

‘With the emerging evidence on the use of various routes of administration of misoprostol, particularly in the non-hospital setting, it is becoming clear that this drug should be available at the community level in the hands of trained personnel, especially where oxytocin, Uniject and other uterotonics are not present or practical for use.’

The Working Group of the Goa International Conference on the Prevention of Post Partum Hemorrhage, July 15, 2006, Goa, India

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MISOPROSTOL IN PRACTICE

M. Potts

Prior to the availability of misoprostol, it was impossible to carry any significant element of emergency obstetric care into homes where women deliver without a skilled birth attendant. As a low-cost, easy-to-administer, powerful uterotonic with an excellent safety profile and long shelf-life, misoprostol has a revolutionary potential to reduce death and morbidity from postpartum hemorrhage in precisely those situations where it is most common – delivery at home without a skilled birth attendant.

In a placebo-controlled, community-based trial in India, administration of 600 µg misoprostol orally immediately after delivery significantly reduced postpartum hemorrhage (see Addendum). Research in Indonesia, Nepal and elsewhere is showing that community volunteers with minimal training can teach illiterate women to self-administer misoprostol effectively and responsibly¹ (see Chapter 19). A 1000 µg rectal dose of misoprostol can be used to treat postpartum hemorrhage, in situations where an appropriate technology exists to diagnose blood loss (such as blood-soaked sarong or ‘kanga’), and where births are attended by traditional birth attendants (TBAs). In Tanzania, illiterate TBAs, with a brief training, used misoprostol to bring about a highly significant reduction in the number of women who needed to be referred to hospital or receive intravenous treatment².

Although these measures may seem revolutionary at first glance, they should be viewed as an essential step towards a long-term strategy where all women can be delivered by a certified midwife or physician practicing active management of the third stage of labor. Over the past half-century, countries such as Sri Lanka and Thailand have brought maternal mortality to low levels by ensuring over 90% of deliveries are attended by a skilled person able to use an oxytocic, and ultimately all countries should follow such a path.

Unfortunately, rapid population growth, economic collapse and the spread of HIV/AIDS in some African countries and the endless recruitment of skilled health professions from developing to developed countries will make the road to providing comprehensive obstetric care long and slow. During this interval, widespread access to misoprostol and the education to use it safely during home births have the potential to make a significant contribution – perhaps even the single most important contribution – to reducing the global burden of deaths from postpartum hemorrhage. The only other practical intervention with the potential to reduce postpartum hemorrhage in low-resource settings is realistic access to family planning, as all women who wish to limit childbearing are at risk of postpartum hemorrhage, and the older,

higher-parity women, who have the greatest unmet need for family planning, are at even higher risk.

References

1. Wiknjosastro G, Sanghvi H. Preventing PPH among women living in areas where a high proportion of births are not attended by skilled providers: Safety, acceptability, feasibility and program effectiveness (SAFE) demonstration project of community-based distribution of misoprostol for prevention of PPH in rural Indonesia. Proceedings of *Preventing Postpartum Hemorrhage: From Research to Practice*, Bangkok, Thailand, January 20–24, 2004:31–7
2. Prata N, Mbaruka G, Campbell M, Potts M, Vahidnia F. Controlling postpartum hemorrhage after home births in Tanzania. *Int J Gynaecol Obstet* 2005;90:51–5

Editors' Addendum

The Editors wish to bring the reader's attention to the paper referred to by Professor Potts on page 156. This paper has been published in the October 7, 2006 issue of *The Lancet*. To the Editors' knowledge, this is the largest placebo-controlled study of misoprostol for the prevention of postpartum hemorrhage, and the results showed that misoprostol significantly reduced the rate of postpartum hemorrhage in the patients who were administered this agent in comparison to the patients who received the placebo control. The full title of the paper and all authors are:

R. J. Derman¹, B. S. Kodkany², S. S. Goudar², S. E. Geller³, V. A. Naik², M. B. Bellad², S. S. Patted², A. Patel⁴, S. A. Edlavitch¹, T. Hartwell⁵, H. Chakraborty⁵, N. Moss⁶. Oral misoprostol in preventing postpartum hemorrhage in a community setting.

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