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COMMENTARY

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FIGO and the International Confederation of Midwives endorse WHO guidelines on prevention and treatment of postpartum hemorrhage

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Out of approximately 135 million annual births globally, 45 million are in Africa and 41 million are in South Asia. Each year, about two-thirds of the world's births occur in settings with unacceptably high maternal and neonatal mortality,[1] and where the risk of death due to postpartum hemorrhage (PPH) is highest. PPH occurs in about 3%–5% of births, with large regional variation.[2] Approximately 25% of the annual 300 000 maternal deaths are related to complications of PPH.[3]

The FIGO PPH Technical Working Group (TWG), which includes members of the International Confederation of Midwives (ICM), recognizes the importance of interdisciplinary collaboration, where midwives, obstetricians, and other healthcare providers work closely together to support women, newborns, and families to have a positive birth experience. Healthcare providers need to be available in sufficient numbers, to have received a quality education, to be appropriately regulated, and to have access to continuing professional development. They also need to work in enabling environments and have access to appropriate and effective medicines and up-to-date guidelines.

The FIGO PPH TWG actively supports activities for healthcare system and provider strengthening, to ensure that women, newborns, and families receive quality care throughout the childbirth continuum.

The availability of evidence-based guidelines can contribute to women, newborns, and families receiving quality care from their healthcare provider. Access to the latest evidence can assist healthcare providers in deciding which care pathway is the most appropriate and can save lives while providing a positive birth experience.

Recognizing that adoption of World Health Organization (WHO) PPH guidelines will need support and that guideline implementation can best be led by national healthcare professionals, the FIGO PPH TWG and ICM consulted with their respective member obstetric and gynecologist societies and midwives' associations. There was consensus that collaborating on joint statements for PPH prevention and treatment would help to reflect the valuable contribution of both professions to improve the quality of care provided to women, newborns, and families.

To this end, in 2021, two joint statements were authored by FIGO and ICM demonstrating the ongoing collaboration between FIGO and ICM, the world's two leading maternal and newborn healthcare organizations. These publications follow numerous other joint publications, the first being a 2006 joint statement on the prevention and treatment of PPH in low-resource settings.[4] We also recognize that certain aspects are evolving and that, for example, the optimal mode of administration of tranexamic acid is still under study.

The two 2021 joint statements are the "Joint statement of recommendation for the use of uterotonics for the prevention of postpartum haemorrhage"[5] and the "Joint statement of recommendation for the use of tranexamic acid for the treatment of postpartum haemorrhage".[6]

The two joint statements build on the 2012 WHO PPH guidelines,[7] the 2018 WHO update,[8] and the 2020 update on the route of oxytocin administration after vaginal birth.[9]

FIGO and ICM recognize that contexts differ, and that global recommendations and guidelines must be supported by national experts who provide maternal and newborn health care. ICM and FIGO have strong connections with their respective professional associations and societies and are committed to supporting implementation of evidence-based guidelines and recommendations at national levels to support quality preservice education and in-service continuing professional development.

FIGO–ICM JOINT STATEMENT OF RECOMMENDATION FOR THE USE OF UTEROTONICS FOR THE PREVENTION OF POSTPARTUM HAEMORRHAGE

June 2021

Postpartum haemorrhage (PPH) is a devastating but preventable condition that affects mothers and their children around the world. PPH occurs when a mother has serious bleeding after giving birth. When not treated quickly, it can be fatal. Most deaths from PPH could be avoided through active management of the third stage of labour, and prompt and effective application of the first response bundle (use of uterotonics, uterine massage, fluid replacement and tranexamic acid [TXA]).

Preventing and treating PPH

As leading organizations representing specialists in midwifery, obstetrics and gynaecology, the International Federation of Gynecology and Obstetrics (FIGO) and the International Confederation of Midwives (ICM) draw attention to a range of aspects of care that are essential to the prevention and treatment of PPH. These include:

- organization of care
- pre-service and in-service training of care providers
- identification and treatment of anaemia in women of childbearing age
- increased availability of contraception and family planning
- improved referral pathways
- development of clinical protocols for prevention and treatment of PPH.[1]

FIGO and ICM recommendations

In response to the availability of new evidence, FIGO and ICM strongly recommend the use of uterotonics during active management of third stage of labour to prevent PPH during vaginal birth or caesarean section. Our recommendations align with those made in the WHO 2018 recommendations on uterotonics for the prevention of postpartum haemorrhage.[2]

All health care providers should be trained and competent in both physiological and active management of third stage of labour.[3] Women may choose physiological management of third stage of labour. In some settings, uterotonics may not be available or of good quality.
For active management of third stage of labour, it is recommended that one of the following uterotonics be used, preferably within one minute after birth. In settings where multiple uterotonic options are available, oxytocin (10 IU, IM/IV) is the recommended uterotonic agent for the prevention of PPH for all births.[4]
In settings where oxytocin is unavailable (or its quality cannot be guaranteed), the use of other uterotonics (carbetocin, ergometrine/methylergometrine, oxytocin/ergometrine fixed-dose, misoprostol) are recommended for the prevention of PPH. Administration of uterotonics does not impede the delay of cord clamping.

Oxytocin 10 IU, IM/IV

Oxytocin is relatively inexpensive and widely available. However, it requires refrigerated transport and storage (2–8°C). In settings where this cannot be guaranteed, the quality and effectiveness of oxytocin may be adversely affected. In these situations, alternative effective uterotonics may be considered.

Heat-stable carbetocin 100 mcg, IM/IV

Heat-stable carbetocin does not require refrigeration and therefore eliminates the costs associated with refrigerated storage and transport. This is a context-specific recommendation where its cost is comparable to other effective uterotonics.

