



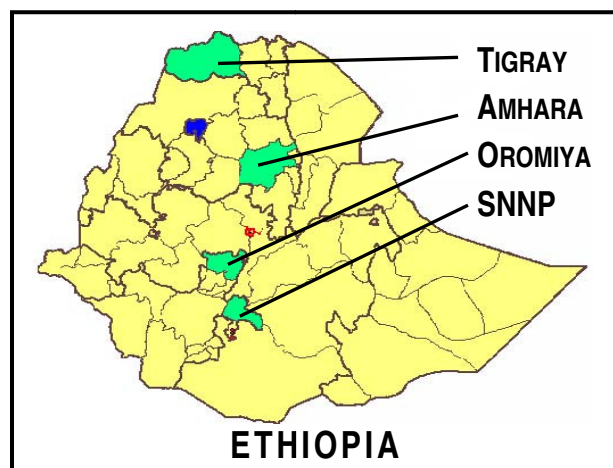
Community-Level Prevention of Postpartum Hemorrhage: The Role of Misoprostol

An evaluation of a joint project by the Ethiopian Federal Ministry of Health,
Venture Strategies for Health and Development and DKT-Ethiopia
May 2008



EVALUATION BRIEF

BACKGROUND: Postpartum hemorrhage (PPH) is one of the leading causes of maternal mortality in developing countries. Previous interventions to address PPH have been facility-based and relied on uterotonic drugs requiring the expertise of skilled providers and complicated logistics management due to their pharmacological instability. The government of Ethiopia is committed to reducing maternal mortality from 871 to 350 by the year 2015 as specified in the Millennium Development Goals. To achieve this ambitious goal, the Federal Ministry of Health embarked on an innovative initiative to introduce a low cost, heat-stable drug—misoprostol—for the prevention of PPH at the health post and household levels. This project was jointly implemented by the Ministry of Health, Venture Strategies, and DKT in selected sites in Amhara, Oromiya, SNNP and Tigray regions.



Under the project, 128 health extension workers (HEWs), representing 120 health posts, and 49 trainers (doctors and nurses) were trained on active management of third stage labor (AMTSL) and misoprostol. As of November 2007, 207 additional HEWs and a minority of traditional birth attendants (TBAs), were trained through cascade trainings. From January to November 2007, 2,095 women received misoprostol through the project. This evaluation brief presents a summary of results and recommendations from a subsequent evaluation conducted by Addis Ababa University, School of Public Health.

METHODOLOGY: A project evaluation was conducted from January 28 to February 8, 2008 to document the experiences of the misoprostol community-level intervention pilot and provide recommendations for scale-up. All health centers, 72 health center (HC) providers, and 80% of trained HEWS were included. Researchers employed quantitative and qualitative methods, including post-tests, record review, key informant interviews, and focus group discussions.

SELECTED RESULTS:

- From post-tests, over 80% of HEWs and 93% of HC providers correctly identified the purpose of AMTSL as a preventative measure for PPH. Virtually all HEWs and all health center providers having used misoprostol reported it effectively minimizes the occurrence of PPH. (Table 1)
- Nearly half of HEWs reported a lack of confidence in conducting deliveries independently, but over 80% felt confident when they conduct deliveries with TBAs or midwives; 85% of HEWs could identify at least one TBA in their area with whom they can work.
- Some HEWs reported that, since the introduction of misoprostol, they have experienced greater acceptance by the community. As a result, more women are seeking their assistance during delivery.
- Thirty-five percent of HEWs reported that they received obstetric referrals from TBAs, mainly for PPH, obstructed labor and retained placenta. (Figure 1)

“Previously, delivery was entirely given by TBAs, now since the community started to understand the use of misoprostol, mothers are looking for us. If they don’t know our home they ask the TBAs.” — HEW, Tigray

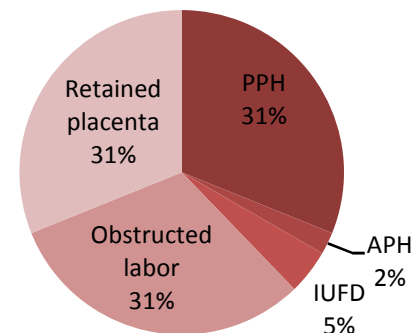
“When we were new, we were giving [TBAs] gloves and watch them when they deliver a baby. But now after misoprostol training delivering mothers will call us and we will go with our misoprostol and give delivery together with the TBAs.” — HEW, Tigray

Table 1: Provider knowledge and practice of AMTSL and misoprostol

Knowledge related to AMTSL by provider type	HEWs (n=103) No (%)	HC Providers (n=73) No (%)
Components of AMTSL*		
Administer a uterotonic	41 (39.8)	50 (69.4)
Apply controlled cord traction	0 (0.0)	27 (37.5)
Provide uterine massage	16 (15.5)	26 (36.1)
AMTSL is control/prevention of PPH	14 (13.6)	7 (9.6)
Remove the placenta	10 (9.7)	9 (12.3)
Did not know	13 (12.6)	2 (2.7)
Knew purpose of AMTSL is to prevent PPH		
Yes	83 (80.5)	68 (93.1)
No	20 (19.5)	5 (6.9)
Practice of AMTSL and use of misoprostol by provider type		
AMTSL routinely practiced at this facility		
Yes, routinely	62 (60.2)	53 (72.6)
Yes, occasionally	12 (11.6)	12 (16.7)
Not practiced	20 (1.9)	2 (2.8)
Do not know	9 (8.7)	5 (6.9)
Do you yourself practice AMTSL routinely		
Yes	67 (65.0)	59 (81.9)
No	36 (35.0)	13 (18.1)
Ever used misoprostol as uterotonic drug?		
Yes	94 (91.3)	43 (59.7)
No	9 (8.7)	29 (40.3)
When do you give out misoprostol*		
During ANC	7 (7.4)	1 (2.3)
During Delivery	84 (89.4)	36 (83.7)
Other	3 (3.2)	6 (14.0)
Have you encountered side effects related to misoprostol*		
Yes	56 (54.4)	21 (48.8)
No	43 (41.7)	21 (48.8)
Don't know	4 (3.9)	1 (2.3)
From your experience does misoprostol effectively minimize PPH?		
Yes	92 (97.9)	43 (100.0)
No	2 (2.1)	0 (0.0)

