Research Summary

Secondary Prevention/Early Treatment of Postpartum Hemorrhage
An Innovative New Model For PPH Management

Postpartum hemorrhage (PPH) is a major cause of death during pregnancy. Simple, effective and sustainable models of PPH care are needed wherever women deliver, including lowest levels of care. Where oxytocin (the gold standard for PPH management) is not feasible, misoprostol (a heat-stable tablet) may be the best option for preventing and treating PPH.

Even with prophylaxis, many women will still go on to develop PPH. To date, most community level PPH programs have focused on efforts to introduce uterotonics for PPH prevention (which we know reduces blood loss but are less clear that it saves lives) but there has been limited attention and guidance on the crucial issue of PPH treatment.

Research conducted at the community level in India and Egypt compares a 'universal prophylaxis' approach to an early treatment or 'secondary prevention' approach whereby only women who bleed more than average are given a pre-emptive treatment dose of misoprostol.

The secondary prevention approach has potential programmatic advantages over universal prophylaxis –such as, medicating fewer women, exposing fewer women to side effects, improving acceptability, and reducing costs – and could be an important new model for task sharing PPH management at all levels of the health system.

India: Study Findings and Implications

The study included over 3000 vaginal deliveries attended by Auxiliary Nurse Midwives (ANMs) at the lowest level (sub-centers) and at home in a predominantly rural district of southern India.

ANMs were randomly assigned to administer misoprostol using either one of the two approaches:

1) a prophylactic dose (600mcg oral, 3 tablets) to all women within five minutes of delivery, or
2) an early treatment dose (800mcg sublingual, 4 tablets) only to women who exceeded a specified blood loss (350 mls), as measured by a calibrated blood collection drape in this first study.

Findings from the India Study

- Secondary prevention of PPH with misoprostol is no worse than ('non inferior to') universal prophylaxis based on the outcome of post-delivery hemoglobin levels.
- The secondary prevention approach medicated substantially fewer women, with 5% of women receiving early treatment compared to 99% of women receiving prophylaxis.
- Providers successfully administered both regimens and easily managed side effects.
- Short-lived shivering was more common among women receiving prophylaxis.

Our research shows early treatment/secondary prevention for PPH to be a feasible alternative strategy to universal prophylaxis with the potential for being more acceptable, effective, cost-effective and sustainable. It has the additional potential to equip community level providers with a timely and fitting strategy to manage bleeding before it reaches the point of an emergency.

You can read more about the study: Misoprostol for primary versus secondary prevention of postpartum haemorrhage: a cluster-randomised non-inferiority community trial, Raghavan et al., BJOG 2015. The Egypt trial is in press.

The India trial, completed in 2014, was implemented by Gynuity Health Projects; University of California, San Francisco; University of Illinois, Chicago; JN Medical College Belgaum, Karnataka; and BLDE University's Shri B. M. Patil Medical College Bijapur, Karnataka.

Gynuity Health Projects is a research & technical assistance organization committed to ensuring that affordable reproductive and maternal health technologies are available and accessible to all. For further information, visit our website www.gynuity.org and follow us on Twitter @Gynuity.

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Gynuity HEALTH PROJECTS

15 East 26th Street, New York, NY 10010 tel: 212.448.1230 fax: 212.448.1260 www.gynuity.org