Misoprostol 400 mcg to 600 mcg, PO

Misoprostol can be used in both hospital and community settings if no other injectable uterotonics are available. Its acceptability may be limited where providers have concerns regarding potential misuse, or need more information on its effectiveness, implementation and the management of side effects.

Ergometrine/methylergometrine 200 mcg, IM/IV OR

Oxytocin and ergometrine fixed-dose combination 5 IU/500 mcg, IM

Context-specific recommendations where hypertensive disorders can be safely excluded prior to the use of ergometrine.

Actions for midwives' associations and OBGYN societies

FIGO and ICM recommend that national professional midwives' associations and obstetrics and gynaecology societies have an important and collaborative role to play in:

- the dissemination and implementation of these recommendations for the use of uterotonics in the case of active management of third stage of labour
- advocacy to increase women's access to quality maternal health care at all levels
- strengthening capacity at all levels of health care facilities to ensure the provision of high-quality services to all women giving birth
- translating recommendations into care packages and programmes at country and facility level, where appropriate to the context.

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FIGO–ICM JOINT STATEMENT OF RECOMMENDATION FOR THE USE OF TRANEXAMIC ACID FOR THE TREATMENT OF POSTPARTUM HAEMORRHAGE

June 2021

Postpartum haemorrhage (PPH) is a devastating but preventable condition that affects mothers and their children around the world. PPH occurs when a mother has serious bleeding after giving birth. When not treated quickly, it can be fatal. Most deaths from PPH could be avoided through active management of the third stage of labour, and prompt and effective application of the first response bundle (use of uterotonics, uterine massage, fluid replacement and tranexamic acid [TXA]).

Preventing and treating PPH

As leading organizations representing specialists in midwifery, obstetrics and gynaecology, the International Federation of Gynecology and Obstetrics (FIGO) and the International Confederation of Midwives (ICM) draw attention to a range of aspects of care that are essential to the prevention and treatment of PPH. These include:

- organization of care
- pre-service and in-service training of care providers
- identification and treatment of anaemia in women of childbearing age
- increased availability of contraception and family planning
- improved referral pathways
- development of clinical protocols for prevention and treatment of PPH.[1]

FIGO and ICM recommendations

FIGO and ICM recommend the early use of TXA within three hours of birth, in addition to standard care for women with clinically diagnosed PPH following vaginal birth or caesarean section

Standard care in the context of this recommendation covers routine care for PPH, including fluid replacement, administration of uterotonics, monitoring of vital signs, non-surgical (e.g. bimanual compression, intrauterine balloon tamponade, nonpneumatic antishock garment, aortic compression) and surgical interventions (e.g. brace sutures, arterial ligation, or hysterectomy) in accordance with WHO guidelines, FIGO recommendations or adapted local PPH treatment protocols.

TXA is a competitive inhibitor of plasminogen activation. It can reduce bleeding by inhibiting the enzymatic breakdown of fibrinogen and fibrin clots. TXA is in routine clinical use for reduction of blood loss in surgery and trauma and is listed on the WHO Essential Medicines List for management of postpartum haemorrhage.

Use of tranexamic acid for the treatment of PPH

FIGO and ICM strongly recommend the use of TXA for the treatment of PPH as a component of the first response bundle when the bleeding is thought to be due or partly due to trauma. Our recommendations (below) align with those made in the WHO 2017 recommendation on tranexamic acid for the treatment of postpartum hemorrhage, in response to moderate supporting evidence from the WOMAN Trial.[1,2,3]

- Initial dose of TXA should be administered within 3 hours of birth, at a fixed dose of 1 g (100 mg/ml), IV at 1 ml per minute (i.e. administered over 10–20 minutes). Infusion rate of more than 1 ml/min can cause hypotension.
- Initial administration of TXA beyond 3 hours does not confer any clinical benefit.
- If needed after initial dose, a second dose of TXA of 1 g (100 mg/ml), IV at 1 ml per minute should be administered if bleeding continues after 30 minutes, or if bleeding restarts within 24 hours of completing the first dose.
- TXA should be used in all cases of PPH regardless of whether the bleeding is due to genital tract trauma or other causes.
- Use of TXA should be avoided in women with a contraindication to antifibrinolytic therapy or thromboembolic disorder during pregnancy.
- Standard IV infusion equipment is required, as well as health care providers with sufficient training to safely administer IV bolus infusions.
- TXA should be recognized as a life-saving intervention and be made readily available for the management of PPH in settings where emergency obstetric care is provided.

Actions for midwives' associations and OBGYN societies

FIGO and ICM recommend that national professional midwives' associations and obstetrics and gynaecology societies have an important and collaborative role to play in:

- the dissemination and implementation of recommendations for the use of tranexamic acid for the treatment of PPH.
- advocacy to increase women's access to quality maternal health care at all levels.
- strengthening capacity at all levels of health care facilities to ensure the provision of high-quality services to all women giving birth.
- translating recommendations into care packages and programmes at country and facility level, where appropriate to the context.

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CONFLICT OF INTEREST

Outside of the present work, FW reports that ICM receive funding from Merck for Mothers via Concept Foundation on a project led by FIGO to Improve Access to Essential Medicines for PPH Prevention and Treatment. Other authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

Claudia Hanson wrote the first draft with major inputs from Cherrie Evans. The two FIGO and ICM statements were written by Cherrie Evans, Florence West, and Alison Wright and all members of TWG approved the recommendations. All authors reviewed and approved the final manuscript.

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