Best Practices in Maternal and Newborn Health Prevention of Postpartum Hemorrhage at Homebirth in Afghanistan

A Joint Program Between MOPH-Afghanistan & ACCESS Supported by USAID

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JHPIEGO in partnership with Save the Children, Constella Futures, The Academy for Educational Development, The American College of Nurse-Midwives and Interchurch Medical Assistance
Objectives

- Describe steps in setting up prevention of PPH program in Afghanistan
- Share how challenges are overcome in achieving high coverage in remote and difficult areas
Maternal Mortality in Afghanistan

- The highest maternal mortality ratio in the world: 1600 per 100,000 live births
- 26,000 women die from pregnancy related causes every year that is 1 woman every 27 minutes
- Hemorrhage is responsible for 38% of maternal deaths or 7600 women per year

Source: Bartlett et al 2005
Purpose

- Show that community-based distribution of 600-mcg of Misoprostol, and subsequent use immediately after homebirth was safe, acceptable, feasible and programmatically effective
- Ensure that Misoprostol was not misused
Policy for Prevention of PPH: Afghanistan

Without a Skilled Birth Attendant
- Community Awareness – BCC/IEC
- Birth Planning
- Promotion of skilled attendance at birth
- Family Planning and Birth Spacing
- Detection and treatment of anemia
- Community Based Distribution of Misoprostol for Routine Third Stage Use

Policy adopted in 2005 after Asia Region PPH meeting held here in Bangkok, MNH/USAID

With Skilled Birth Attendant
- Community Awareness – BCC/IEC
- Antenatal Care (and Birth Planning)
- Detection and treatment of anemia
- Family Planning and Birth Spacing
- Use of Partograph to reduce prolonged labor
- Limiting episiotomy in normal birth
- Active Management of the Third Stage of Labor
- Routine inspection of placenta for completeness
- Routine inspection of perineum/vagina for lacerations
- Routine immediate postpartum monitoring
Intervention areas: Qarabagh, Quraghan, Qaramqul
Comparison areas: Guldara, Qarqin, Khamyab
Project Design

In intervention and comparison areas:
- Identification of all pregnant women through home visits
- PPH education
- Birth preparedness and complication readiness education
- Promotion of skilled midwife
- Postpartum visit

In intervention area only:
- Distribution of misoprostol at 8 months gestation

In both areas, newly trained midwives are being posted
Project designed to address concerns of national stakeholders

- **Ensure Safety**
  - Monitor level of side effects
  - Prevent misuse before birth (risk of ruptured uterus and death)
  - Avoid unintended use before delivery of twins
  - Prevent loss of drug and misuse (abortion, Induction of labor)

- **Determine Acceptability**
  - By women, community, health community

- **Examine Feasibility**
  - Achieve high coverage, keep CHW motivated

- **Document Program Effort**
  - Address logistical issues, maintain high quality through supervision, ands training
Creating Support for Intervention

- Advocacy at national level including creation national TAG
- Advocacy at provincial/district/community levels (October 2005-March 2006)
- Provincial public health directors in selected provinces
- District hospital directors and staffs
- Health facilities
- Supporting NGOs in the selected districts
- Community health workers
- Village leaders, Mullahs, Community Health Council
- Community members
Implementation Landmarks

- Jan-Mar 2006: Formative Research, finalization of training materials
- Feb 2006: Ethical Board approval
- May-June 2006: training CHW, supervisors, coordinators, clinic staff
- June 2006: Importation of Misoprostol, repackaging and branding
- 15 June 2006: Field implementation
Intervention: Counseling (continued)

- Counseling about PPH by community volunteer during home visits to pregnant women
- PPH
  - Warning signs of dangerous bleeding
  - What to do if hemorrhage occurs during or after delivery
  - Where to seek emergency medical care
Intervention: Counseling

- Preventing PPH
  - The role of the midwife in active management of third stage
  - Use of oxytocin injection and common side effects
Medication to prevent postpartum hemorrhage is offered when woman is 8 months pregnant

- Safe and correct timing for use of misoprostol
- Risks of taking tablet prior to delivery
- Common side effects of misoprostol
- What to do in case side effects occur
- Where to go if PPH occurs, even after taking medication
Implementation Roles

- **Community Health Workers (Volunteers)**
  - Identify pregnant women through home visits
  - Provide birth preparedness and complication readiness and PPH education using pictorial chart book
  - At 8 months, in intervention districts distribute misoprostol

- **Community Health Supervisors**
  - Supervise and mentor CHWs
  - Examine CHW pictorial records, replenish misoprostol supply
  - Conduct postpartum interviews, retrieve unused medication
Implementation Roles (continued)

