INCIDENCE OF POSTPARTUM HEMORRHAGE AND RELATED RISK FACTORS: A RETROSPECTIVE STUDY

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Background: Postpartum hemorrhage (PPH) remains one of the leading causes of maternal morbidity and mortality worldwide. Although extensively studied in public health settings, data from private high-risk maternity hospitals in Brazil remain scarce, limiting a comprehensive understanding of hemorrhagic patterns and associated clinical characteristics in this context.

Objective: To analyze the incidence, clinical profile, and factors associated with postpartum hemorrhage in a private high-risk maternity hospital in southeastern Brazil.

Methods

A retrospective observational study was conducted including all women diagnosed with PPH who underwent vaginal delivery, intrapartum cesarean section or cesarean section at a private maternity hospital between April 1, 2022, and April 1, 2023.

PPH was defined as blood loss ≥1000 mL within the first 24 hours postpartum.

Sociodemographic, obstetric, clinical, and neonatal variables were extracted from electronic medical records.

Statistical significance was set at $p < 0.05$.

Results

- A total of 644 women with PPH were included. Most patients were aged ≥35 years (59.7%) and presented overweight or obesity (82.1%). Cesarean section was the predominant mode of delivery (91.0%).
- Median blood loss was 1352.5 mL (IQR 1145–1870 mL), with 61.0% presenting losses between 1000 and 1499 mL. Transfusion was required in 7.0% of cases, and hysterectomy was performed in 5.1%, with no maternal deaths observed.
- Blood loss differred according to mode of delivery ($p=0.017$), with patients undergoing vaginal delivery presenting a higher volume of bleeding.
- Higher blood loss volumes were significantly associated with gestational age < 37 weeks, maternal age ≥35 years, assisted reproductive techniques, hypertensive disorders of pregnancy, twin gestation, and inclusion in the institutional hemorrhage protocol (all $p< 0.001$).

Conclusions

In this cohort of women with postpartum hemorrhage managed in a private high-risk maternity setting, greater blood loss was associated with advanced maternal age, prematurity, hypertensive disorders, assisted reproduction, and twin gestation.

These findings highlight the importance of early risk stratification and protocol-based management to mitigate hemorrhagic severity and improve maternal outcomes in private obstetric care settings.