



Blood Transfusion Practices in Obstetrics at a Tertiary Care -An Audit

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OBJECTIVE

- Obstetrics accounts for the highest blood utilization in most countries.
- Optimizing blood use minimizes transfusion-associated risks and improves inventory management. According to the International Red Cross, appropriate usage could reduce blood demand by 30%.
- This audit aimed to evaluate blood utilization practices in obstetrics at a tertiary care hospital, focusing on adherence to guidelines, transfusion triggers, and achieving a crossmatch-to-transfusion (C/T) ratio of 2.5 as a standard for efficient utilization

DESIGN

- A retrospective observational audit
- location: Latifa Hospital, Dubai
- Duration: July 2022 to December 2022 .

METHODS

Data were reviewed from the electronic medical records of 334 women antenatal or postnatal period .

Variables analyzed included demographics, parity, clinical indications for transfusion, triggers, and the number of units transfused.

Statistical analyses assessed the trends, compliance with guidelines, and C/T ratio.

RESULTS

Of total 334 cases, 201 received transfusions., remaining 133 case had only cross matched blood

Blood transfusions were most prevalent among women aged 26–40 years (76%), and multigravidas (66%)

Transfusion occurred predominantly in the postnatal (48%) and antenatal (45%) periods.

Single-unit transfusions occurred in 9.6% of cases, 2-unit transfusions in 19.2%, and more than 4 units in 2.46%.

A total of 905 units were crossmatched, with 428 units transfused, **achieving a C/T ratio of 2.15, However the 447 units were crossmatched not transfused**

8 cases required emergency transfusion without prior crossmatch. Justification for transfusion was documented in 41% of cases, while 16% were unjustified, and 41% lacked adequate documentation.

CONCLUSION

This audit highlights significant variability in adherence to transfusion guidelines, including frequent unnecessary crossmatching and inadequate documentation contributing to inefficiencies.

While the C/T ratio of 2.15 met the target, opportunities for improvement remain.

Implementing patient blood management protocols , enhancing clinician training, and prioritizing documentation can optimize transfusion practices, improve maternal safety, and ensure effective blood resource utilization.

These findings provide a framework for refining obstetric transfusion care and establishing benchmarks for best practices.

