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Postpartum hemorrhage care: A comprehensive approach from the obstetric nursing perspective

Atención de hemorragias postparto: Un enfoque integral desde la perspectiva de la enfermería obstétrica

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ABSTRACT

Objective: to analyze postpartum hemorrhage care from the obstetric nursing perspective. **Method**: A descriptive documentary method was adopted for the identification of 15 relevant articles available in the PubMed database. **Results and conclusion**: The increased risk of PPH severity in certain circumstances, especially in multiparous women, highlights the importance of more focused prenatal and obstetric care tailored to individual patient characteristics. In addition, early identification of risk factors, together with appropriate interventions and implementation of quality control protocols, can contribute significantly to the reduction of PPH-associated maternal morbidity.

Descriptors: uterine hemorrhage; female urogenital diseases and pregnancy complications; pregnancy complications. (Source, DeCS).

RESUMEN

Objetivo: analizar la atención de hemorragias postparto desde la perspectiva de la enfermería obstétrica. **Método**: Se adoptó un método descriptivo documental para la identificación de 15 artículos pertinentes disponibles en la base de datos PubMed. **Resultados y conclusión**: El aumento del riesgo de gravedad de la HPP en determinadas circunstancias, especialmente en mujeres multíparas, resalta la importancia de una atención prenatal y obstétrica más centrada y adaptada a las características individuales de las pacientes. Además, la identificación temprana de factores de riesgo, junto con intervenciones adecuadas y la implementación de protocolos de control de calidad, puede contribuir significativamente a la reducción de la morbilidad materna asociada con la HPP.

Descriptores: hemorragia uterina; enfermedades de los genitales femeninos y complicaciones del embarazo; complicaciones del embarazo. (Fuente, DeCS).

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Brief original

INTRODUCTION

In the context of maternal care, postpartum haemorrhage persists as a clinical entity of significant concern, representing an important source of maternal morbidity and mortality. In this sense, comprehensive care of postpartum haemorrhage takes on critical relevance, and it is within this framework that obstetric nursing emerges as an essential actor in the management and mitigation of these obstetric complications. This research delves into the meticulous analysis of strategies and approaches undertaken by nurse-midwives, exploring their pivotal role in optimising postpartum haemorrhage care.

Through a comprehensive examination of clinical practices, intervention protocols and the application of innovative approaches, this research aims to contribute to the body of knowledge, outlining perspectives that will improve obstetric care and, consequently, improve maternal outcomes in critical postpartum haemorrhage situations. Maternal care during the postpartum period is a crucial stage in women's reproductive health, where postpartum haemorrhage emerges as a significant clinical complication. [1 2 3]

In this context, the obstetric nursing perspective emerges as an essential component to comprehensively address this obstetric challenge. This article dives into a detailed analysis of postpartum haemorrhage care from a nurse-midwifery perspective, exploring not only the clinical management of these complications, but also highlighting the critical role of nursing in health promotion, prevention and education. Through a holistic approach, it seeks to shed light on innovative practices and strategies implemented by obstetric nursing professionals, with the aim of contributing to the advancement of knowledge in the field and improving the quality of maternal care in critical postpartum situations. [4 5 6]

In consideration the objective is to analyse postpartum haemorrhage care from the perspective of obstetric nursing.

METHOD

A meticulous descriptive documentary review was carried out with the aim of systematically unravelling the psychosocial factors that affect the responsiveness and comprehensive care provided by obstetric nurses in postpartum settings.

Data collection was carried out through the review of documents intimately linked to the experience of obstetric nurses in postpartum haemorrhage situations. This approach not only provided a comprehensive view of the complexity inherent in the psychosocial factors involved in the care of this obstetric complication, but also accurately contextualised their interaction.

In order to strengthen the body of knowledge, a comprehensive review of the scientific literature was undertaken, thoroughly identifying 15 relevant articles available on PubMed. The selection of these articles, carried out using rigorous criteria of relevance, methodological quality and geographical and specialised diversity, shed light on critical perspectives related to clinical management, specialised interventions and specific psychosocial challenges faced by obstetric nurses in the management of postpartum haemorrhage.

The conduct of this study was guided by a strong ethical commitment, in strict adherence to both international and national ethical standards and regulations related to human subjects research. The information extracted from the 15 selected articles was subjected to rigorous thematic analysis, ensuring the reliability and validity of the results and allowing for a robust and nuanced interpretation of the findings.

