

## MANAGEMENT OF POSTPARTUM HEMORRHAGE AT THE COMMUNITY LEVEL

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The ability to manage postpartum hemorrhage at the community level is an essential element in any program to decrease maternal mortality from postpartum hemorrhage<sup>1</sup>, as most of the deliveries in developing countries occur at home without the presence of a skilled birth attendant<sup>2</sup>.

The efficacy, safety, and importance of misoprostol use for postpartum hemorrhage management are well established for hospital-based settings<sup>3</sup>. However, misoprostol's most significant impact will probably be at the household level, where most deliveries occur. Some studies have tested such technology in home births, and

all of them produced encouraging results. During one intervention trial in rural Kigoma, Tanzania, Prata and colleagues demonstrated that traditional birth attendants (TBAs), who assist in most home deliveries, were able to diagnose postpartum hemorrhage and effectively and safely administer 1000 µg of rectal misoprostol to control postpartum hemorrhage<sup>4</sup>. Blood loss measurement was standardized by employing the traditional blood collection tool used by women in the region – the local garment that is colloquially referred to as a 'kanga'<sup>5</sup>. This study also showed that the ability to manage postpartum hemorrhage in home births resulted

**Table 1** Controlling postpartum hemorrhage (PPH) with a 1000 µg of misoprostol (intervention) in home births, Kigoma, Tanzania

<i>Main outcomes of the study</i>	<i>Intervention</i>		<i>Non-intervention</i>		<i>Odds ratio (95% CI)</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>		
PPH (blood loss ≥ 500 ml)	111	24.5	73	18.5	1.3	(1.0–1.7)
Referrals	8	1.8	75	19.0	0.1	(0.0–0.2)
<i>Additional interventions among PPH cases</i>	<i>n = 111</i>		<i>n = 73</i>			
Type of additional interventions <sup>a</sup>	1 <sup>b</sup>	0.9	69 <sup>c</sup>	94.5		
Intravenous fluids	1	0.9	25	34.3		
Blood transfusion	1	0.9	16	21.9		
Manual removal of placenta	0	0.0	17	23.3		
Repair of tears	0	0.0	4	5.5		
Hysterectomy	0	0.0	1	1.4		
Other medical interventions <sup>d</sup>	0	0.0	7	9.6		

<sup>a</sup>Number of cases do not add up to total referred, some women had more than one intervention; <sup>b</sup>hospital records not available for one patient; three patients did not need additional interventions; another three were referred for other reasons than PPH; <sup>c</sup>hospital records not available for four patients; four patients did not need additional interventions; two cases referred for other reasons than PPH; <sup>d</sup>medical interventions included: Amoxyl tablets, methergin, and misoprostol.

Source: Prata N, *et al.* Controlling postpartum hemorrhage after home births in Tanzania. *Int J Gynaecol Obstet* 2005;90:51–5

in important reductions in the number of referrals and the need for additional interventions, key factors in resource-poor settings (Table 1). This is particularly helpful in rural areas.

In settings where culturally appropriate methods of measuring blood loss after delivery are difficult to devise, all women could be administered a prophylactic dose of 600 µg misoprostol after delivery of the baby. Its safety and efficacy in the hands of TBAs were shown in a randomized, controlled trial in the Gambia<sup>6</sup>. In addition, in places where, for cultural or other reasons, women deliver at home alone or in the presence of a family member, self-administration of a prophylactic dose of misoprostol, distributed during pregnancy by trained community health-care workers, are both viable options that can produce promising results, as was shown in other studies in Indonesia, Nepal, and Afghanistan.

It will be many decades before all women in low-resource settings can receive skilled attention at delivery in their homes. In the meantime, misoprostol has the potential to make a significant difference in reducing maternal mortality. It should be made available for use in all settings

including home births, and particularly in those where it must be self-administered.

## References

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