Postpartum Hemorrhage: Medicines and Interventions

Integrating misoprostol for PPH management in national programs: What we have learned from research evaluation?
How far we have come and where we are going?

• National PPH prevention strategies

  Is this strategy sufficient?

• National PPH management strategy
  • Prevention
  • Treatment
Misoprostol for PPH prevention

PPH occurs in all settings, administration of misoprostol in the third stage of labor may prevent uterine atony

Misoprostol stimulates uterine contractions, which will speed up separation of the placenta from the uterine wall

ABUNDANT EVIDENCE TO SUPPORT USE....
Evaluation efforts

Gynuity Health Projects collaborated with in-country partners and MOHs to evaluate national PPH programs in Nepal, Senegal and Niger.

Gynuity conducted assessments to document feasibility of prevention and treatment models, coverage, acceptability and provider and women’s knowledge of misoprostol.
National Programs for PPH Prevention

Pilots to policy approval for national scale-up

**Senegal**

National scale-up of PPH prevention strategy with misoprostol, by auxiliary midwives at community health huts:

*Providers:* community based auxiliary midwives
  - Jan-July 2015 - provider training
  - May 2016 – Evaluation of PPH services

*Supplies setting*
  - 2014- miso on country EML since
  - 2016 – miso added to emergency EML
  - Now 2 dedicated products registered

**Nepal**

National PPH prevention program with advance distribution of misoprostol for home births (oxytocin for facility births):

*Providers:* Female community health volunteers (FCHV)
  - 2012: Program implemented
  - 2013-2014: Evaluation of PPH services/ emphasis on advance distribution

*Supplies setting*
  - 2009 – miso on country EML
  - At least 3 dedicated products registered
National PPH prevention strategies: Misoprostol stocks

Senegal – health huts

• 35% of huts experienced one or more stock-outs in past year

• 52.5% of misoprostol stock was deemed sufficient or more based on MOH guidelines

Nepal – community

• 81% of FCHVs had experienced one or more stock-outs in past year

• Just 50% of health facilities had sufficient misoprostol stock at time of assessment (vs. 95% with sufficient oxytocin stock)
National PPH prevention strategies: Misoprostol use in deliveries / Coverage

Senegal – health huts

- 54% of women delivering in health huts received misoprostol (N=362)
- Misoprostol coverage in health huts with no stock-outs: 78%

Nepal – community

- Among women who received misoprostol during ANC (N=270)
  - 46% delivered at home or in transit
  - 86% used miso
  - 54% delivered at a health facility
- 87% (1810/2070) did not receive misoprostol during ANC
Beyond universal coverage?

Misoprostol provides opportunity to expand uterotonic coverage where oxytocin is not available however,

- Despite stock availability, women do not receive/use misoprostol systematically

- Given gaps in coverage, is this model sustainable?

- Despite use of prophylaxis 3-16% women develop PPH and require treatment*

  - *Transfer remains only option particularly at community level; difficult in many settings*

*Carroli 2008; Moeen 2011
Transfer to higher level care is not always possible....
Effective and comprehensive coverage for PPH management must include treatment options at ALL levels of the health system.
Niger: National PPH Prevention and Treatment Program

2014 - Niger MOH and Health and Development International (HDI) launch a National PPH program
- All 8 regions and 42 districts nationwide
- Provision of stock (misoprostol, UBT, NASG)
- Training on the program components: at least 1 provider per facility

Program components:

PPH prevention: Provision of misoprostol (600 mcg, oral) to all women at their ANC visit for use immediately after delivery, if oxytocin is unavailable

PPH treatment:
1. Provision of misoprostol (800 mcg, sublingual)
2. Insertion of uterine balloon tamponade (UBT)
3. Non-pneumatic anti-shock garment and transfer to higher level care

2015 - Ongoing training and supply distribution
May 2016 - Phase 1: Evaluation of National PPH Program
Nov 2017 - Phase 2: Evaluation of National PPH Program
Niger: Phase 1 summary of findings

• PPH Prophylaxis:
  • 0.7% of women delivering in facilities received misoprostol (N=423/58321)
  • 84% received other uterotonic prophylaxis (most likely oxytocin) (N=48533/58321)
  • 23% women received misoprostol during ANC before delivery
    • 77% took misoprostol (56% took at PHC, 43% took at home delivery)

• PPH treatment:
  • 1.3% (n=774) women experienced PPH requiring additional intervention
    • 75.6% received miso for treatment; 17.6% received other uterotonics = 93.2%
    • 1.7% received UBT; 1.6% NASG
  • 25 PPH-Maternal deaths/ over 58,000 deliveries -3.2%
Conclusion

• Treating PPH is essential at all levels.
  • Studies have shown that offering misoprostol for PPH treatment at the community level is safe – no serious adverse events associated with misoprostol (or misoprostol plus misoprostol)

• Barriers to transfer highlight importance of PPH treatment

• Increases access and empowers lower-level providers (safe)

• Community level treatment models are feasible - Niger model suggests that this is working...

• Where do we go from here?
Thank you
Where are we with supplies?

Stock-outs

Misoprostol prevention doses:
• 81.7% facilities received miso prevention doses (N=60)
• 25% facilities experienced stock-outs in past year

Misoprostol treatment doses:
• 76.8% facilities received miso treatment doses (N=69)
• 14.8% facilities experienced stock-outs in past year

Oxytocin:
• 92.8% facilities received oxytocin (N=69)
• 16.9% facilities experienced stock-outs in past year

UBT:
• 62.3% facilities received UBT kits (N=69)
• 1 facility experienced a stock-out in past year
• 10 facilities had incomplete UBT kits

NASG:
• 91.3% facilities received NASG

Stock-out levels:
- Prevention doses:
  - Never: 75.0%
  - Less than week: 8.3%
  - 7-30 days: 8.3%
  - 1-3 months: 8.3%
  - Over 3 months: 2.1%

- Treatment doses:
  - Prevention doses:
    - Never: 75.0%
    - Less than week: 8.3%
    - 7-30 days: 8.3%
    - 1-3 months: 8.3%
    - Over 3 months: 2.1%

- Oxytocin:
  - Never: 92.8%
  - Less than week: 16.9%
  - 7-30 days: 16.9%
  - 1-3 months: 16.9%
  - Over 3 months: 16.9%

- UBT:
  - Never: 62.3%
  - Less than week: 16.9%
  - 7-30 days: 16.9%
  - 1-3 months: 16.9%
  - Over 3 months: 16.9%

- NASG:
  - Never: 91.3%
  - Less than week: 16.9%
  - 7-30 days: 16.9%
  - 1-3 months: 16.9%
  - Over 3 months: 16.9%