EDITORIAL

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Improving postpartum hemorrhage care: Policy, practice, and research

Postpartum hemorrhage (PPH) occurs in around 3%–5% of all births, with large regional variation. Approximately one-quarter of the annual 300000 maternal deaths are related to complications of PPH.¹ The FIGO PPH supplement comprises seven original contributions on medicines and management of PPH. Broadly, the papers cover policy and regulatory issues, research and development including new medicines in the pipeline and new routes of administration of old medicines, quality of medicines in low- and middle-income countries (LMICs), and strategies to improve PPH prevention and treatment.

The joint PPH statements by FIGO and the International Confederation of Midwives underscore the importance of interdisciplinary collaboration for improved quality of care and reduction of maternal morbidity and mortality.² The two joint statements on the use of uterotonics for the prevention of PPH and on the use of tranexamic acid (TXA) for the treatment of PPH are complementary to World Health Organization (WHO) PPH recommendations published between 2012 and 2020. The statements recognize the importance of context-specific guidelines and enabling environments with adequate drugs, supplies, and trained and skilled health personnel to improve quality of care and provide a positive birth experience for women. Healthcare professionals and their respective obstetrics and gynecology societies and midwives' associations are critical in the development and implementation of context-specific care guidelines.

The WHO updated recommendations for PPH prevention and treatment included heat-stable carbetocin (HSC) for prevention of PPH in specific contexts.³ and TXA for treatment of PPH.⁴ However, both drugs are still underused or not used at all for PPH in many countries with a high burden. A key step to improving the implementation of current evidence-based practice is addressing health system bottlenecks around the availability and utilization of quality uterotonics. WACI Health and Concept Foundation implemented an advocacy initiative that focused on accelerating access to quality-assured and heat-stable medicines for the prevention and treatment of PPH in Sub-Saharan African countries. Ng'ang'a et al.⁵ provide a commentary on the process and lessons learned during the initiative to improve awareness of the importance of recently recommended medicines for the management of PPH and support the process

to update PPH guidelines and Essential Medicines Lists to include these drugs.

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Ameh et al.⁶ describe the process used by FIGO to get policy into practice for the prevention of PPH in low-resource settings through the "Improving access to essential medicines to reduce PPH morbidity and mortality (IAP)" project to engage key stakeholders in eight Sub-Saharan African countries to develop country-specific PPH protocols and clinical guidelines. The authors present the challenges identified by key stakeholders in implementing current WHO PPH recommendations. They performed a secondary analysis of the Kenyan Confidential Enquiry into Maternal Deaths dataset to identify factors associated with maternal deaths from PPH and performed a standards-based audit of care provided against national PPH guidelines and standards. Their findings and conclusions reinforce the need for developing and dissemination of context-specific evidence-based PPH guidelines for improved quality of care.

Another study by Wakili et al.⁷ on the differences in obstetric practices and outcomes of PPH across Nigerian facilities based on a cross-sectional survey concluded that there is large variation in PPH rates and PPH-related adverse maternal outcomes. This underscores the need for a detailed contextual understanding of quality of care for prevention and treatment of PPH in Nigeria.

Innovations are critical for the prevention and treatment of PPH. These allow a wide range of interventions that may be best suited for various settings to be developed. Investments in early-phase research are essential to support the emergence of new products. In their paper on innovations for the prevention and treatment of PPH, McDougal et al.⁸ performed a systematic analysis of novel medicines in the development pipeline to identify and rank candidates for the prevention and treatment of PPH.

Intravenous TXA when given as soon as possible after onset of bleeding and no later than 3 hours after birth reduces PPH-associated deaths. One barrier to women receiving TXA treatment is the need for intravenous injection. Many women give birth in settings where administering an intravenous injection is not possible and this can be a barrier to PPH treatment. Alternative routes of TXA administration would allow more women to benefit from this lifesaving treatment. Shakur-Still et al.⁹ performed and discuss a narrative review on TXA plasma concentration needed to inhibit fibrinolysis and the time

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2022 The Authors. International Journal of Gynecology & Obstetrics published by John Wiley & Sons Ltd on behalf of International Federation of Gynecology and Obstetrics. taken to achieve this concentration when using different routes of TXA administration.

Finally, the use of quality uterotonics is critical for successful prevention and treatment of PPH. Ammerdorffer et al.¹⁰ assessed the quality of oxytocin and TXA in Kenya, Nigeria, South Africa, and Tanzania using the International and British Pharmacopeia. Their findings underline the need for quality assurance systems along the supply chain of these medications as an integral part of the health system for optimal outcomes.

We hope that this supplement will improve awareness of the key issues around the prevention and treatment of PPH, including the implementation of current evidence-based recommendations, especially in LMICs.

KEYWORDS

clinical guidelines, essential medicine list, heat stable carbetocin, PPH prevention, PPH treatment, quality of care, tranexamic acid

AUTHOR CONTRIBUTIONS

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CONFLICT OF INTEREST

No conflicts of interest to declare.

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REFERENCES

- World Health Organization. Trends in maternal mortality 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division: Executive summary. WHO; 2019.
- FIGO PPH Technical Working Group; Begum F, Beyeza J, Burke T, et al. FIGO and the International Confederation of Midwives endorse WHO guidelines on prevention and treatment of postpartum hemorrhage. 2022;158(s1):6-10. doi:10.1002/ijgo.14199.
- World Health Organization. WHO recommendations: Uterotonics for the prevention of postpartum haemorrhage. WHO; 2018.
- World Health Organization. WHO recommendation on tranexamic acid for the treatment of postpartum haemorrhage. WHO; 2017.
- Ng'ang'a J, Chitimbe T, Mburu R, et al. Challenges in updating national guidelines and essential medicines lists in Sub-Saharan African countries to include WHO-recommended postpartum hemorrhage medicines. 2022;158(s1):11-13. doi:10.1002/ijgo.14269.
- Ameh CA, Ramya MJ, West F, Dickinson F, Allott H, Godia P. A synthesis of clinical and health system bottlenecks to implementing new WHO postpartum hemorrhage recommendations: Secondary data analysis of the Kenya Confidential Enquiry into Maternal Deaths 2014–2017. 2022;158(s1):14-22. doi:10.1002/ijgo.14270.
- Wakili AA, Aswat A, Timms R, et al. Differences in obstetric practices and outcomes of postpartum hemorrhage across Nigerian health facilities. 2022;158(s1):23-30. doi:10.1002/ijgo.14198.
- McDougall ARA, Goldstein M, Tuttle A. Innovations in the prevention and treatment of postpartum hemorrhage: Analysis of a novel medicines development pipeline database. 2022;158(s1):31-39. doi:10.1002/ijgo.14200.
- Shakur-Still H, Grassin-Delyle S, Muhunthan K, et al. Alternative routes to intravenous tranexamic acid for postpartum hemorrhage: A systematic search and narrative review. 2022;158(s1):40-45. doi:10.1002/ijgo.14201.
- Ammerdorffer A, Rushwan S, Timms R, et al. Quality of oxytocin and tranexamic acid for the prevention and treatment of postpartum hemorrhage in Kenya, Nigeria, South Africa, and Tanzania. 2022;158(s1):46-55. doi:10.1002/ijgo.14197.