

Advance Distribution of Misoprostol for the Management of Postpartum Bleeding in Home Deliveries: Family First Aid Model in Rural Pakistan

Research has shown that dispensing misoprostol pills in advance to pregnant women for prophylactic self-use is safe and has been widely tested in communities where women continue to deliver at home. This strategy facilitates access to postpartum hemorrhage (PPH) prevention care for women in rural and underserved locations but it fails to address the urgent need for more readily accessible PPH treatment options. The social and logistical difficulties of transferring women in remote settings confirm the shortcomings of referral as the sole solution for excessive postpartum bleeding in these settings. Increasing the availability and knowledge of misoprostol's evidence-based, therapeutic role may extend care to women who experience excessive bleeding when delivering outside of facilities.

Gynuity Health Projects and the National Committee for Maternal and Neonatal Health conducted a pre-post intervention study to determine the feasibility of the Family First Aid model: advance provision of misoprostol (800mcg administered sublingually) for use as a first aid measure to control excessive bleeding following home delivery. Implemented over 12 months in two phases (baseline and intervention), the study tested this new approach in two districts of Sindh province in Pakistan where referral alone is the standard of care. Pregnant women were dispensed four misoprostol tablets and, along with their families, counseled on how to identify heavy postpartum bleeding, when and how to take the medication, and how to manage possible side effects. The study also provided a platform to educate community members about complications during childbirth and the importance of seeking timely care in the event of a complication.



Results in Brief

- More than 4,000 women took part in the study and almost all were successfully followed-up after delivery.
- Over half of the women enrolled in the study gave birth at home and nearly all were assisted by a traditional birth attendant (TBA).
- Excessive bleeding was identified in 5-10% of home deliveries across study phases.
- Most women who reported experiencing heavy bleeding after giving birth at home used misoprostol as first aid treatment. In all instances, the medicine was used after the birth of the baby in response to bleeding.
- During the intervention phase, significantly fewer PPH referrals occurred following home deliveries, compared to the baseline period when misoprostol was not available to women.
- Maternal and neonatal outcomes were comparable between the two study phases; one woman died during the baseline phase following a facility delivery.
- The overwhelming majority of women reported being “satisfied” or “very satisfied” with using misoprostol as a first aid measure to control heavy bleeding after childbirth.

Interpretation and Programmatic Implications

- The advance distribution of misoprostol for use as first aid is a safe and feasible model of care and provides a unique opportunity to expand the role of informal providers and birth companions in PPH care during home deliveries.
- This model increases access to timely PPH care, especially in contexts where women may not be able to reach a health facility.
- The relatively rare occurrence of reported excessive bleeding and need for treatment with misoprostol in this context warrants further consideration of the costs and sustainability of antenatal distribution models of misoprostol.
- The high rate of TBA-assisted home deliveries suggests that training and equipping TBAs to identify heavy bleeding and administer treatment using misoprostol may be a viable alternative to counseling and dispensing misoprostol to every expectant woman and her family.

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September 2018