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Maternal and Child Health
Integrated Program

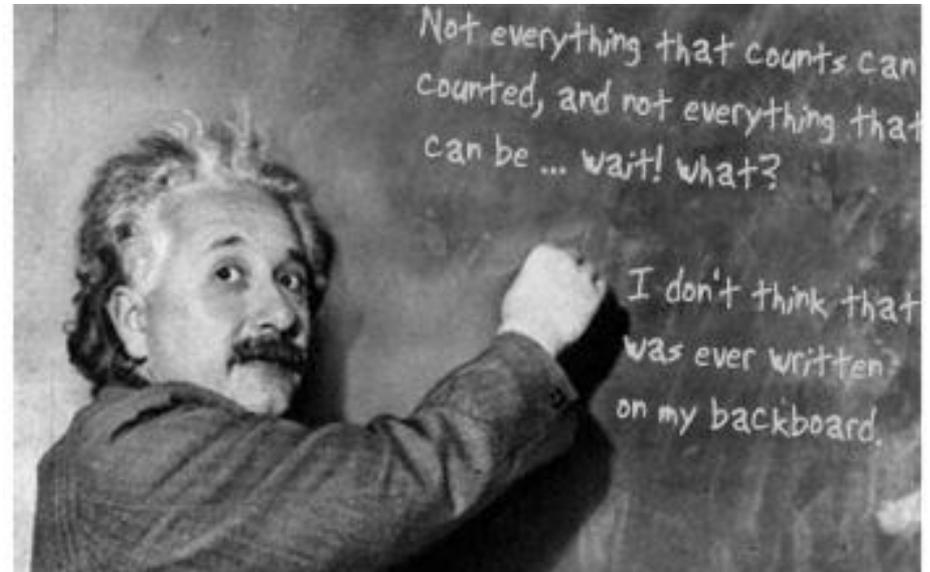
Quality Assurance and Program Monitoring

Vikas Dwivedi
M&E Team, MCHIP



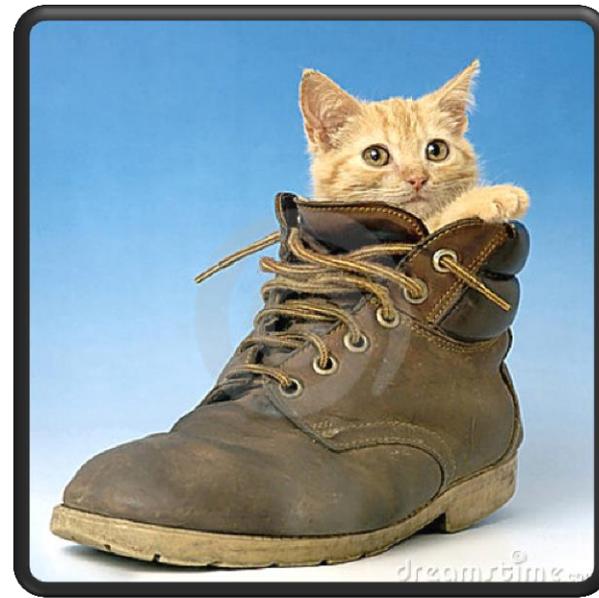
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Monitoring?

1. Define information needs
2. Describe how information can be used

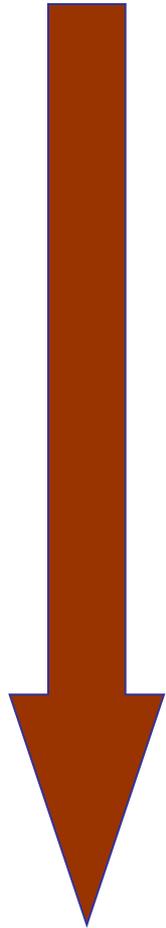


*Put yourself in the shoes of
the data user*

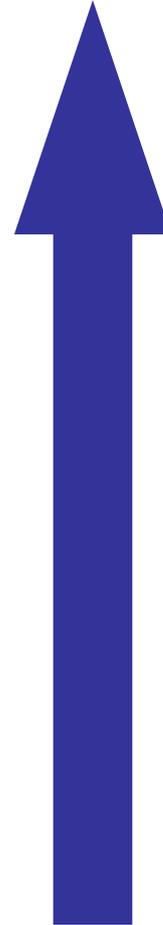
Measuring intervention

*Measuring **as an** Intervention*

Project Goal



Reduce PPH



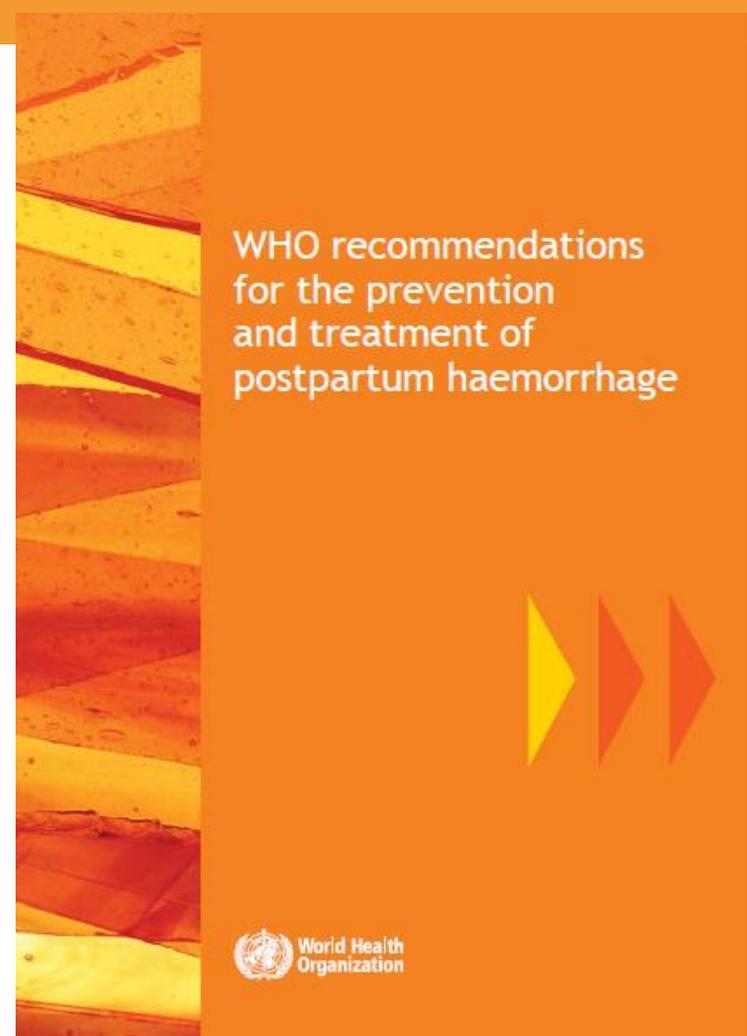
**Increase
Use of
Misoprostol**

Step to develop M&E Plan

- Defined the project strategy and key activities to achieve the desired results;
- *Brainstormed possible indicators—with cost and simplicity of data collection in mind;*
- Technical teams reviewed and revised preliminary indicators;
- M&E Plan developed hand-in-hand with workplan;

Global Recommendation

“Monitoring the use of uterotonics after birth for the prevention of PPH is recommended as a process indicator for programmatic evaluation”



Global Review

- 18 programs in various countries

Misoprostol for postpartum hemorrhage prevention at home birth: an integrative review of global implementation experience to date

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³ Venture Strategies Innovations, 2115 Milvia St., Suite 4A, Berkeley, CA 94704, USA

⁴ University of California, San Diego (Ret), 7717 Canyon Point Lane, San Diego, CA 92126, USA

⁵ School of Public Health, University of California, Berkeley, 229 University Hall, Berkeley, CA 94720-6390, USA

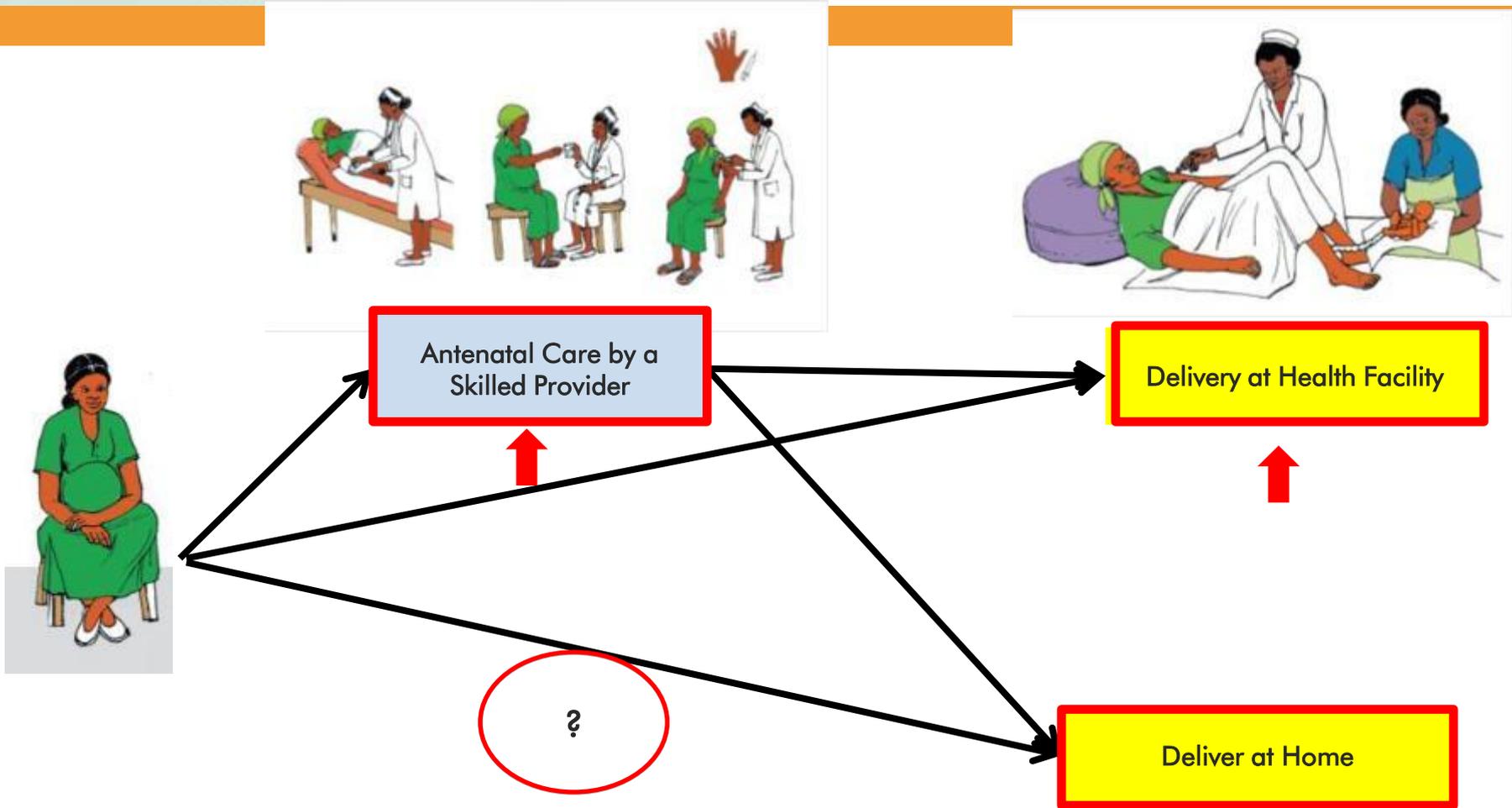
[†] Equal contributors.