RESULTS

Postpartum haemorrhage, recognised as one of the pre-eminent surgical emergencies in obstetrics, demands a comprehensive approach involving an interprofessional team, including laboratory personnel and nurses specialising in labour and postpartum. [7] [8]

Treatment and management of this obstetric complication revolves around resuscitation of the patient while identifying and addressing the specific cause, in many cases surgical in nature. Preservation of haemodynamic stability is imperative to ensure continuous perfusion to vital organs, requiring the establishment of wide intravenous (IV) access. Careful assessment of cumulative blood loss is essential, with special attention to early implementation of protocols for blood product release and massive transfusion procedures. [9] [10] [11] [12]

Prompt identification of the underlying cause of postpartum haemorrhage and simultaneous initiation of treatment are crucial components. To improve outcomes, resuscitation in a surgical setting is advocated, where anaesthetic assistance may be indicated to facilitate repair of complex lacerations, correct uterine inversions, provide analgesia if required for removal of retained products, or in cases requiring surgical exploration. [12]

Maternal characteristics did not exhibit an increased risk of severe postpartum haemorrhage (PPH), with the exception of nulliparous and multiparous women who had previous caesarean deliveries. On the other hand, certain obstetric interventions, such as induction of labour, acceleration of labour, and a birth weight greater than 4000 g, were associated with an increased risk of severe PPH. In addition, larger vaginal tears had the most pronounced risk of developing severe PPH. Clinical practice guided by rigorous indications for obstetric interventions, as well as timely identification and treatment of genital tract tears, are seen as crucial strategies to mitigate the risk of severe PPH. [13]

Prolonged duration from delivery of the foetus to completion of caesarean section has been identified as a risk factor for the development of postpartum haemorrhage (PPH) in surgical procedures. PPH, despite being an obstetric problem of considerable importance, is often underestimated, especially in the context of vaginal deliveries. Regardless of the route of delivery, measurement of blood loss based on haemoglobin levels of 500 ml and 1000 ml can be valuable, acting as early warning and diagnostic thresholds, respectively. [14]

According to findings in the US literature, black race, increased Body Mass Index (BMI), caesarean delivery, and the presence of anaemia were correlated with an increased risk of Postpartum Haemorrhage (PPH). Specifically, the presence of anaemia at the time of delivery was associated with an increased risk of severe maternal morbidity in those patients who experienced episodes of PPH. [14]

The use of forceps in assisted delivery and caesarean section procedures were identified as factors that increase the risk of severity in postpartum haemorrhage (PPH). These adverse effects were more pronounced in multiparous women. In contrast, episiotomy, vacuum-assisted delivery and spontaneous vaginal delivery (SVD) had a comparable risk of progression to severe PPH in both nulliparous and multiparous women. These findings have important implications for obstetric decision-making in terms of choice of delivery methods, maternal and neonatal health care, and obstetric quality control. [15]

CONCLUSION

The results of this study highlight the importance of careful consideration of risk factors associated with postpartum haemorrhage (PPH) when making obstetric decisions. The significant influence of variables such as type of delivery (forceps assisted, caesarean section), parity and other specific obstetric procedures such as

episiotomy and vacuum assisted delivery underlines the need for individualised assessment in the planning and execution of delivery methods.

The increased risk of PPH severity in certain circumstances, especially in multiparous women, highlights the importance of more focused antenatal and obstetric care tailored to individual patient characteristics. In addition, early identification of risk factors, together with appropriate interventions and implementation of quality control protocols, can contribute significantly to the reduction of PPH-associated maternal morbidity.

These findings provide valuable information for clinical decision-making, improvement of maternal and neonatal care, as well as the development of obstetric quality control strategies. Ultimately, it is hoped that this knowledge will contribute to optimising obstetric outcomes and improving women's safety and well-being during the postpartum period.

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CONFLICT OF INTEREST

There is no conflict of interest with individuals or institutions involved in the research.