- Health facility Pharmacist
  - Maintains Misoprostol stock, and records
- Field coordinators
  - Oversee supervisors,
  - monitor safety
- Central team provides overall quality and logistics support, manage data, update Prevention of PPH TAG
**Women Do act on the Educational Message**

<table>
<thead>
<tr>
<th>Number of women:</th>
<th>Intervention</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postpartum interviews completed</td>
<td>1348</td>
<td>884</td>
</tr>
<tr>
<td>Accepted the drug at home visit</td>
<td>1329 (98.6%)</td>
<td></td>
</tr>
<tr>
<td>Took the drug misoprostol</td>
<td>903 (67%)</td>
<td></td>
</tr>
<tr>
<td>Received injection (uterotonic)*</td>
<td>426 (31.6%)</td>
<td>247 (27.9%)</td>
</tr>
<tr>
<td>Did not receive either uterotonic*</td>
<td>19 (1.4%)</td>
<td>667 (72%)</td>
</tr>
</tbody>
</table>

Injection presumed to be uterotonic given to mother by health provider immediately baby was born.
There are 5 SBA in intervention area, and 3 in control area.

Near universal coverage with a PPH prevention method when misoprostol is made available.
High Coverage Is Possible Even in Difficult Areas

Estimates of eligible women based on national statistics (2006). CBR 3.7%. Eligible target population 2334 over 10 month period

Steady coverage throughout year by CHWs even when external monitoring reduced during winter
## Program effort

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Intervention area</th>
<th>Comparison area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of home visits per CHW per month</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Average number of births covered by CHW per month</td>
<td>2-3</td>
<td>3-4</td>
</tr>
<tr>
<td>Births attended by SBA per month</td>
<td>8-9</td>
<td>8-9</td>
</tr>
</tbody>
</table>

CHWs ARE UNPAID VOLUNTEERS FULLY SUPPORTED BY VILLAGE LEADERSHIP
# Intervention Is Safe

## Safety Issue and adverse events

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Took misoprostol at wrong time</td>
<td>None</td>
</tr>
<tr>
<td>Unused misoprostol not recovered postpartum</td>
<td>3</td>
</tr>
<tr>
<td>Major adverse event (Maternal death, Ruptured uterus)</td>
<td>1</td>
</tr>
</tbody>
</table>

Expected number of maternal deaths among 1348 births at rate of 1600/100,000 is 22
1 maternal death occurred in intervention area in February 2007
Unused misoprostol was recovered from family.
Verbal autopsy suggests postpartum eclampsia.
## Intervention Is Acceptable

<table>
<thead>
<tr>
<th>Acceptability Factor</th>
<th>All Women In Intervention Areas N=1348</th>
<th>Among Women Who Took Misoprostol N=903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would use if pregnant again</td>
<td>92.3%</td>
<td>99.7%</td>
</tr>
<tr>
<td>Would recommend to a friend or relative</td>
<td>61.7%</td>
<td>99.2%</td>
</tr>
<tr>
<td>Willing to purchase misoprostol in next pregnancy</td>
<td>88.6%</td>
<td>98.0%</td>
</tr>
<tr>
<td>$4</td>
<td>14.2%</td>
<td>16.7%</td>
</tr>
<tr>
<td>$2</td>
<td>28.4%</td>
<td>33.6%</td>
</tr>
<tr>
<td>$1</td>
<td>47.1%</td>
<td>48.5%</td>
</tr>
</tbody>
</table>
Intervention Reduces Perceived PPH

Perceived hemorrhage: If woman reported more than 2 cloths soaked with bleeding
Intervention Is Feasible

- Trained CHW are acceptable source of counseling and misoprostol distribution
- CHW reached many women who were not ever in contact with the health care system
- 3 Days training, followed by periodic supervision by CHS prevents misuse and maintains quality
- District leaders and Health Councils are fully supportive and have found innovative means of motivating community volunteers
39 years old
12 pregnancies
8 children alive
home delivery 7 days ago
received PPH information and misoprostol
Experienced excessive bleeding in previous births

“I took the drug like CHW told me, this time I did not have bleeding. Before I had to stay in the house for many days after delivery, I was so weak and tired, this time I did not have bleeding, I did not have to rest, I was ready to start working”
“Our wives will not die anymore because of bleeding, if they take this drug after birth of the baby and before expulsion of Baar (placenta). We must support and encourage you. Thank you for distributing the drug to our district.”
(A community leader)
Thank You