



# Misoprostol for the treatment of postpartum haemorrhage in low resource settings

Joint statement

International Confederation of Midwives (ICM)

International Federation of Gynecology and Obstetrics (FIGO)

The International Confederation of Midwives (ICM) and the International Federation of Gynecology and Obstetrics (FIGO) have a long established common commitment towards upholding women's fundamental human right to health; reducing the global incidence of maternal mortality and morbidity and using evidence based interventions to do so.

This statement reflects the latest (2012) evidence base on the use of misoprostol for the treatment of postpartum haemorrhage (PPH) in low resource settings where intravenous oxytocin, the gold standard for treatment of PPH, is not available.

## Background

Postpartum haemorrhage is the leading cause of maternal morbidity and mortality, but most cases of PPH can be effectively prevented and treated in virtually all settings where women deliver;

Investing in improved midwifery and obstetric services remains vital for reducing maternal morbidity and mortality. To meet the needs of the most underserved populations, access to life saving interventions in community settings must be prioritized.

Active management of the third stage of labour, with the administration of a uterotonic can reduce blood loss and reduce the incidence of PPH. Nonetheless, 6-16% of women who receive uterotonic prophylaxis<sup>1</sup> will still experience post-partum haemorrhage requiring prompt interventions.

When PPH occurs where the use of 40 IU IV oxytocin, the gold standard for PPH treatment, is not feasible (e.g. there is a lack of skilled attendants or refrigeration), 800  $\mu$ g sublingual misoprostol, a safe and effective drug with few contraindications or side effects, can be used to control blood loss.

FIGO and ICM have committed themselves to making increased access to misoprostol for the management of postpartum haemorrhage a reality, particularly in low resource settings where IV oxytocin remains largely unavailable or not feasible.

#### Benefits of misoprostol for the treatment of postpartum haemorrhage in low resource settings

- Safe, effective, easy to administer, transient side effects, cost effective, widely available and stable at room temperature
- Provides a safe and effective option for the treatment of PPH where currently IV oxytocin is not available and/or feasible

<sup>&</sup>lt;sup>1</sup> Carroli G, Cuesta C, Abalos E, Gulmezoglu AM. Epidemiology of postpartum haemorrhage: a systematic review. Best Practice & Research Clinical Obstetrics and Gynaecology 2008; 22:999-1012.

# Recommendations for treating PPH when 40 IU intravenous oxytocin is not immediately available<sup>2</sup>

Regimen	Single dose of misoprostol 800 µg sublingually is indicated for <b>treatment</b> of PPH when 40 IU IV infusion oxytocin is not immediately available (irrespective of the prophylactic measures).
Course of treatment	Once PPH is diagnosed, the treatment should be given immediately.
Repeat or consecutive doses	Since the known side effects of misoprostol appear to be dose related, repeat or consecutive doses of misoprostol may increase the incidence of side effects.
	If oxytocin is already being provided for treatment of PPH, evidence suggests that adjunct (simultaneous) use of misoprostol has no added benefit.
	There is insufficient information about the effect of two or more consecutive doses of
	misoprostol for treatment of PPH. In the absence of such information, repeat doses of
	misoprostol for PPH treatment are not recommended
	Other treatment options, such as bimanual compression or aortic compression, should be considered if one dose has not been effective.
Contraindications	History of allergy to misoprostol or other prostaglandin
Precautions	1. Caution is advised in instances where the woman may have already received misoprostol as prophylaxis for PPH prevention if an initial dose of misoprostol was associated with pyrexia or marked shivering.
	<ol> <li>After provision of uterotonics, the need for other steps to stop the bleeding should be explored, and causes of PPH other than uterine atony should be considered.</li> <li>Small amounts of misoprostol or its active metabolite may appear in breast milk but</li> </ol>
	no adverse effects on breast feeding infants have been reported.
Effects and side effects	Prolonged or serious effects and side effects are rare.
	The most common known side effects associated with misoprostol are:
	<b>Fever/Shivering:</b> Shivering, chills and/or fever are associated with use of misoprostol. Shivering has been reported in 37–47% of women following administration of 800 $\mu$ g sublingual misoprostol, fever in 22–44%, and hyperpyrexia (>40 degrees Celsius) in 1–14%. These side effects are transient and non-life threatening and can be managed using anti-pyretics and physical cooling.
	Gastro-intestinal effects: Nausea occurs in 10–15% of women given 800 $\mu$ g
	sublingual misoprostol and vomiting in about 5%. Both should resolve within two to six
	hours. An anti-emetic can be used if needed, but in general no action is required
	except to reassure the woman and her family.
	Diarrhoea may also occur in about 1% of women but should resolve within a day.

<sup>&</sup>lt;sup>2</sup> FIGO Guidelines, Treatment of postpartum haemorrhage with misoprostol, International Journal of Gynecology and Obstetrics 119 (2012) 215 - 216

### Call to action

As two leading international associations of healthcare professionals, ICM and FIGO have a pivotal role to play in ensuring that women, especially those most vulnerable to morbidity and mortality during childbirth due to a lack of a skilled attendant and a lack of access to oxytocin, have access to misoprostol.

In leading this effort, national obstetric and midwifery associations, particularly in countries where universal access to oxytocin is unreliable, are urged to undertake the following critical actions:

- Advocate for the incorporation of these international recommendations on the use of misoprostol in low resource settings for the treatment PPH into national clinical guidelines thereby improving maternal health care services and approaches

- Supplement national guidelines by organizing interactive pre and in service training programmes, for health care providers using PPH treatment simulations where feasible. The programs should include education on the physiology of the third stage of labour and on the management of PPH based on visual estimates of blood loss and clinical symptoms

- Build the capacity of health care providers to understand the physiology of normal labour and birth and to perform additional life-saving procedures such as bimanual compression of the uterus and aortic compression in the event that bleeding persists after the administration of uterotonics<sup>3</sup>

- Collaborate with key stakeholders to advocate for the increased availability, affordability and accessibility of skilled care and essential life-saving commodities, including uterotonics, for all women at birth

- Promote a task-sharing approach to improving life-saving care and challenge regulatory and policy barriers which limit access to such care, by ensuring an appropriately qualified maternity workforce that is able to administer uterotonic drugs and work in partnership with other health care professionals across the maternity services spectrum

- Work with civil society organizations to raise awareness among communities on the importance of accessing ante-natal care and on having skilled attendants at all births<sup>4</sup>

- Advocate for an increased midwifery workforce and mobilize resources for identifying and implementing innovative strategies for making childbirth safe for women, particularly those most underserved

<sup>&</sup>lt;sup>3</sup> FIGO Guidelines, Prevention and treatment of postpartum haemorrhage in low resource settings, FIGO Safe Motherhood and Newborn Health Committee, International Journal of Gynecology and Obstetrics 117 (2012) 108 – 118

<sup>&</sup>lt;sup>4</sup> Role of the Midwife in Physiological Third Stage of Labour, ICM Position statement (2011)