Abstract

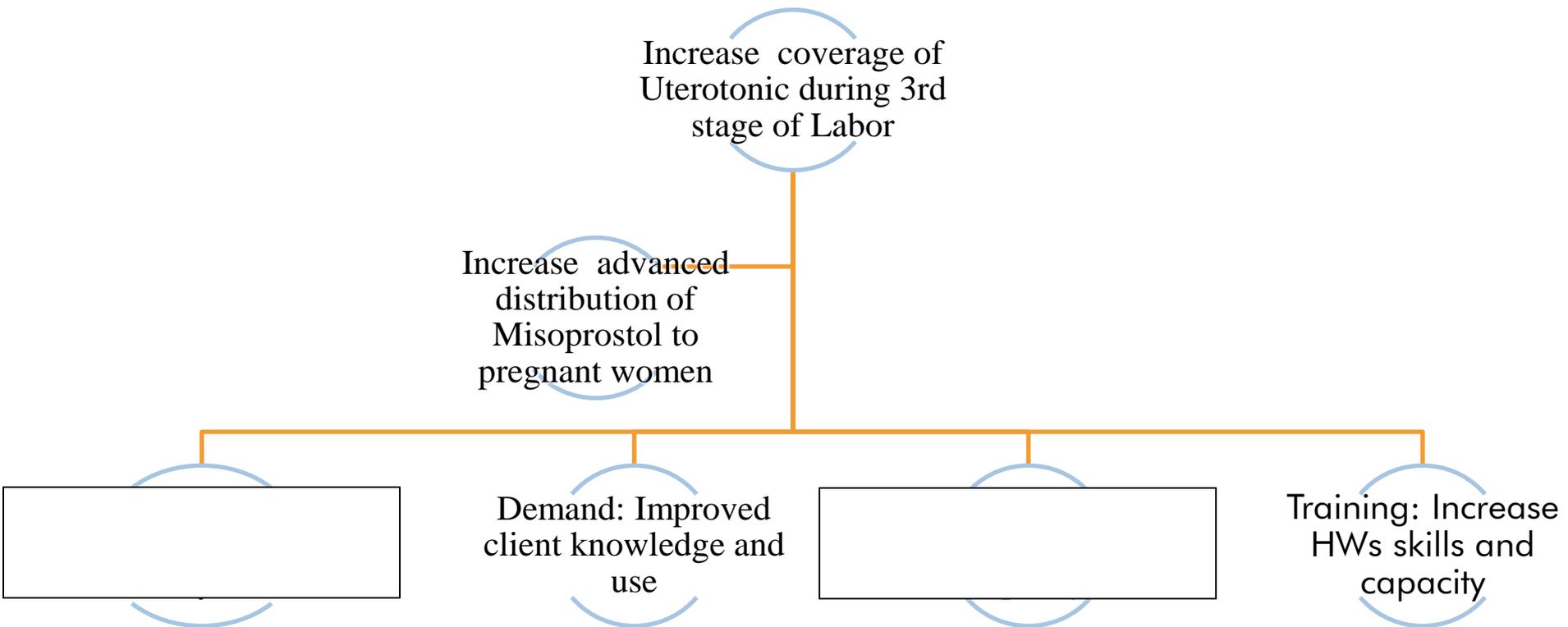
Background

Hemorrhage continues to be a leading cause of maternal death in developing countries. The 2012 World Health Organization guidelines for the prevention and management of postpartum hemorrhage (PPH) recommend oral administration of misoprostol by community health workers (CHWs). However, there are several outstanding questions about distribution of misoprostol for PPH prevention at home births.

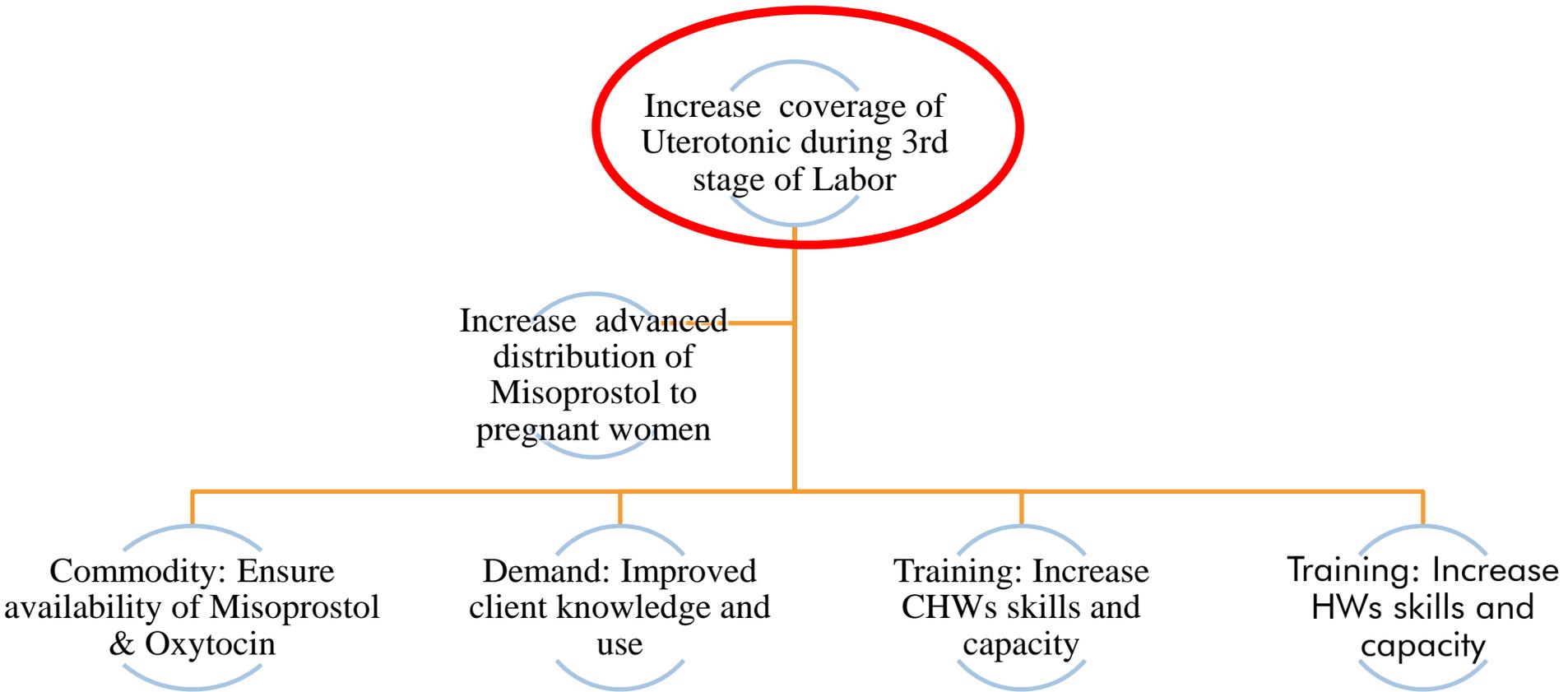
What do we need to measure?



Results Framework



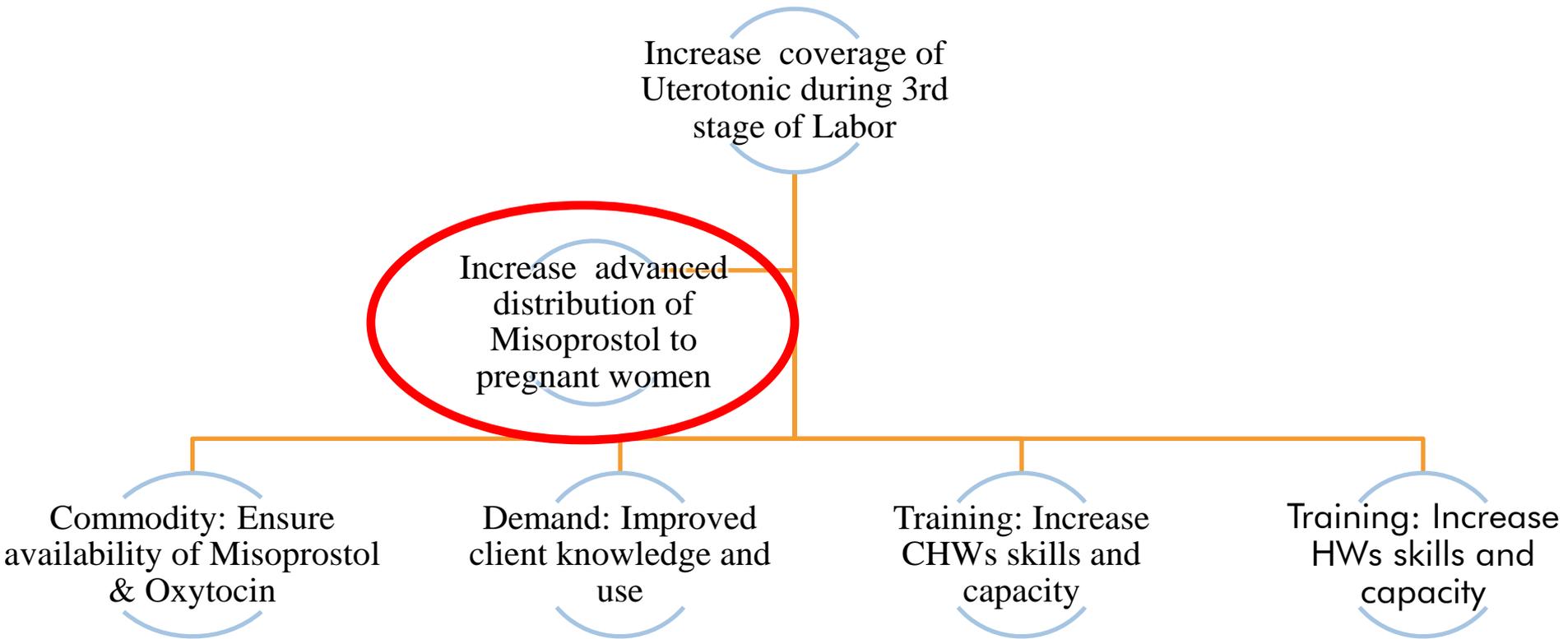
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Brainstorming Possible Indicators

- Overall Result: all deliveries receive a uterotonic immediately after delivery
- Indicator 1: Coverage Rate
- Component 1: All deliveries at health facility are given a uterotonic (oxytocin/Misoprotol)
 - Source: HMIS
- Component 2: All deliveries outside health facility receive Misoprostol
 - Source: Community HMIS and population surveys

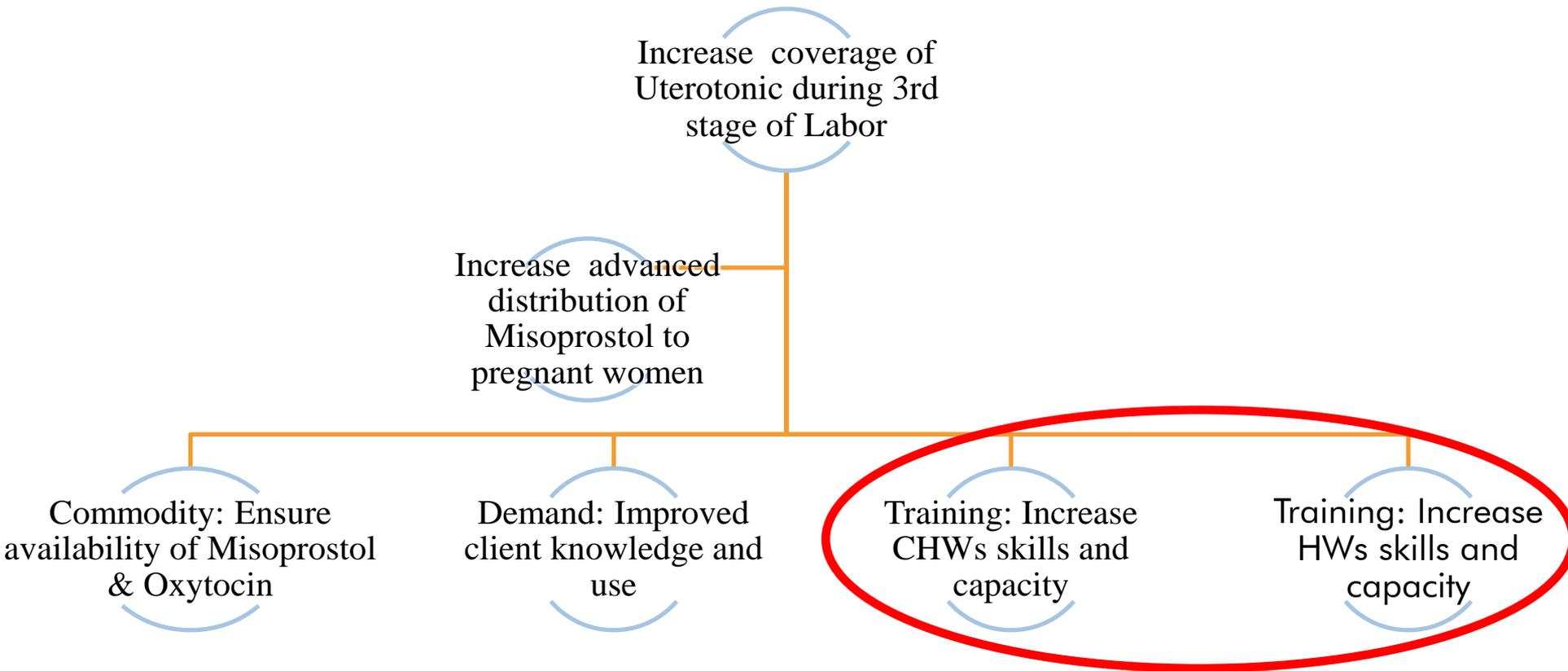
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Brainstorming Possible Indicators

