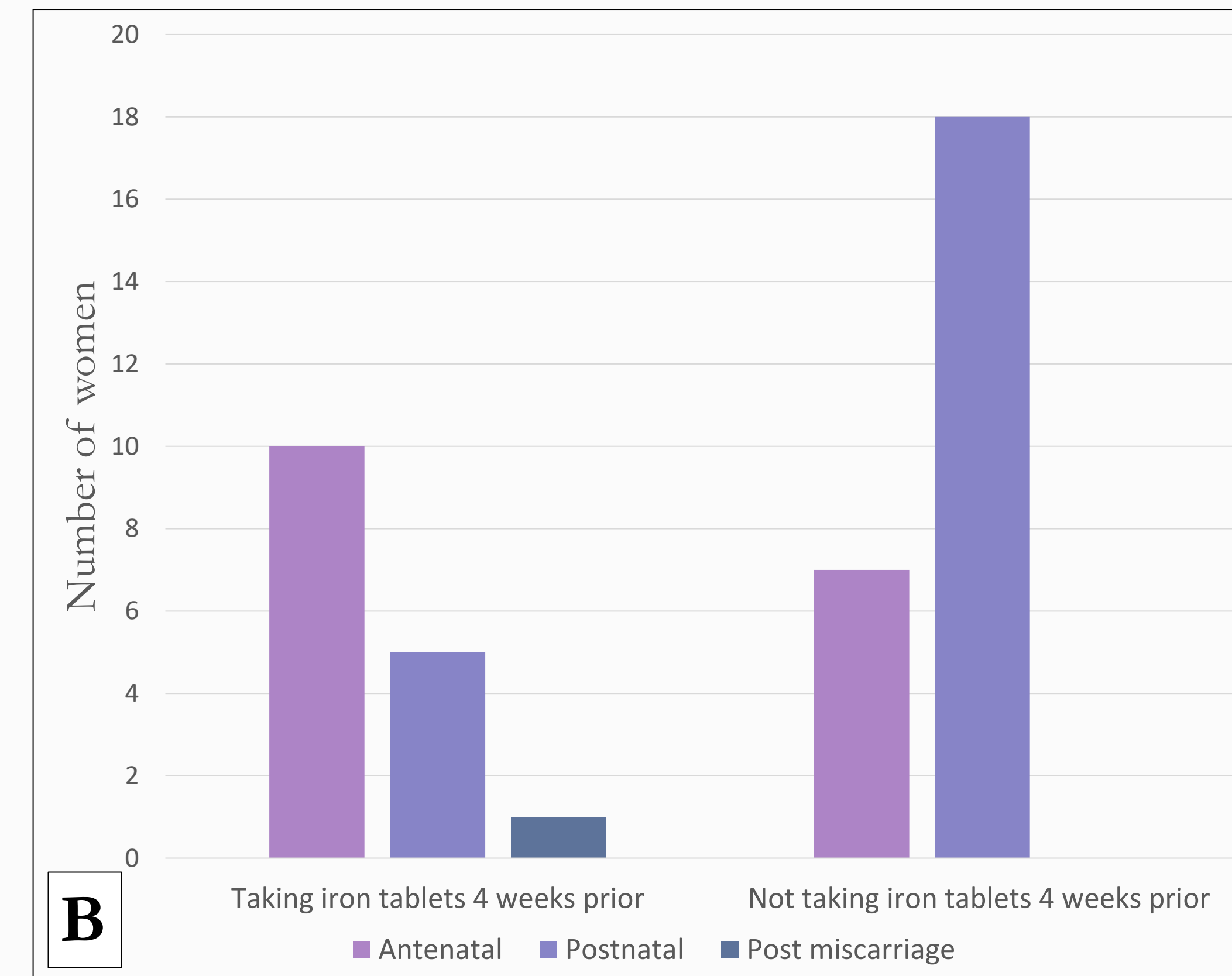
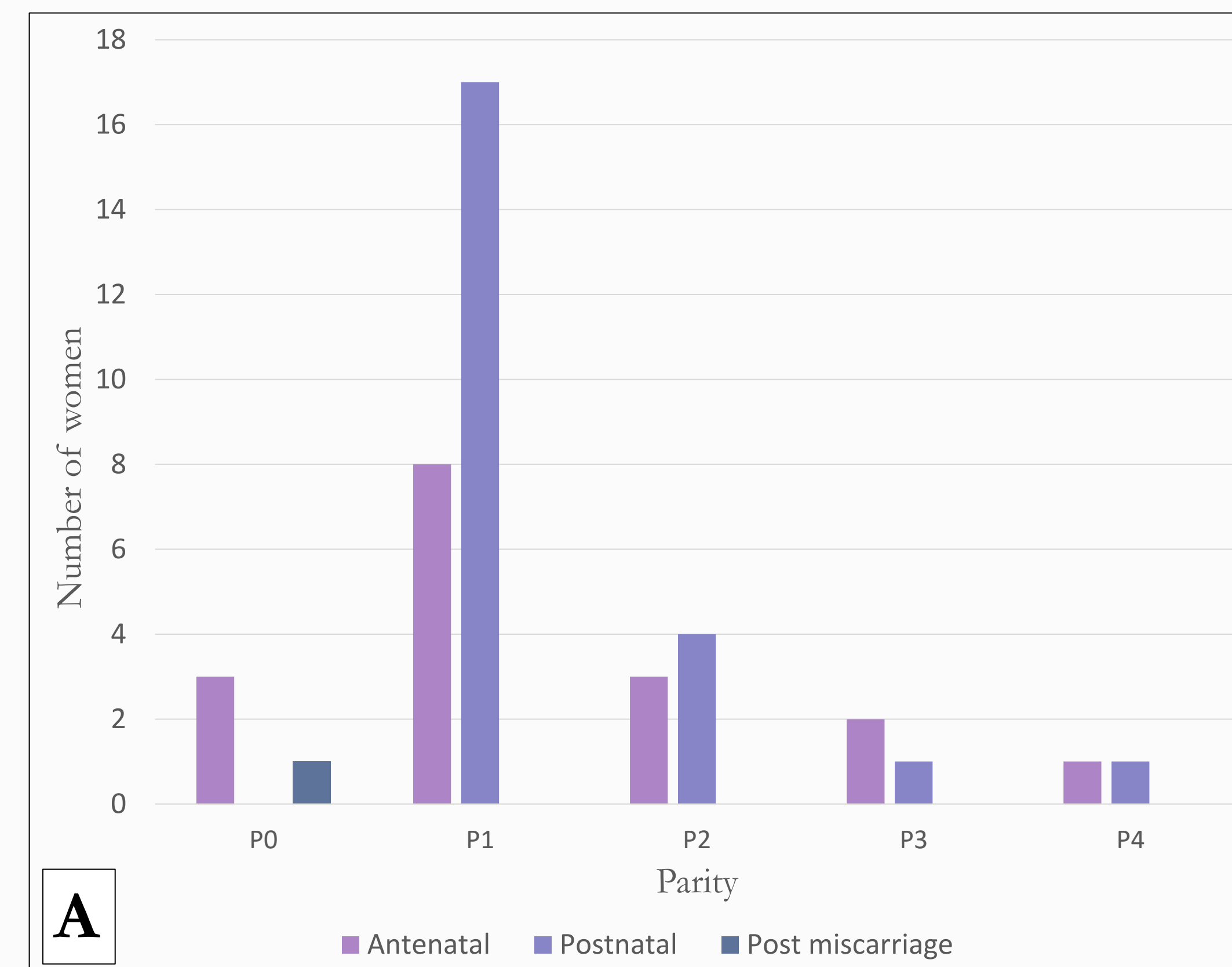
Methodology

