

Management of Anaemia in Pregnancy to Reduce Risk of Postpartum Haemorrhage

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OBJECTIVE

Iron deficiency anaemia is recognised as a significant but avoidable risk factor for postpartum haemorrhage (PPH). NICE¹ recommends that all pregnant women should be offered screening for anaemia routinely during their pregnancies. Antenatal anaemia should be investigated and treated appropriately to reduce the morbidity associated with PPH².

This study aimed to identify women who experienced PPH that had been anaemic during their pregnancy and review their anaemia management plan.

DESIGN

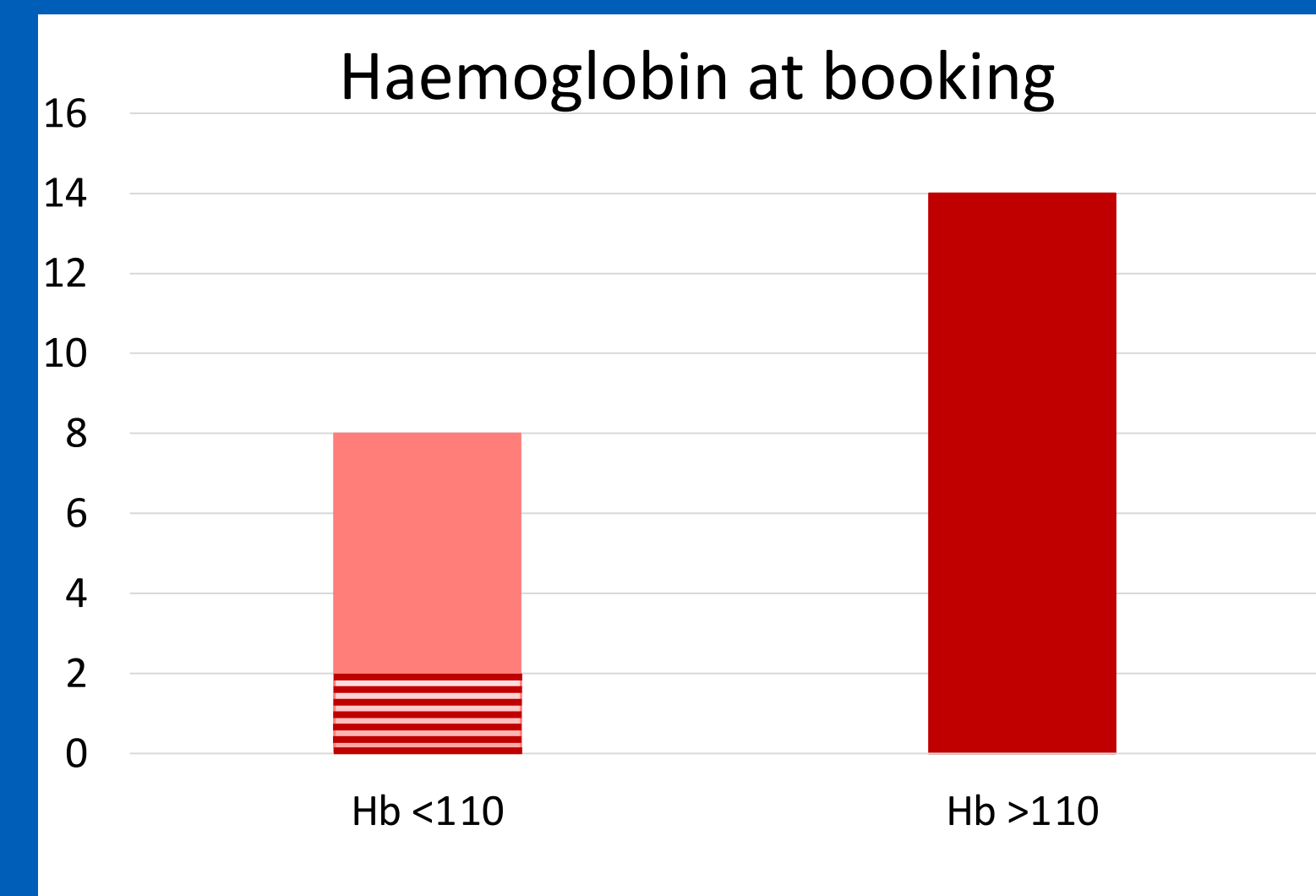
This study was a retrospective audit from patients' maternity notes.