- Program Activity: distribution of Misoprostol to all pregnant women
- Indicator:
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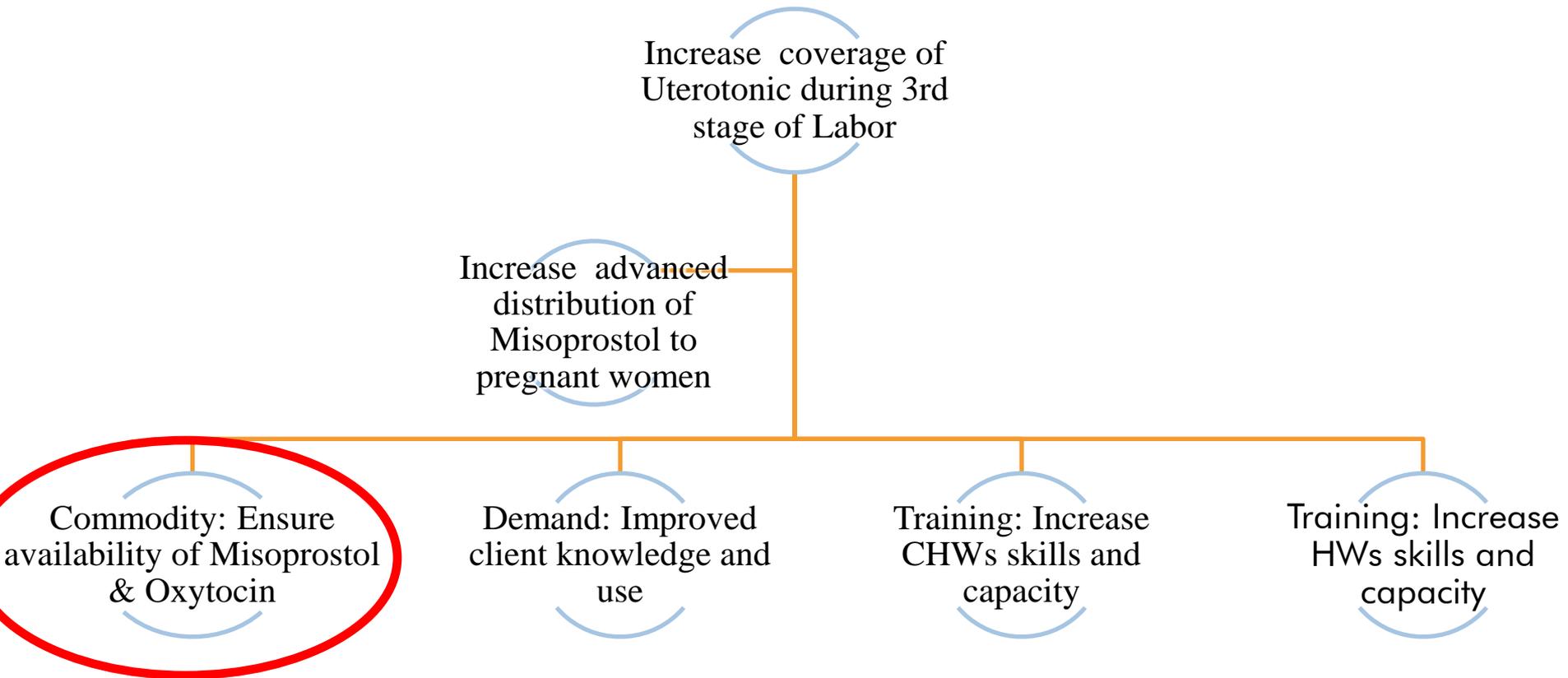
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Brainstorming Possible Indicators

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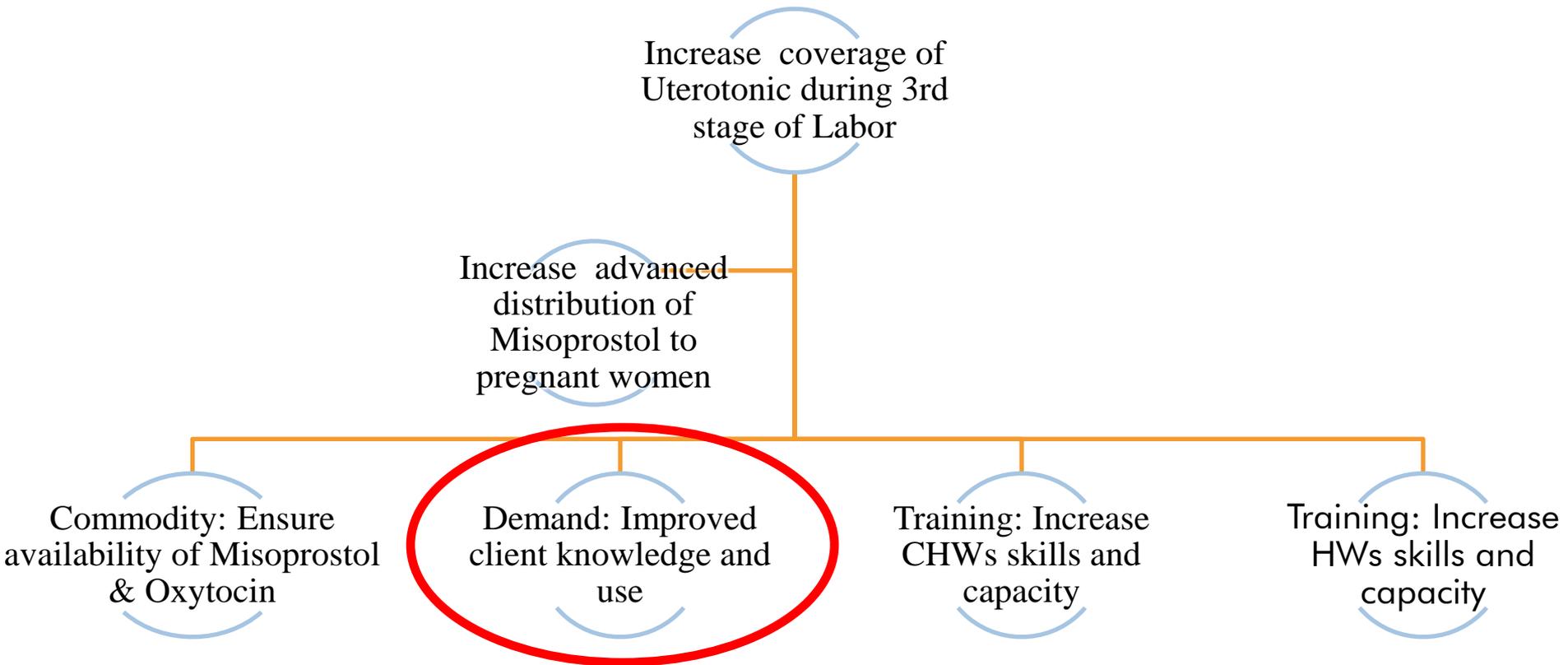
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Brainstorming Possible Indicators

- Program Activity: all health facilities and CHWs have Misoprostol and Oxytocin available
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Results Framework



Brainstorming Possible Indicators

- Overall Result: Women administer *Misoprostol* at correct time and are satisfied.
- Indicator: Women administer *Misoprostol* correctly (timing, dose)
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Brainstorming Possible Indicators

- Overall Result: Adverse event, PPH complication and Deaths among Women who administer Misoprostol
- Indicator: Percentage of women with home births who ingested misoprostol and experienced an adverse event
 - Source: HMIS & Postpartum Household Survey
- Indicator: Percentage of women who used misoprostol at a home birth, experienced PPH and were referred to a health facility
 - Source: HMIS & Postpartum Household Survey
- Total number of maternal deaths

KEY MESSAGE

**Build on existing government systems,
and ensure consistency across all PPH prevention projects.**

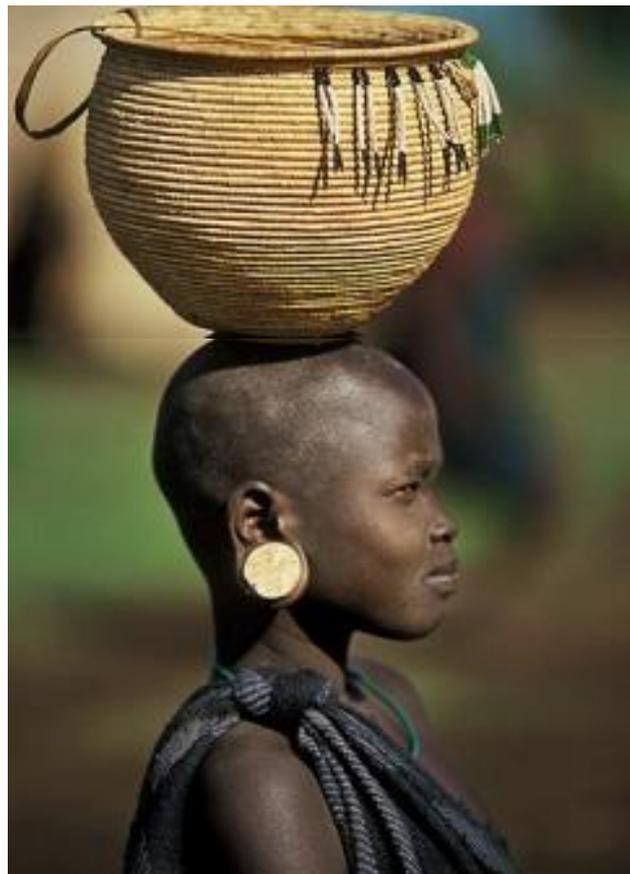


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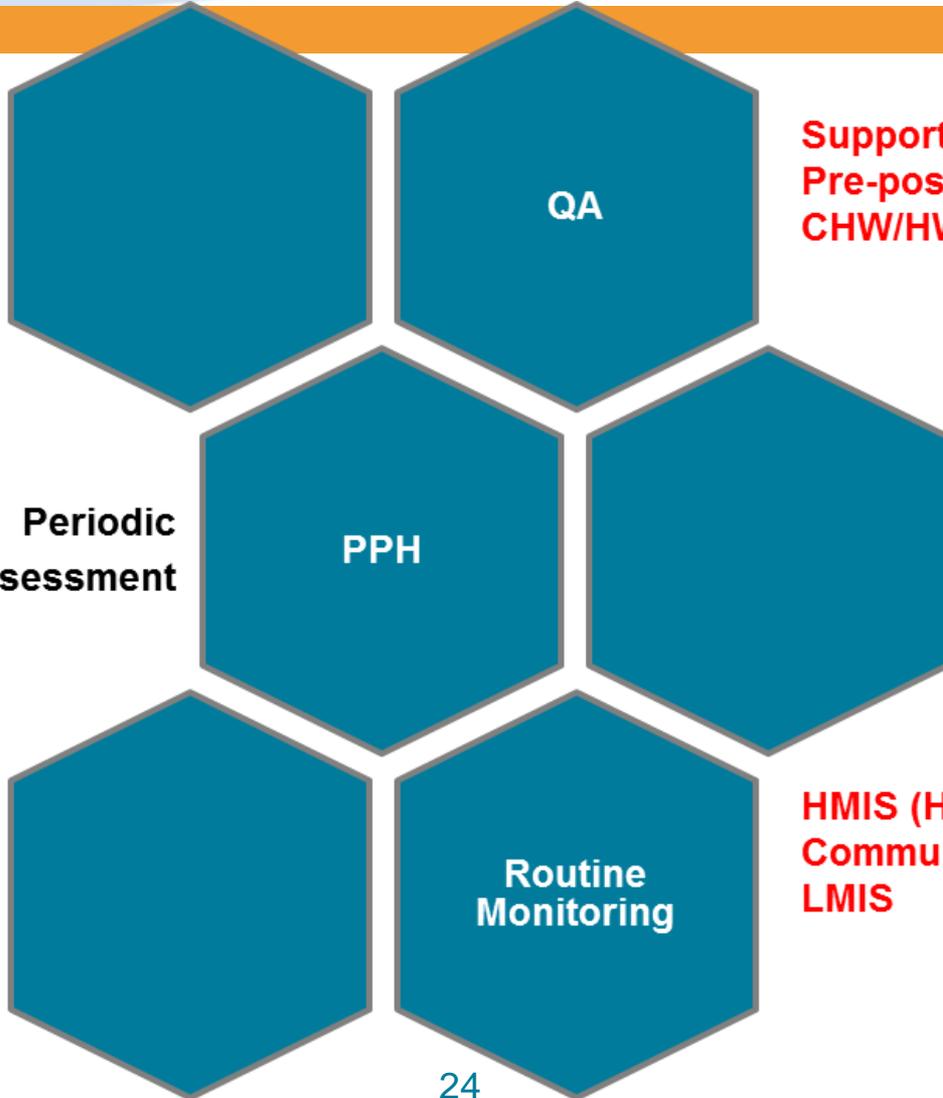
Maternal and Child Health
Integrated Program

Putting it all together?