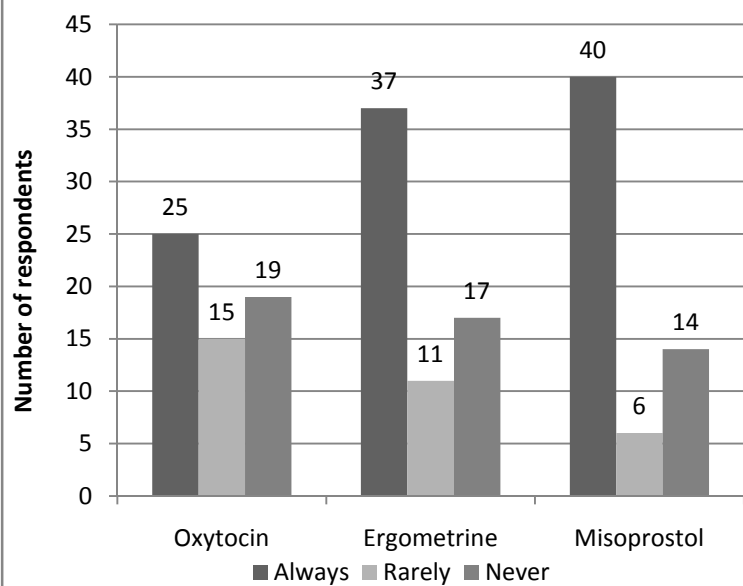
* Among the respondents reporting previous use of misoprostol

Fig 1: Referrals received by HEWs from TBAs



- HEWs reported that in communities where misoprostol was introduced the rate of PPH has decreased; this observation was also shared by health center providers and TBAs.
- In interviews, key informants at the *Woreda* level corroborated the observation that the number of PPH cases coming to health centers has decreased adding that, beyond decreasing morbidity and mortality, the introduction of misoprostol has reduced transportation costs for families requiring referral due to PPH and reduced the burden on referral facilities.
- The proportion of HEWs receiving supervisory support related to delivery was low in this sample (34%). Slightly more (42.7%) received visits related to misoprostol use and record keeping.
- Misoprostol is the most widely available drug available at the health facilities surveyed.

Fig 2: Availability of uterotonics in health centers



- HEWs and health center providers agree that users should pay for misoprostol, though there is a concern that introducing a fee before the product is known could be counter-productive. Some feared that the poor could not afford to pay while others thought the community may not value misoprostol if it were free. Current policies forbid the sale of drugs and services at the health post level.

“We distribute Paracetamol for free to treat minor pain. [Clients] don’t think it helps them since it is for free and they go and buy the same drug from drug vendors and use them. I believe they should pay some amount [for misoprostol].”—HEW, Oromiya

CONCLUSION: MISOPROSTOL CAN BE SAFELY AND EFFECTIVELY ADMINISTERED AT HEALTH CENTERS AND THE HEW LEVEL IF PRECEDED BY PROPER TRAINING AND SUPERVISION.

RECOMMENDATIONS: Based upon the evaluation results, the following recommendations for scale-up are put forth:

- **Training** of HEWs and health center provider should emphasize practical aspects of conducting deliveries and HEWs should be provided with adequate delivery equipment and supplies. Cascade training can be used as a cost-effective means to expand the cadre of trained HEWs.
- **Expansion** of the misoprostol program should coincide with efforts to encourage facility-based deliveries while the inclusion of TBAs should be seriously considered and carefully designed, including TBA sensitization on the merits of health facility delivery and close supervision, as modeled in Tigray.
- **Supervision** should improve and include regular joint review meetings for the HEWs and health center providers. In addition to the *Woreda* health office supervisors, health center providers (e.g. midwives) should supervise HEWs and TBAs, enhancing collaboration between the facility and community-based activities.
- **Strengthen referral networks** by creating a forum for HEWs and all community health workers to share experiences, mitigating competition and fostering trust among different health workers at the community level.
- **Sustainability** issues have to be considered. A cost recovery scheme should be considered in the future. Misoprostol should be included in the national Reproductive Health/ Family Planning costing exercise. As the role of the private for-profit health sector in health service delivery is growing, it should be considered for inclusion during expansion of the program.
- **Greater awareness** of misoprostol across levels of health care delivery and administration is needed, including a wide-scale community education campaign on safe delivery and misoprostol for PPH prevention.
- **Record keeping** should improve and integration of information on misoprostol use within the national Health Management and Information System should also be considered in the long-term.

ACKNOWLEDGEMENTS

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For a full copy of the evaluation report, *Community-level Prevention of Postpartum Hemorrhage: The Role of Misoprostol*, contact: info@venturestrategies.org