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INTRODUCTION

Postpartum hemorrhage (PPH) is one of the leading preventable causes of maternal morbidity and mortality worldwide, particularly in the first hours following delivery. In Brazil, it remains a major challenge for the healthcare system, ranking as the second leading cause of maternal death. Beyond its clinical impact, PPH places a significant burden on healthcare resources, especially in developing countries, where its incidence is higher, and resources are more constrained. Effective prevention and management of this condition not only improve maternal outcomes but also contribute to the more efficient allocation of healthcare resources. Although the clinical management of PPH is well established, its economic impact remains largely unexplored.

OBJECTIVE

To evaluate the clinical aspects, hospital outcomes, and costs associated with the hospitalization of patients with postpartum hemorrhage (PPH) in a hospital linked to a Brazilian health insurance provider.

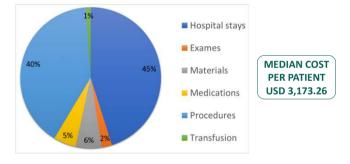
METHODS

This retrospective study was conducted at a hospital belonging to Unimed Sorocaba, a health insurer covering 150,000 lives. Data from electronic medical records and administrative registers from September 2021 to October 2024 were analyzed, focusing on patients diagnosed with PPH. The variables included age, delivery type, length of hospitalization, resource utilization, hospital costs, the need for blood transfusion (BT), and hysterectomy.

RESULTS

A total of 6,535 deliveries occurred during the study period, of which 5.5% (n=358) resulted in PPH. The average age of patients was 33.1 years (18-46), with the highest prevalence (50.3%) in the 31-38 age range. Cesarean deliveries accounted for 87% of all births. Of the PPH patients, 19.5% (n=70) required ICU admission. The total hospitalization cost for PPH patients was USD1,134,790.40, with an average cost of USD3,173.26 (USD1,083.92-35,070.97). Forty-five percent of the total costs were related to hospital stays, and 40% were attributed to diagnostic and therapeutic procedures (Figure 1).

Figure 1. Cost Distribution of Postpartum Hemorrhage



The average length of stay was 4.5±4.4 days, and 37% of patients received multiple medications for hemorrhage control. Additionally, 10 patients (2.79%) underwent hysterectomy. Patients who required blood transfusion (29%: n=68) incurred significantly higher total costs (158.9%) and average costs (64%), primarily due to increased costs for procedures (254%) and hospital stays (177%) (Figure 2).

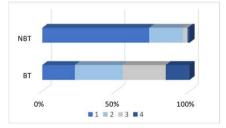
RESULTS

Figure 2. Cost Distribution of Postpartum Hemorrhage by **Blood Transfusion Status**



They also had longer hospitalizations (5.87±4.48 vs. 4.22±4.37 days: p<0.01), more frequent use of multiple medications (78% vs. 25%) (Figure 3), and higher rates of hysterectomy (80%).

Figure 3. Medication Use Distribution in Postpartum **Hemorrhage by Blood Transfusion Status**



CONCLUSION

PPH represents a significant burden on the healthcare system, particularly for patients requiring blood transfusion, due to the higher consumption of resources and extended hospitalization. These findings underscore the need for preventive strategies and early interventions to reduce complications, healthcare costs, and to improve maternal outcomes.

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