DHS
LQAS
Other HH Surveys

Periodic
Assessment



Supportive Supervision
Pre-post training assessment
CHW/HWs Interviews

HMIS (Health Facility &
Community
LMIS

- How many country HMIS capture Uterotonic Use?
- Do we have a Community HMIS system?

Strengthen Supportive Supervision Systems

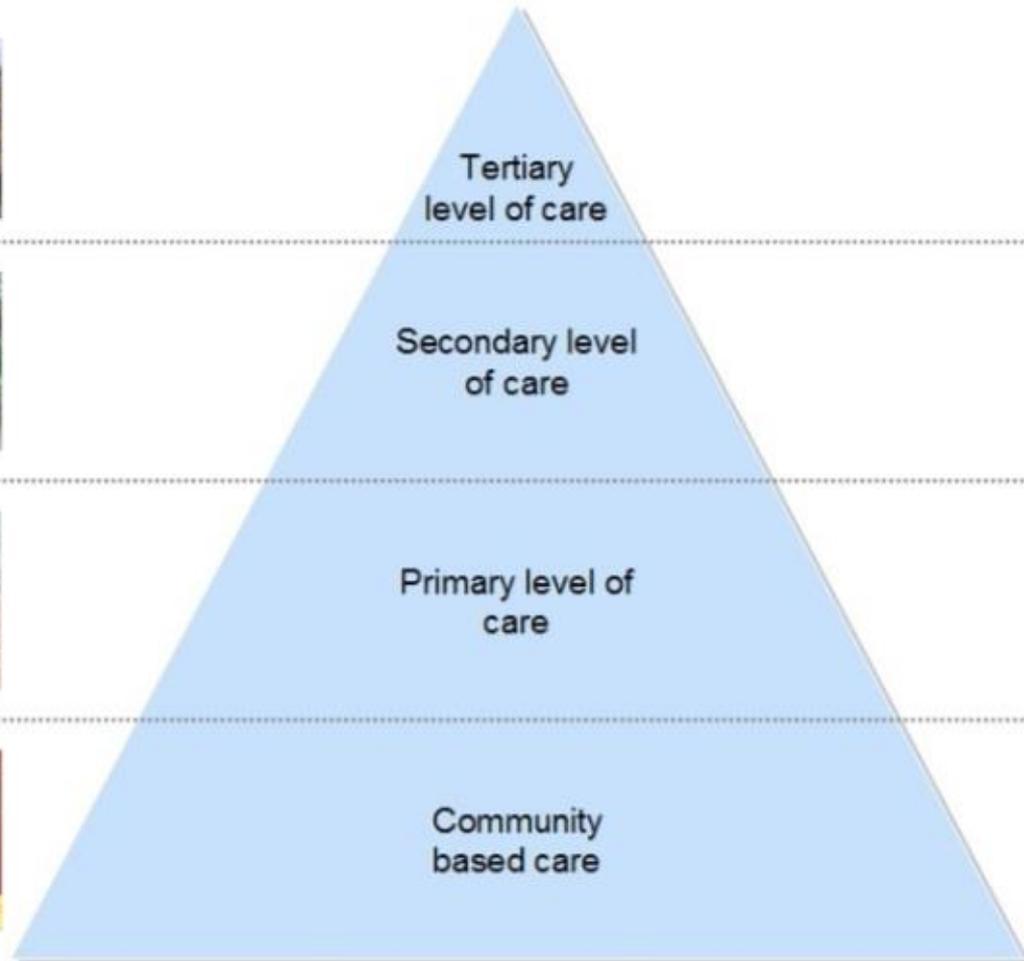
- Why?
 - Help new trainers develop their facilitation skills and master the training material
 - Reinforce new knowledge and skills of facility-based healthcare providers
 - Reinforce new knowledge and skills of CHWs/TBAs
- How?
 - Facilitation of monthly or quarterly meetings
 - Direct Observation

Data use for performance improvement

- What is the information telling you?
 - Identify/analyze successes and areas to improve
 - Look at comparisons (between/among groups, against targets, over time..)
- Ensure Equity
- Local Action

“Develop and implement changes”

Data use... across the spectrum of care delivery ...



Introducing technology

- Identifying & Tracking Pregnant Women
- Reminder messages to Women and CHWs
- Follow-up of women Post-partum



Country Dashboard

Period

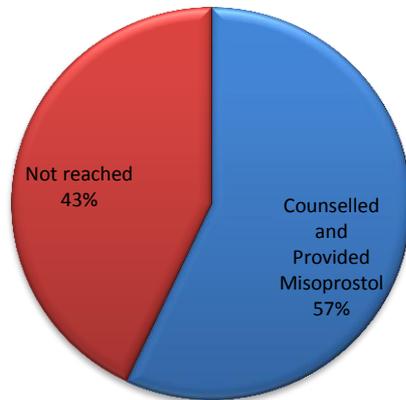
Jan – June, 2013

Program Information	
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No. of HW Trained	1R HW (only #)

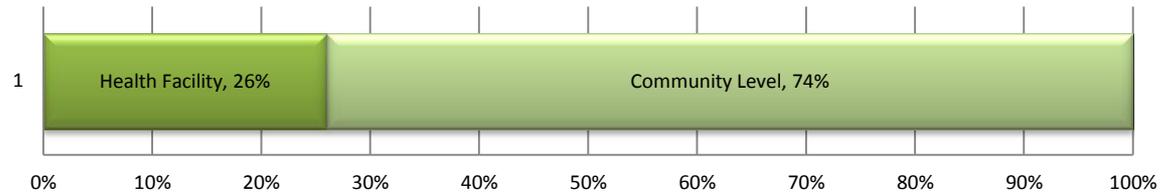
Deliveries	
Health Facility	4 R (only #)
Home	(Expected – HF)

Stock-outs	
Oxytocin at Health Facility	7 R
Misoprostol at CHW level	8 R

Women Counsellled and Provided Misoprostol by Place of Counselling (Estimated Pregnant Women)



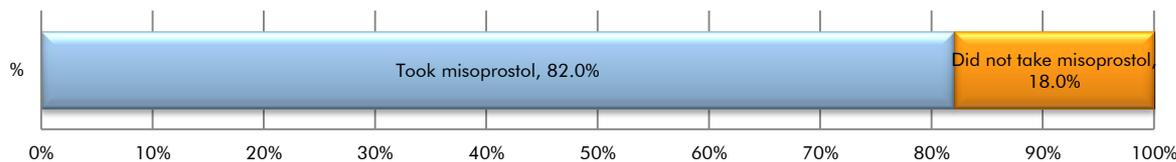
Place of Counselling & Distribution of Misoprostol



Uterotonic Coverage

Uterotonic Coverage by Place of Birth

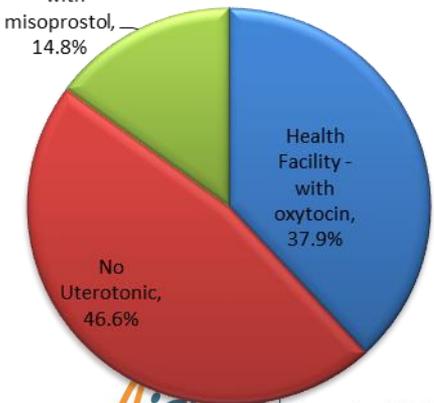
Home Deliveries that took Misoprostol



Deliveries at Health Facility who received a Uterotonic



Home birth
- with
misoprostol,
14.8%



What gets measured gets managed.
What gets managed gets done!

- Tom Peters

Thank you!

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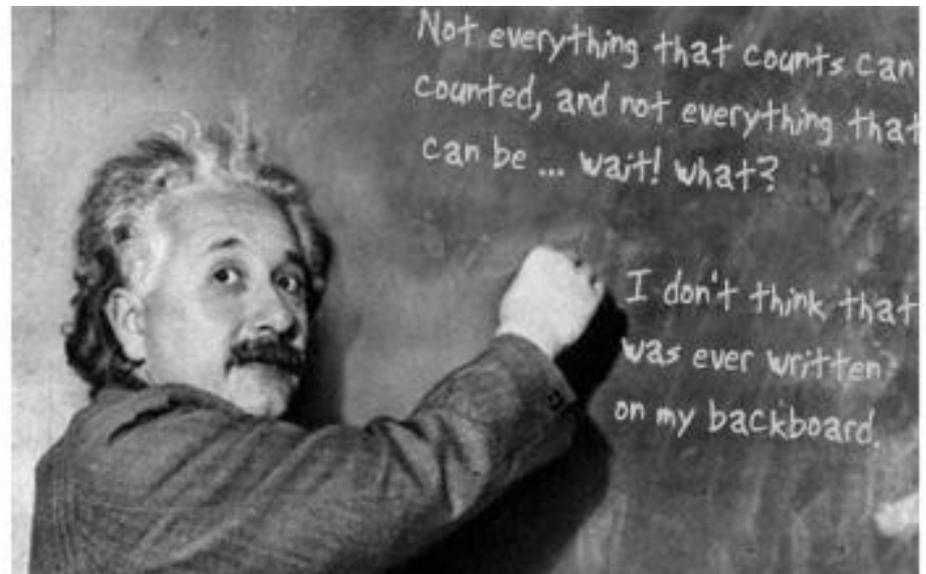
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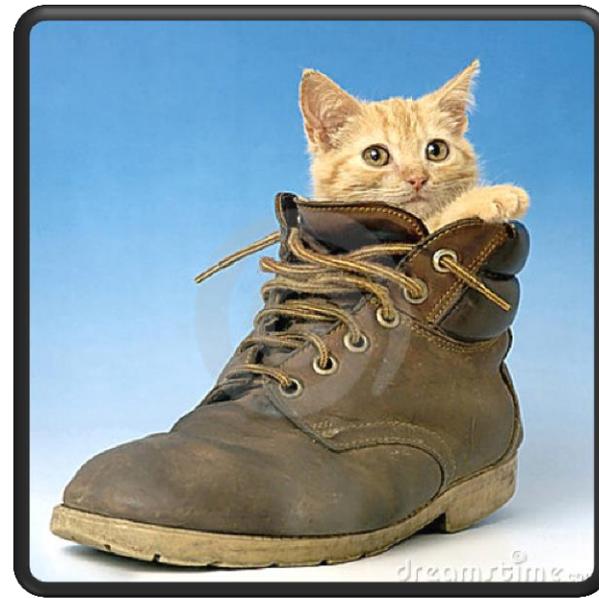
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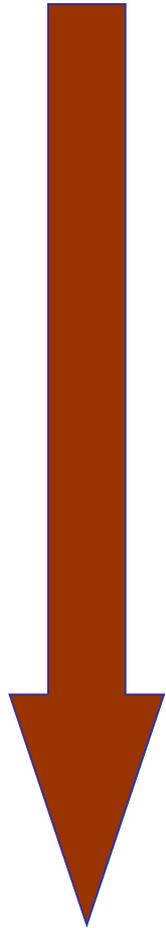