- The case notes of the last 50 women to receive Monofer® in the Rosie Hospital, Cambridge, were examined.
- The outcomes of treatment of iron deficiency anaemia with Monofer® were assessed in relation to local guidance.

References

- Fung, P.L.P., Lau, V.N.M., Ng, F.F., Leung, W.W., Mak, T.W.C., Lee, A., 2022. Perioperative changes in haemoglobin and ferritin concentrations from preoperative intravenous iron isomaltoside for iron deficiency anaemia in patients with colorectal cancer: A pilot randomised controlled trial. PLoS One 17, e0270640. <https://doi.org/10.1371/journal.pone.0270640>
- Gybel-Brask, M., Seeberg, J., Thomsen, L.L., Johansson, P.I., 2018. Intravenous iron isomaltoside improves hemoglobin concentration and iron stores in female iron-deficient blood donors: a randomized double-blind placebo-controlled clinical trial. Transfusion (Paris) 58, 974–981. <https://doi.org/10.1111/trf.14521>
- Omotayo, M.O., Abioye, A.I., Kuyebi, M., Eke, A.C., 2021. Prenatal anemia and postpartum hemorrhage risk: A systematic review and meta-analysis. J. Obstet. Gynaecol. Res. 47, 2565–2576. <https://doi.org/10.1111/jog.14834>

Results



- Graph A shows that the most common parity of people receiving Monofer® was P1. This accounted for 61.0% of the cohort.
- Graph B shows that the majority of people in this cohort requiring Monofer® who did not take iron for at least 4 weeks prior were given Monofer® postnatally.
- Graph C shows that the most common reason for not taking oral iron prior to Monofer® was due to blood loss during delivery.

Conclusions

- Our results show that a lot of Monofer® is being given postnatally, and largely due to post-partum haemorrhage.
- Severe anaemia has been shown to be a risk factor for post-partum haemorrhage (Omotayo et al., 2021) and thus by better monitoring patients antenatally we could potentially decrease the number of patients needing Monofer® postnatally.
- The number of patients experiencing an adverse drug reaction to Monofer® in this cohort was 12.2%, which is comparable to that found in the general literature (Fung et al., 2022)(Gybel-Brask et al., 2018). The most common adverse drug reaction in our cohort was the Fishbane reaction, seen in 4.9% of people. Other side effects noted were blood pressure changes and dizziness.
- A major finding of this audit is that only 19.5% of the entire cohort were given Monofer® according to the local guidelines. This was largely due to the Ferritin levels not being checked (36.6%) though haemoglobin levels were found to be higher than 105g/L in 12.2% of the cohort.
- Given that Ferritin levels were only checked in 36.6% of the cohort we are risking iron overloading patients when they might require different supplementation such as B12 instead of iron.

Further information

- How we are actioning this information:
 - Monofer® clinics have been set up which are run by midwives with training in how to administer Monofer®.
 - A staff survey on how to use Monofer® was conducted to raise staff awareness.