METHOD

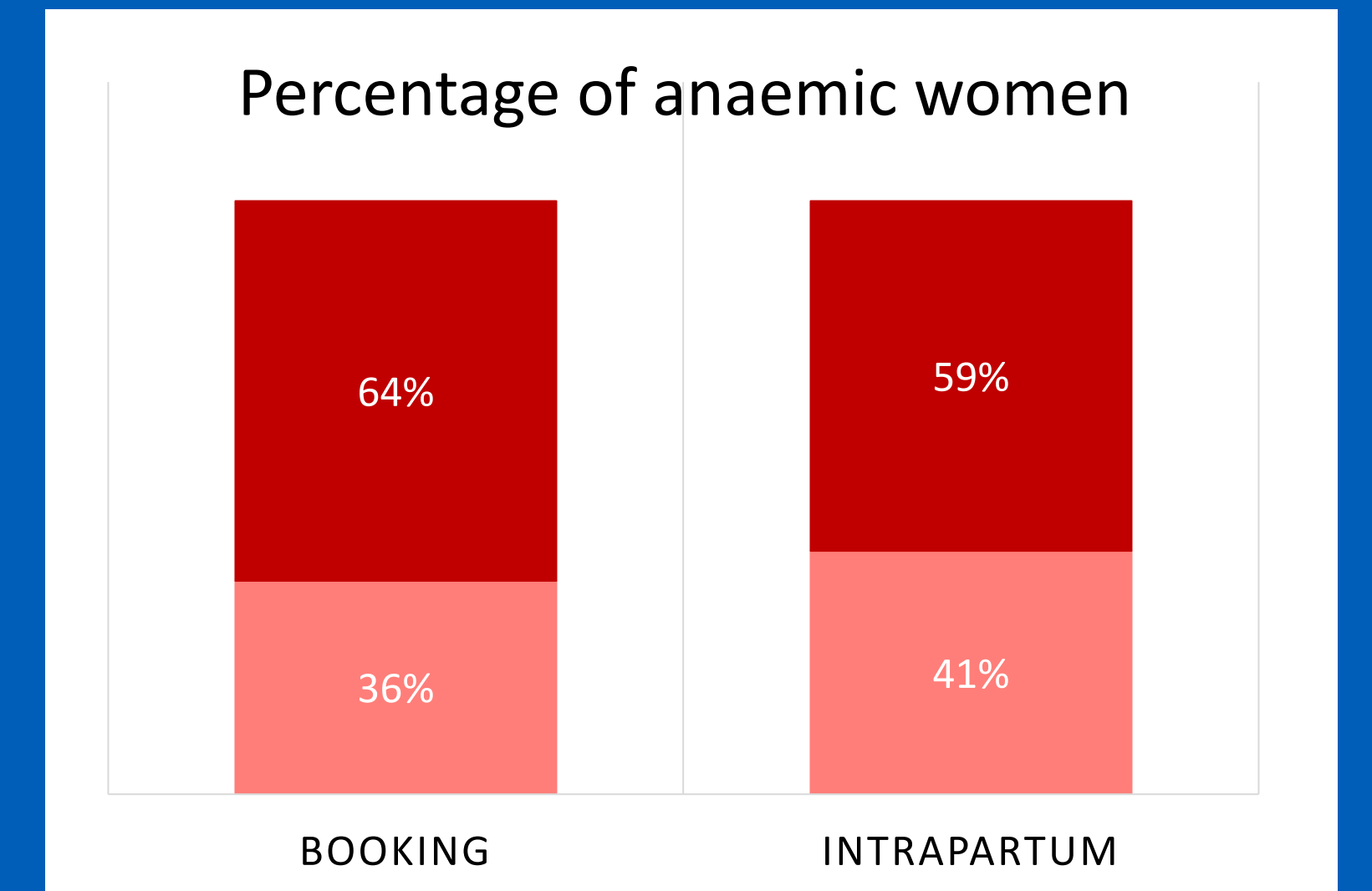
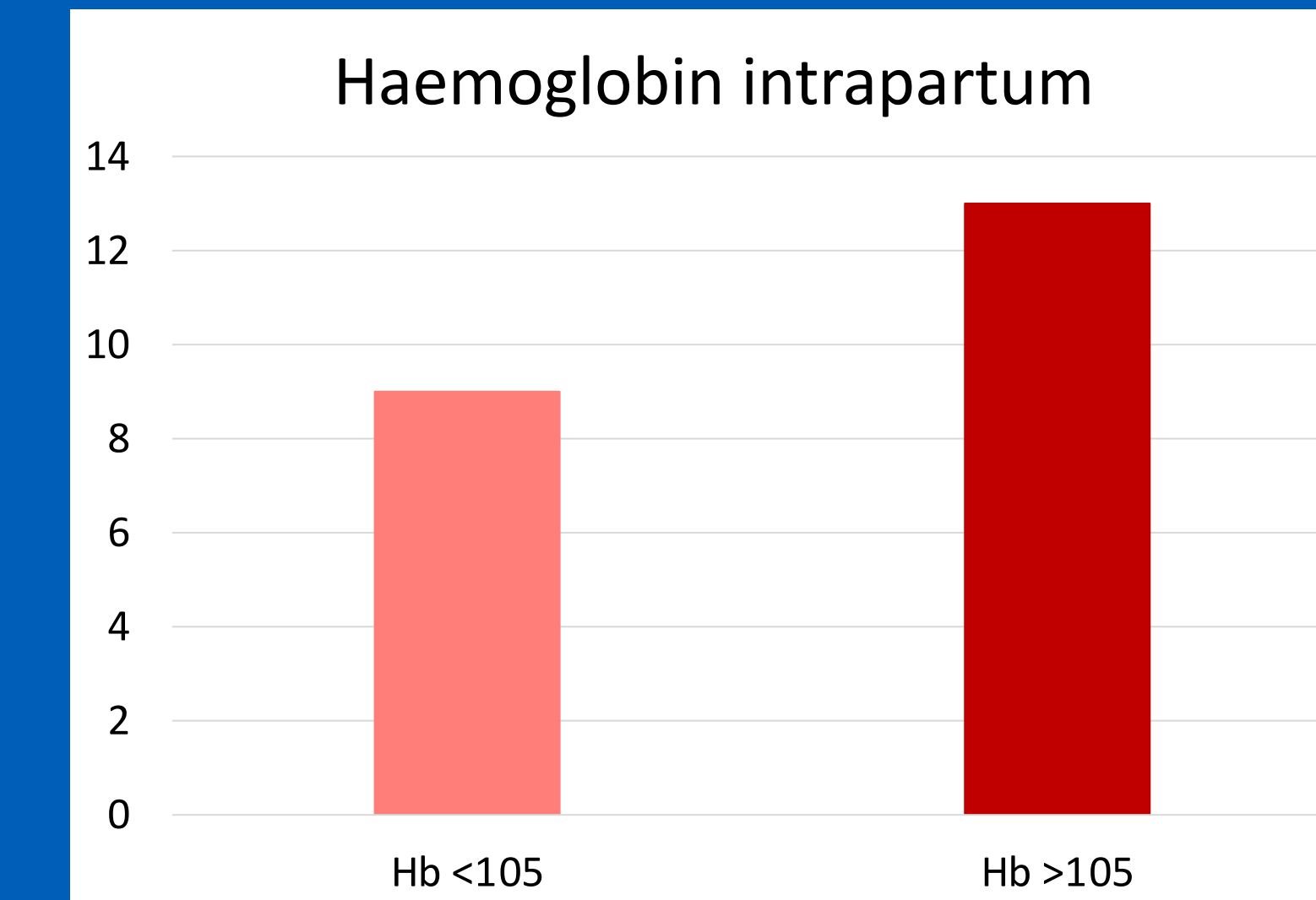
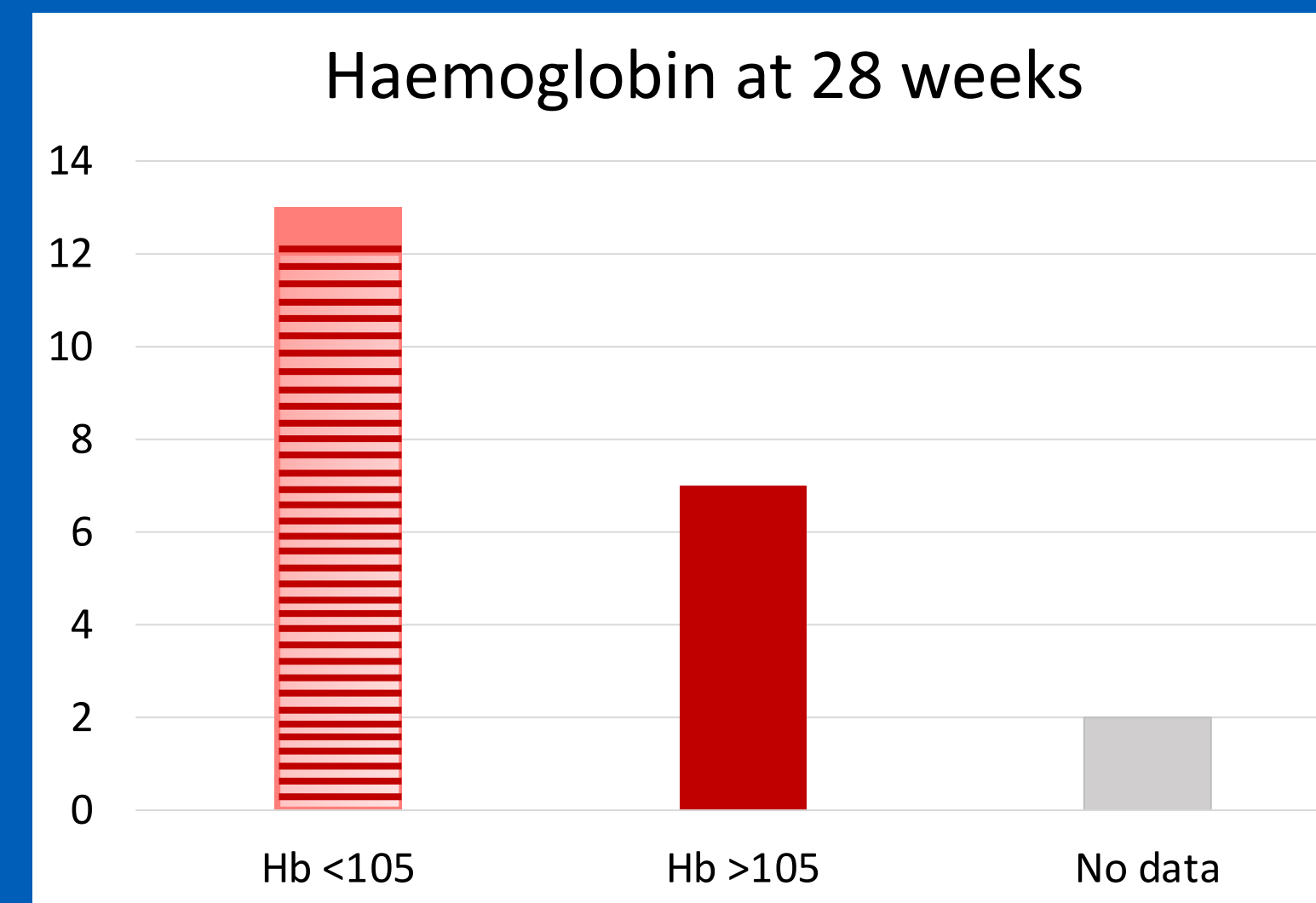
Women who experienced PPH >1999ml between January-December 2021 at a district hospital in the UK were identified and their antenatal blood tests reviewed. Women diagnosed with anaemia at any stage of pregnancy³ were included and their medical records evaluated. A questionnaire was designed using IQVIA Meridian for data entry and results analysed using Microsoft Excel. This audit was registered with the Trust Quality and Clinical Effectiveness team.