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*Measuring **as an** Intervention*

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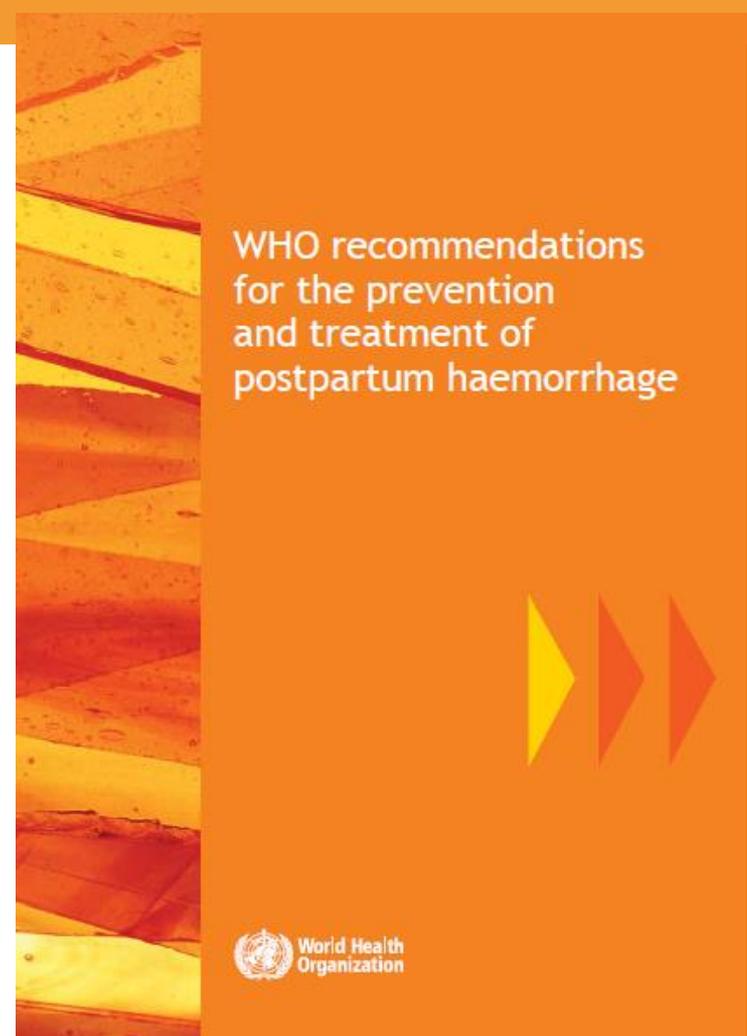
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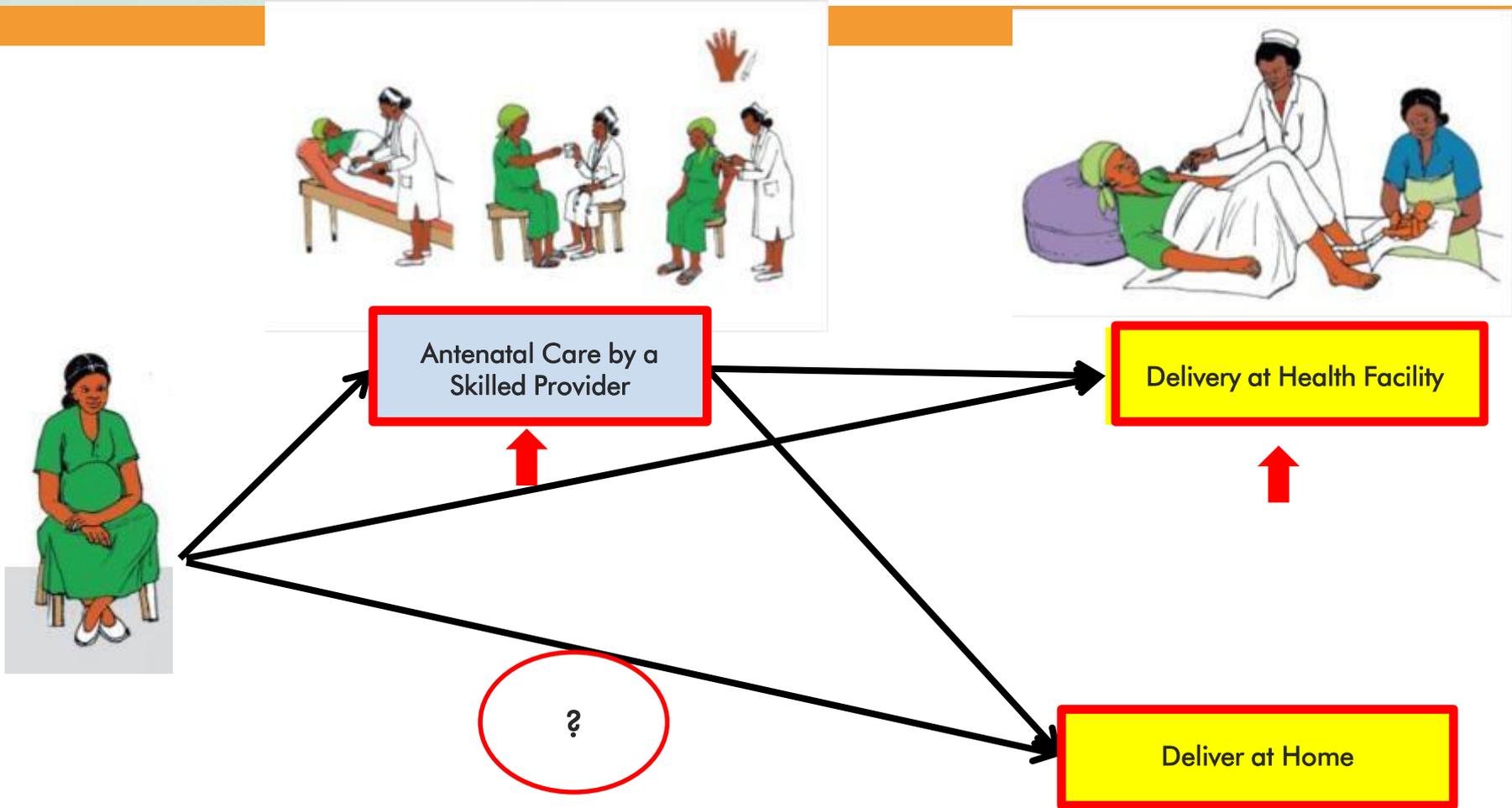
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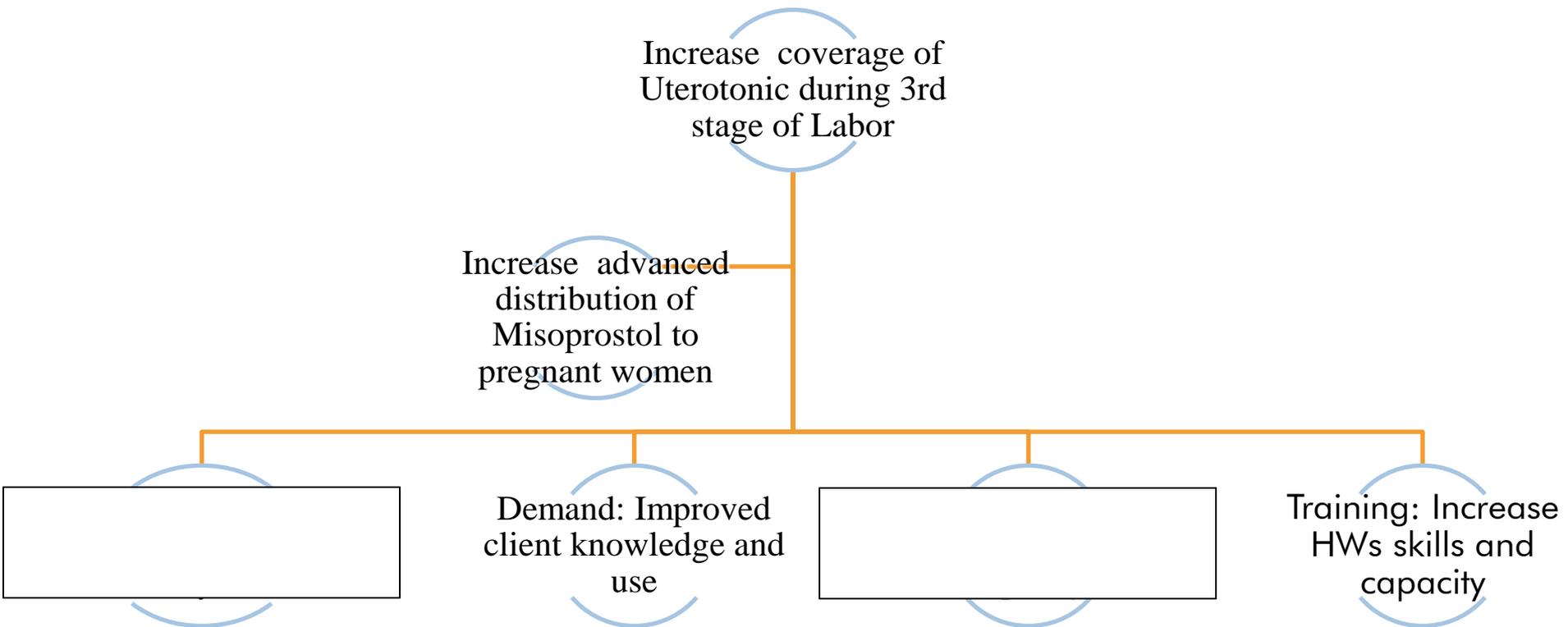
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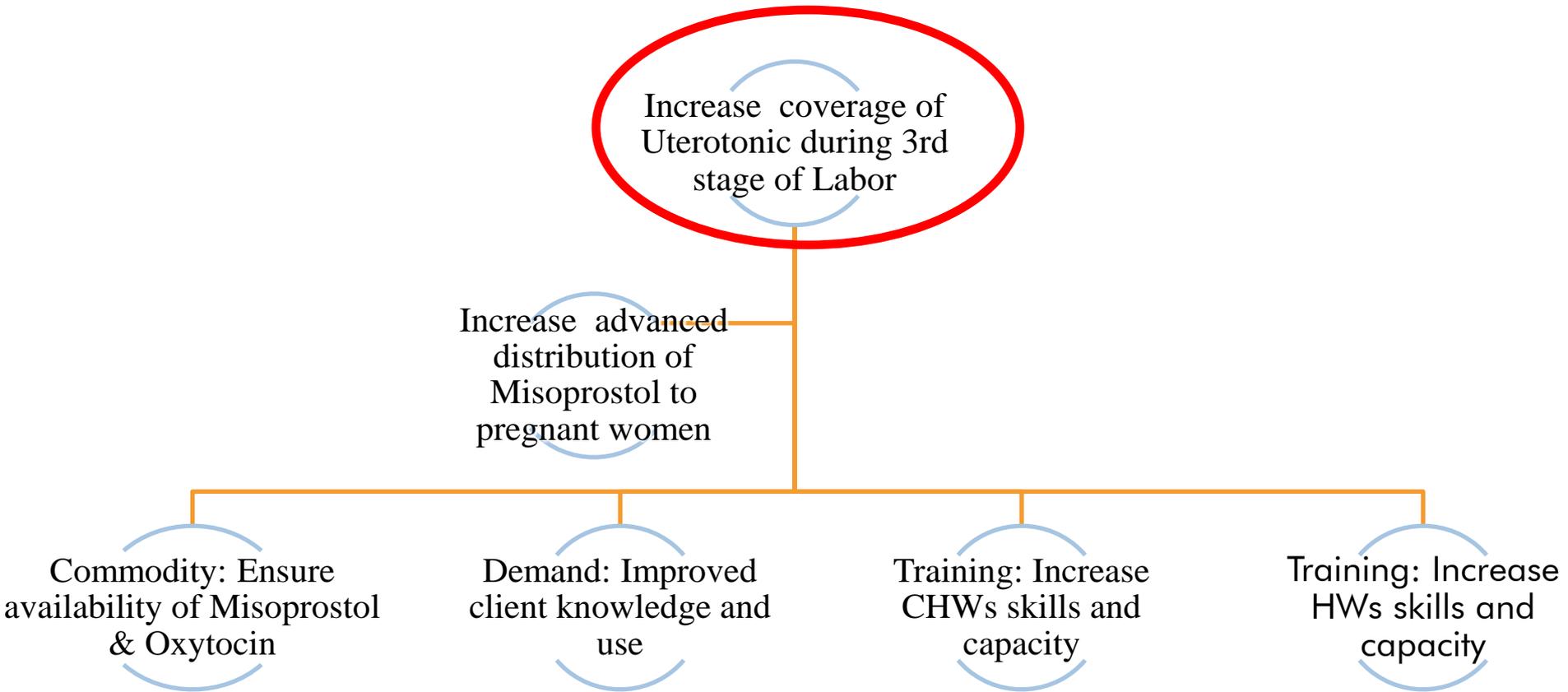