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REFERENCIAS

1. Borges-Damas L, Sixto-Pérez A, Sánchez-Machado R. Historia de las enfermeras obstétricas: importancia de sus cuidados en la atención al parto [History of obstetric nurses: importance of their care in childbirth care]. Revista Cubana de Enfermería [Internet]. 2018; 34 (3) Disponible en: https://revenfermeria.sld.cu/index.php/enf/article/view/1427

2. Banchón Alvarado JD, Fernández Saquicela CA, Villacís Nieto JM, Camacho García DE. Conceptos actuales de sepsis y shock séptico [Current concepts of sepsis and septic shock]. jah [Internet]. 2020;3(2):102-16.
3. Gonzalez-Brown V, Schneider P. Prevention of postpartum hemorrhage. *Semin Fetal Neonatal Med*. 2020;25(5):101129. doi:10.1016/j.siny.2020.101129
4. Watkins EJ, Stem K. Postpartum hemorrhage. *JAAPA*. 2020;33(4):29-33. doi:10.1097/01.JAA.0000657164.11635.93
5. Evensen A, Anderson JM, Fontaine P. Postpartum Hemorrhage: Prevention and Treatment. *Am Fam Physician*. 2017;95(7):442-449.
6. Rodriguez-Yanez T, Almanza Hurtado A, Martinez Avila MC, Borré-Naranjo D, Montes-Farah JM, Cuadrado Cano B, Ramos-Clason E, Dueñas-Castell C. Utilidad clínica de la diferencia arterio–venosa de lactato como factor pronóstico de mortalidad en pacientes críticamente enfermos [Clinical utility of arterio-venous lactate difference as a predictor of mortality in critically ill patients]. Rev Cienc Biomed [Internet]. 2022;11(1):6-18.
7. Messina A, Calabrò L, Pugliese L, et al. Fluid challenge in critically ill patients receiving haemodynamic monitoring: a systematic review and comparison of two decades. *Crit Care*. 2022;26(1):186. Published 2022 Jun 21. doi:10.1186/s13054-022-04056-3
8. Gassanov N, Caglayan E, Nia A, Erdmann E, Er F. Hämodynamisches Monitoring auf der Intensivstation: Pulmonalarterienkatheter versus PiCCO [Hemodynamic monitoring in the intensive care unit: pulmonary artery catheter versus PiCCO]. *Dtsch Med Wochenschr*. 2011;136(8):376-380. doi:10.1055/s-0031-1272539
9. Teboul JL, Saugel B, Cecconi M, et al. Less invasive hemodynamic monitoring in critically ill patients. *Intensive Care Med*. 2016;42(9):1350-1359. doi:10.1007/s00134-016-4375-7
10. Renner J, Bein B, Grünewald M. Hämodynamisches Monitoring auf der Intensivstation: Je invasiver, desto besser? [Hemodynamic Monitoring in the ICU: the More Invasive, the Better?]. *Anasthesiol Intensivmed Notfallmed Schmerzther*. 2022;57(4):263-276. doi:10.1055/a-1472-4318
11. Wormer KC, Jamil RT, Bryant SB. Acute Postpartum Hemorrhage. In: *StatPearls*. Treasure Island (FL): StatPearls, 2023.
12. Graugaard HL, Maimburg RD. Is the increase in postpartum hemorrhage after vaginal birth because of altered clinical practice? A register-based cohort study. *Birth*. 2021;48(3):338-346. doi:10.1111/birt.12543
13. Wei Q, Xu Y, Zhang L. Towards a universal definition of postpartum hemorrhage: retrospective analysis of Chinese women after vaginal delivery or cesarean section: A case-control study. *Medicine (Baltimore)*. 2020;99(33):e21714. doi:10.1097/MD.0000000000021714

14. Taylor K, Noel E, Chapple AG, Buzhardt S, Sutton E. Risk factors for postpartum hemorrhage in a tertiary hospital in South-Central Louisiana. *J Matern Fetal Neonatal Med*. 2022;35(25):7353-7359. doi:10.1080/14767058.2021.1948528
15. Xu C, Zhong W, Fu Q, et al. Differential effects of different delivery methods on progression to severe postpartum hemorrhage between Chinese nulliparous and multiparous women: a retrospective cohort study [published correction appears in BMC Pregnancy Childbirth. 2021 Jan 19;21(1):64]. *BMC Pregnancy Childbirth*. 2020;20(1):660. Published 2020 Oct 31. doi:10.1186/s12884-020-03351-7