RESULTS

28% of women (n=22/78) who experienced PPH were anaemic during their pregnancy according to current definitions³ depending on trimester. At routine first trimester bloods, 36% of women (n=8/22) were diagnosed with anaemia. 75% of these were Asian or mixed-race and only 25% were appropriately prescribed oral iron. At routine 28-week bloods, 59% of women (n=13/22) were anaemic and 92% of these patients were commenced on oral iron. Women who were anaemic in the first trimester and who had been prescribed oral iron were not anaemic at 28-week bloods. Reviewing the management plan of women proven to be anaemic in the third trimester demonstrated that 70% (n=9/13) were managed inappropriately – either by failure to repeat investigations or failure to increase the oral iron prescription or consider intravenous iron infusion. 41% (n=9/22) of women remained anaemic at their last full blood count prior to delivery. There were no significant confounding factors for PPH recognised in our group.



Figures 1 and 2: Demonstrate the number of women identified as anaemic at booking and at routine 28/40 week bloods. The number of anaemic women who were appropriately prescribed oral iron replacement therapy are indicated by shaded horizontal bars.



Figures 3 and 4: Demonstrate the number of women identified as anaemic intrapartum and compare the proportion of anaemic women at booking and intrapartum.

CONCLUSION

Management of anaemia was suboptimal. Baseline booking tests demonstrated a high proportion of anaemic women that were not appropriately prescribed iron. Whilst the detection and treatment rate was better at 28 weeks, review of management and test of cure remained low, resulting in almost half of the identified population being anaemic in labour, thereby increasing the risk of PPH. Our audit was a retrospective study with low power that can be reproduced in a larger group. A robust implementation strategy to increase awareness of anaemia among clinicians and general population is of paramount importance.

REFERENCES

1. National Institute for Health and Care Excellence. (2021). *Antenatal Care*. [NICE Guideline No. 201]. <https://www.nice.org.uk/guidance/ng201>
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3. Pavord, S. et al. "UK guidelines on the management of iron deficiency in pregnancy." *British Journal of Haematology* vol. 188,6 (2020): 819-830.