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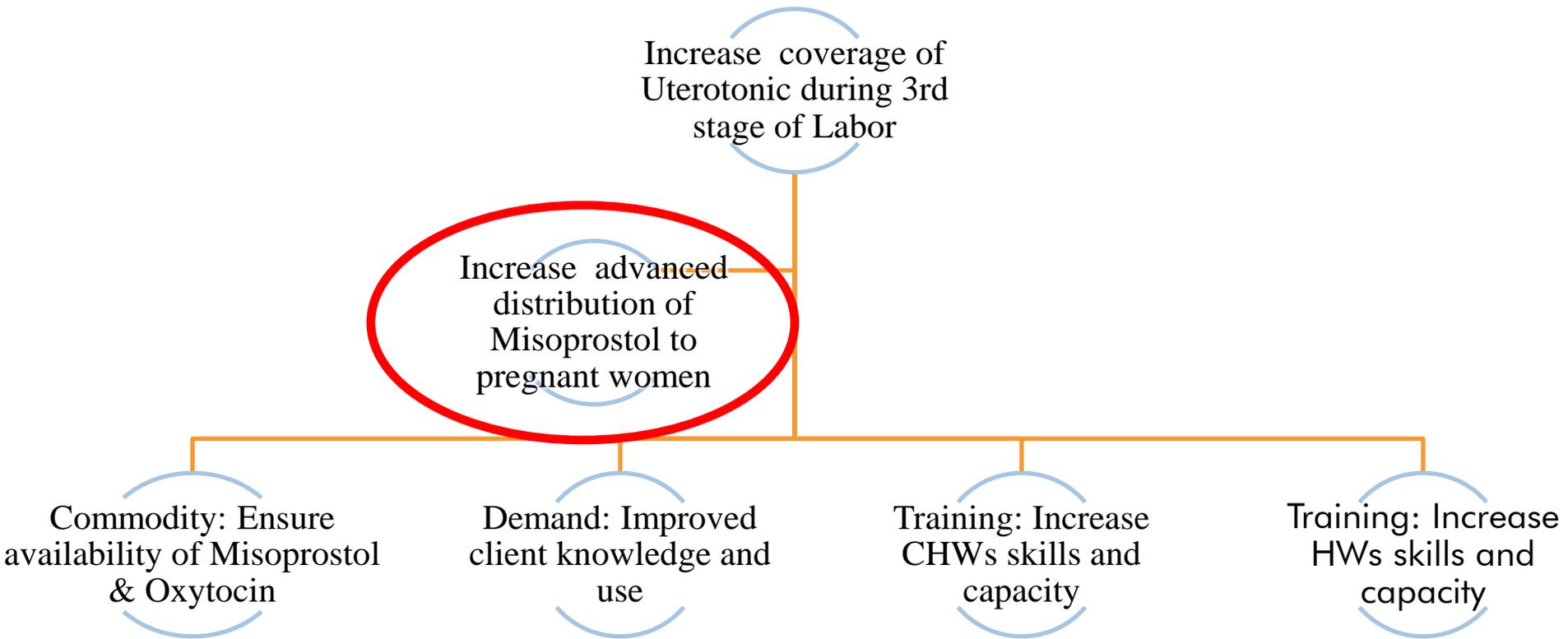
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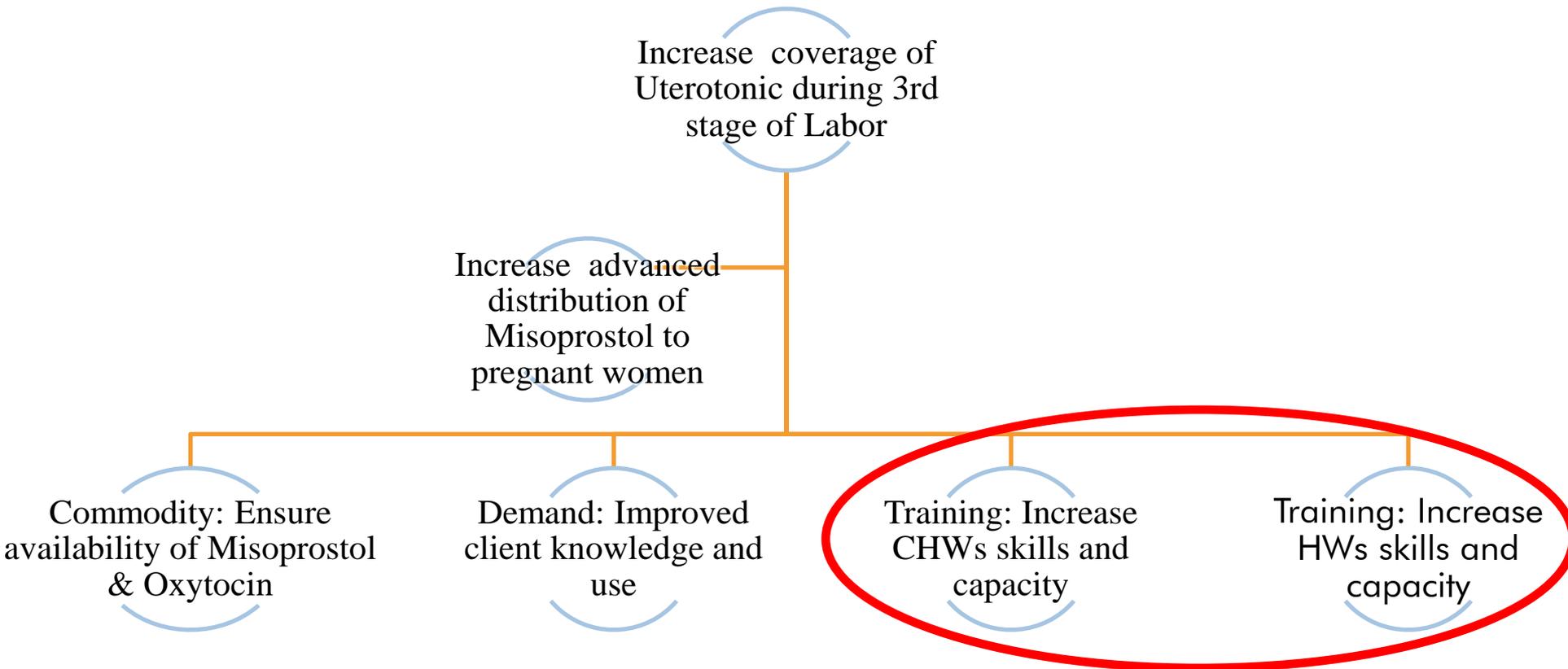
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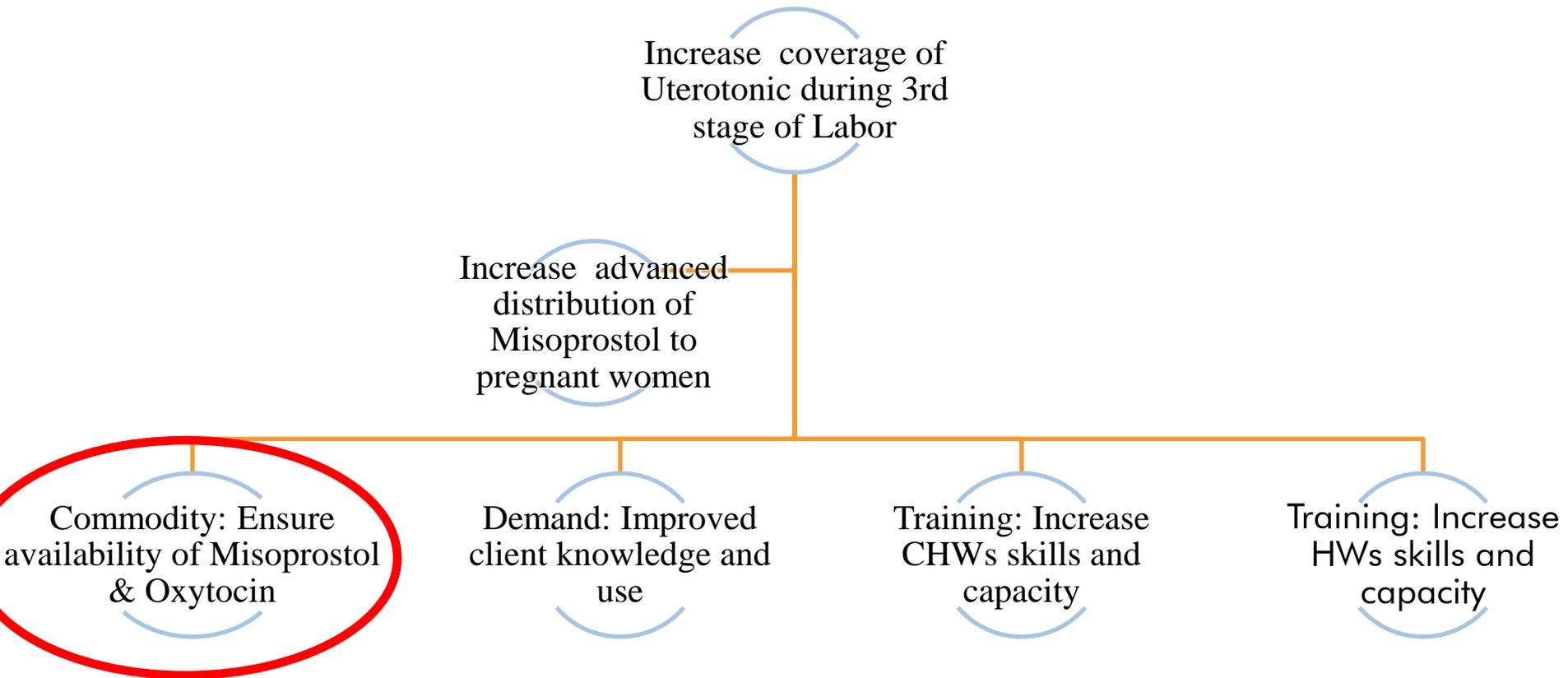
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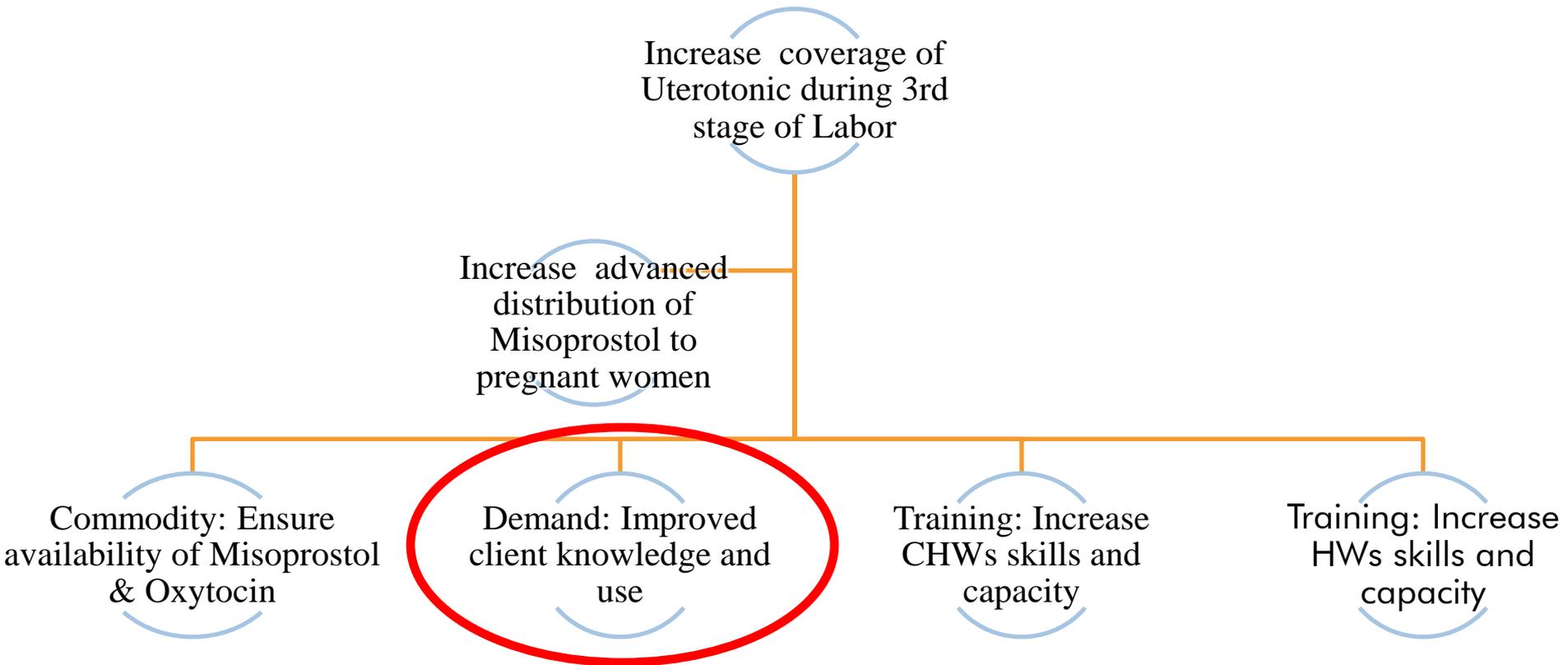
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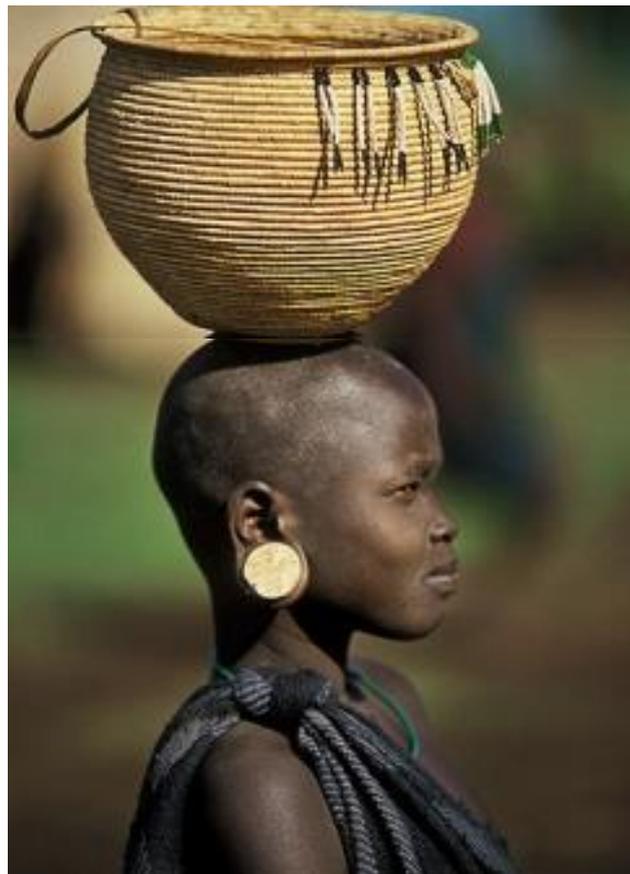


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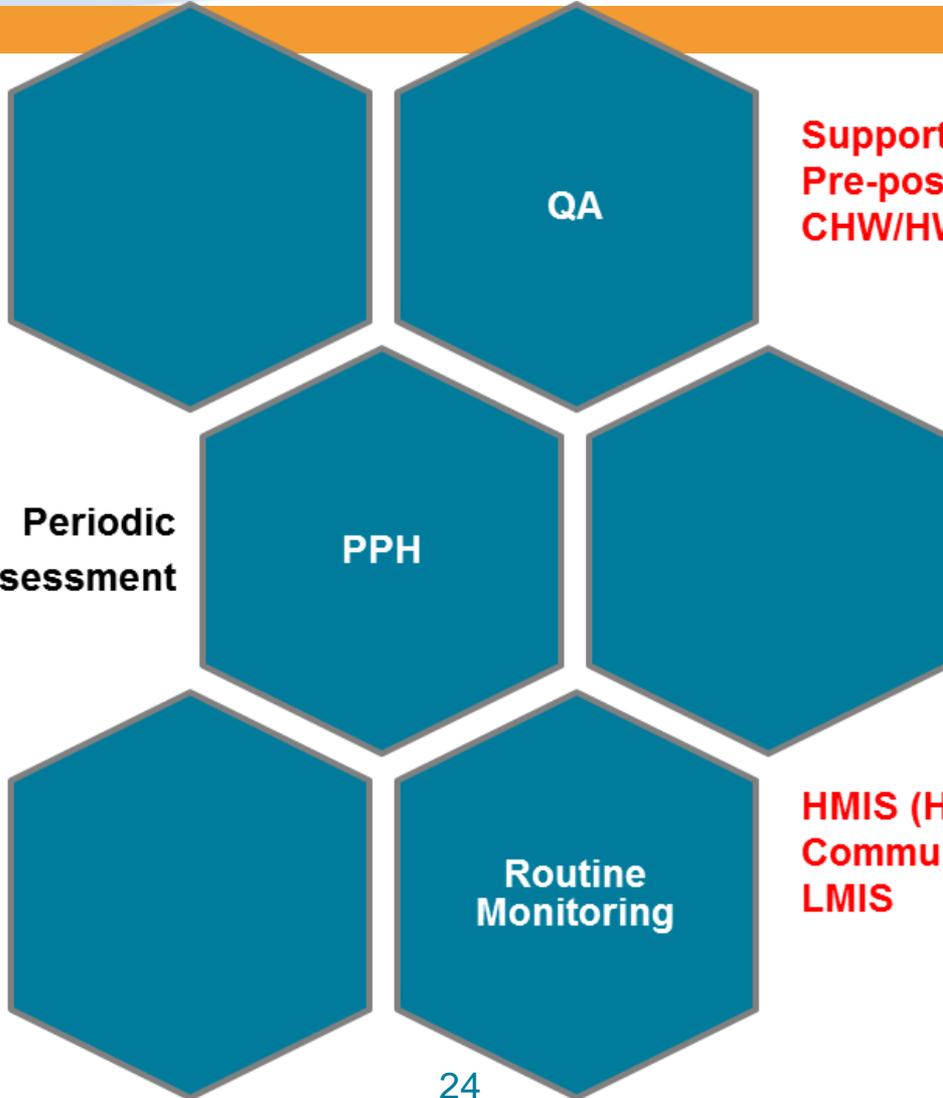
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Strengthen Supportive Supervision Systems

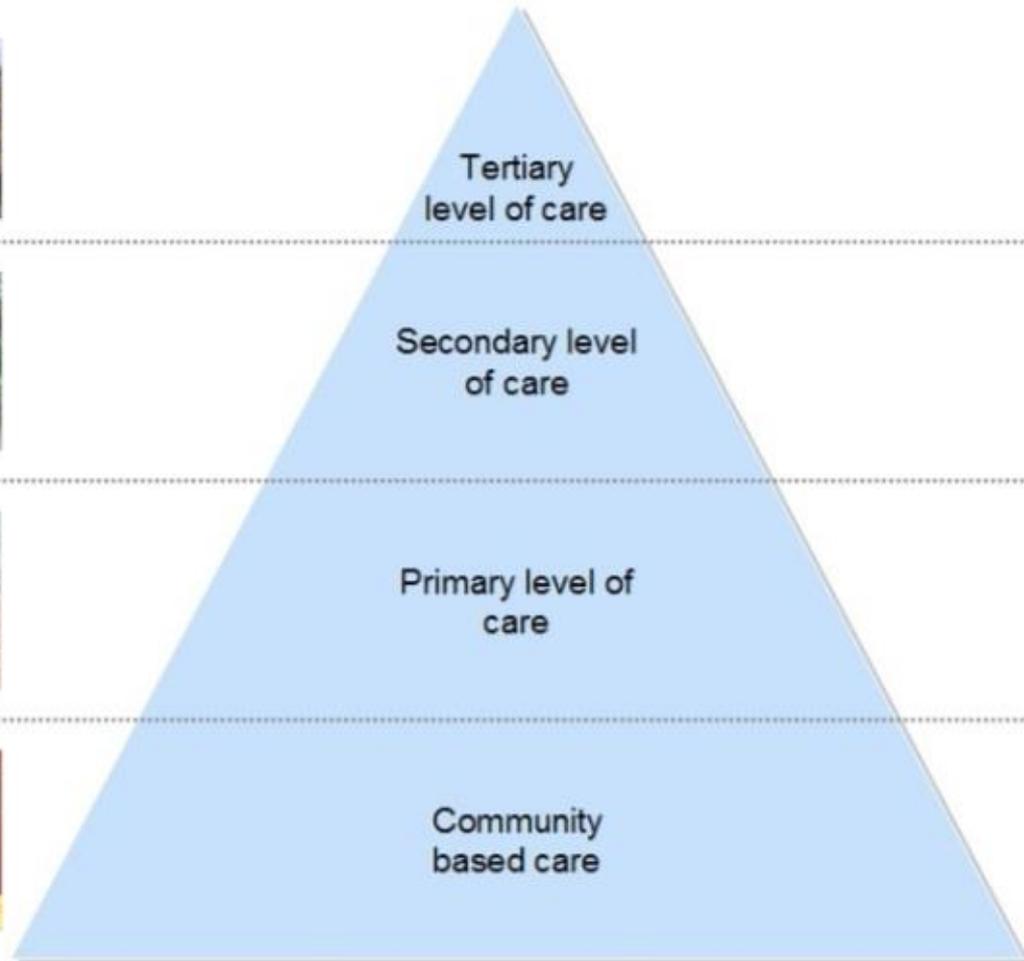
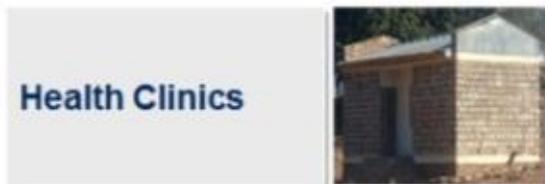
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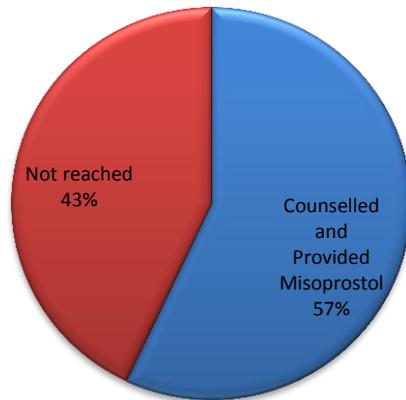
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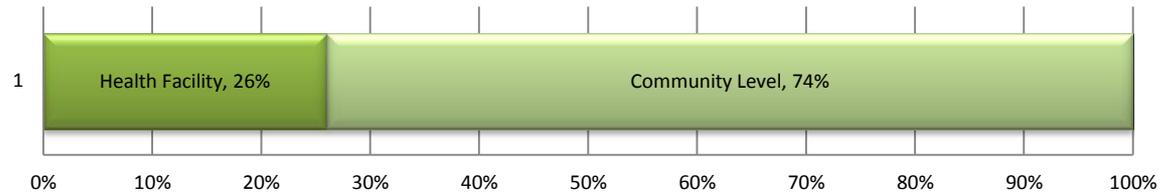
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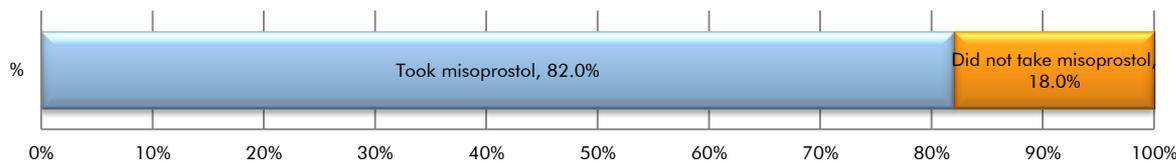
Place of Counselling & Distribution of Misoprostol



Uterotonic Coverage

Uterotonic Coverage by Place of Birth

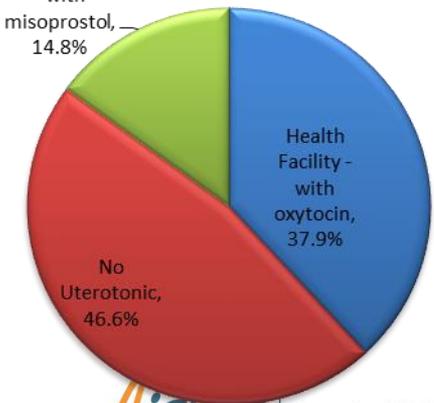
Home Deliveries that took Misoprostol



Deliveries at Health Facility who received a Uterotonic



Home birth
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14.8%



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What gets managed gets done!

- Tom Peters

Thank you!

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Technical Information About Misoprostol for PPH Prevention

Comprehensive PPH Reduction Approach

PROMOTION OF COMPREHENSIVE PACKAGE OF INTERVENTIONS TO PREVENT AND MANAGE PPH

**EDUCATION: Birth planning/complication readiness;
Promotion of ANC; encouragement of facility birth with
SBA**

Facility Birth:

- Correct management of labor and birth, including partograph
- Routine administration of uterotonic immediately after birth (oxytocin preferred, if not, misoprostol)
- Uterotonic availability and quality
- Postpartum vigilance for PPH
- Proper management of PPH

SBA

Transport:

- Initial dose of uterotonic
- Use of Non-pneumatic Anti Shock Garment

Home Birth:

- Education about PPH detection
- Education about use of misoprostol
- Advanced distribution of misoprostol for self administration after birth
- Education about what to do for continued bleeding



JEOPARDY!

PPH Program Implementation Round

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Pharmacology in PPH Prevention	Uses in Obstetrics and Gynecology	Side Effects and Risks	Global Guidance	Program Approaches
<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
<u>600</u>	<u>600</u>	<u>600</u>	<u>600</u>	<u>600</u>
<u>800</u>	<u>800</u>	<u>800</u>	<u>800</u>	<u>800</u>
<u>1000</u>	<u>1000</u>	<u>1000</u>	<u>1000</u>	<u>1000</u>

Program Approaches 200

Who is the best person to store the drug and make sure it is available at the time of delivery?

[return](#)



Answer, Program Approaches 200

Who is the best person to store the drug and make sure it is available at the time of delivery?

The woman herself

[return](#)

Program Approaches 400

Greatest coverage of use of misoprostol for prevention of PPH at home birth has been through:

1. Distribution by whom?
2. Distribution when?
3. Distribution where?
4. Administration by whom?

[return](#)



Answer, Program Approaches 400

Greatest coverage of use of misoprostol for prevention of PPH at home birth has been through:

1. Distribution by whom? **Distribution by CHWs or TBAs**
2. Distribution when? **Distribution late in pregnancy**
3. Distribution where? **Distribution at home visits**
4. Administration by whom? **For self-administration**

[Additional information](#)

[return](#)

Program Approaches 600

Describe the difference between the **distribution rate** of misoprostol and the **coverage rate** of misoprostol?
Why is it important?

[return](#)



Answer, Program Approaches 600

Describe the difference between the **distribution rate** of misoprostol and the **coverage rate** of misoprostol? Why is it important?

Distribution rate is the proportion of pregnant women in the catchment area **who received misoprostol** for the prevention of PPH

Coverage rate is The proportion of women who delivered at home in the catchment area (actual or estimated) **who used misoprostol** for the prevention of PPH.

If there is a large difference between the distribution rate and the coverage rate it could mean that women / families do not have confidence in the counseling or the messages being provided.

[Additional Information](#)

[return](#)

Program Approaches 800

Six countries in the world currently have a national strategy / policy for national scale up of programs for advanced distribution of misoprostol for self-administration. Name FOUR of them.

[return](#)



Answer, Program Approaches 800

Six countries in the world currently have a national strategy / policy for national scale up of programs for advanced distribution of misoprostol for self-administration. Name FOUR of them.

Afghanistan, Nepal, Bangladesh, Nigeria, South Sudan and Mozambique.

[return](#)

Program Approaches 1000

Programs that use ANC as the only distribution method for misoprostol will achieve about how much coverage compared to programs that use home visits by community workers?

[return](#)



Answer, Program Approaches 1000

Programs that use ANC as the only distribution method for misoprostol will achieve about how much coverage compared to programs that use home visits by community workers?

Home visits by community workers (CHWs/TBAs) achieve about 2 X the coverage that ANC-only distribution schemes achieve

[return](#)

Global Guidance 200

For the prevention of PPH, women should be counseled that if the placenta delivers before taking the misoprostol, the misoprostol should not be taken.

True or false?

[return](#)



Answer, Global Guidance 200

For the prevention of PPH, women should be counseled that if the placenta delivers before taking the misoprostol, the misoprostol should not be taken.

True or false?

False

[return](#)

Global Guidance 400

In which year was misoprostol approved on the WHO *Model List of Essential Medicines* for prevention of PPH?

- A. 2007
- B. 2009
- C. 2011
- D. 2013
- E. Not yet approved by the WHO EML for prevention of PPH

[return](#)



Answer, Global Guidance 400

In which year was misoprostol approved on the WHO *Model List of Essential Medicines* for prevention of PPH?

A. 2007

B. 2009

C. 2011

D. 2013

E. Not yet approved by the WHO EML for prevention of PPH

[return](#)

Global Guidance 600

The 2012 WHO *Recommendations for the Prevention and Treatment of PPH* contain which of the following recommendations? (choose all that are correct)

- A. The use of uterotonics for the prevention of PPH during the third stage of labour is recommended for all births.
- B. Oxytocin (10 IU, IV/IM) is the recommended uterotonic drug for the prevention of PPH.
- C. In settings where oxytocin is unavailable, the use of other injectable uterotonics (if appropriate ergometrine/ methylergometrine or the fixed drug combination of oxytocin and ergometrine) or oral misoprostol (600 µg) is recommended.
- D. In settings where skilled birth attendants are not present and oxytocin is unavailable, the administration of misoprostol (600 µg PO) by community health care workers and lay health workers is recommended for the prevention of PPH.

[return](#)



Answer, Global Guidance 600

The 2012 *WHO Recommendations for the Prevention and Treatment of PPH* contain which of the following recommendations? (choose all that are correct)

- A. The use of uterotonics for the prevention of PPH during the third stage of labour is recommended for all births.
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- C. In settings where oxytocin is unavailable, the use of other injectable uterotonics (if appropriate ergometrine/ methylergometrine or the fixed drug combination of oxytocin and ergometrine) or oral misoprostol (600 µg) is recommended.
- D. In settings where skilled birth attendants are not present and oxytocin is unavailable, the administration of misoprostol (600 µg PO) by community health care workers and lay health workers is recommended for the prevention of PPH.

[Additional Information](#)
[return](#)

Global Guidance 800

Regarding the advance distribution of misoprostol for self-administration by women immediately after a home birth: (choose all that are correct)

- A. The WHO says that there is insufficient evidence to recommend the antenatal distribution of misoprostol to pregnant women for self-administration for the prevention of PPH.
- B. The WHO notes that numerous countries have embarked on community-level programs for distribution of misoprostol. This should be done only in the context of research
- C. FIGO guidelines state that self administration by women following birth is safe and effective.
- D. ACOG makes no statement about the use of misoprostol following homebirth for PPH prevention.

[return](#)



Answer, Global Guidance 800

Regarding the advance distribution of misoprostol for self-administration by women immediately after a home birth: (choose all that are correct)

- A. The WHO says that there is insufficient evidence to recommend the antenatal distribution of misoprostol to pregnant women for self-administration for the prevention of PPH.
- B. The WHO notes that numerous countries have embarked on community-level programs for distribution of misoprostol. This should be done only in the context of research
- C. FIGO guidelines state that self administration by women following birth is safe and effective.
- D. ACOG makes no statement about the use of misoprostol following homebirth for PPH prevention.

[return](#)

Global Guidance 1000

How many countries in the world currently have misoprostol approved for an obstetrical or gynecologic indication?

Answer +/- 3 will be accepted.

[return](#)



Answer, Global Guidance 1000

How many countries in the world currently have misoprostol approved for an obstetrical or gynecologic indication?

Answer +/- 3 will be accepted.

Approximately 33

[return](#)

Side Effects and Risks 200

Uterine contractions were initially considered as a dangerous side effect of misoprostol.

True or false?

[return](#)



Answer, Side Effects and Risks 200

Uterine contractions were initially considered as a dangerous side effect of misoprostol.

True

[return](#)

Side Effects and Risks 400

The main side effects of misoprostol, when taken immediately after the delivery of the baby for the prevention of PPH, include:

- A. Pyrexia, shivering, diarrhea and postpartum hemorrhage
- B. Diarrhea, shivering, pyrexia and nausea
- C. Shivering, uterine rupture, fever and nausea
- D. Fever, shivering, uterine rupture, nausea and post partum hemorrhage

[return](#)



Answer, Side Effects and Risks 400

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- B. Diarrhea, shivering, pyrexia and nausea**
- C. Shivering, uterine rupture, fever and nausea
- D. Fever, shivering, uterine rupture, nausea and post partum hemorrhage

[return](#)

Side Effects and Risks 600

In 1998 the Federal Ministry of Health of Brazil banned the use of misoprostol in pregnant women:

- A. Due to an increase in teratogenesis
- B. In an effort to prevent illegal abortion
- C. Because it was resulting in a decrease in facility births
- D. Because it was being exclusively marketed to indigenous women for PPH prevention

[return](#)



Answer, Side Effects and Risks 600

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- A. Due to an increase in teratogenesis**
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- C. Because it was resulting in a decrease in facility births
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[return](#)

Side Effects and Risks 800

In the global review of programs for PPH prevention at home birth using misoprostol, Smith et al. found that out of more than 12, 000 women who took misoprostol:

- A. 19 took the drug before delivery, of those 12 died
- B. 7 took the drug before delivery, of those none died
- C. 14 took the drug before delivery, of those 6 died
- D. 9 took the drug before delivery, of those 3 died

[return](#)



Answer, Side Effects and Risks 800

In the global review of programs for PPH prevention at home birth using misoprostol, Smith et al. found that out of more than 12, 000 women who took misoprostol:

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[Additional Information](#)

[return](#)

Side Effects and Risks 1000

A CHW is in the home of a woman who is in her 8th month of pregnancy. She is counseling the woman about how to take the misoprostol, including the risks and side effects of misoprostol. What should she tell the woman?

[return](#)



Answer, Side Effects and Risks 1000

A CHW is in the home of a woman who is in her 8th month of pregnancy. She is counseling the woman about how to take the misoprostol, including the risks and side effects of misoprostol. What should she tell the woman?

3 Main messages:

The woman must **never take the drug before the delivery** of the baby. This can result in ruptured uterus and death.

The woman **may experience** the following **side effects**: nausea, vomiting, diarrhea, shivering and fever.

The drug is **not always completely effective**. If she still bleeds too much (more than two cloths) she should go to the nearest facility for treatment.

[return](#)

Uses in Obstetrics and Gynecology 200

Misoprostol cannot be used as part of Active Management of the Third Stage of Labor.

True or False?

[return](#)



Answer, Uses in Obstetrics and Gynecology 200

Misoprostol cannot be used as part of Active Management of the Third Stage of Labor.

False

[return](#)

Uses in Obstetrics and Gynecology 400

Misoprostol has known uses for all of the following obstetrical and gynecologic situations except:

- A. Induced abortion in the 1st trimester
- B. Incomplete abortion in the 1st trimester
- C. Missed abortion in the 1st trimester
- D. Cervical ripening in gynecology
- E. Management of 2nd trimester fetal death
- F. Induction of labor
- G. Augmentation of labor
- H. Prevention of PPH
- I. Treatment of PPH

[return](#)



Answer,

Uses in Obstetrics and Gynecology 400

Misoprostol has known uses for all of the following obstetrical and gynecologic situations except:

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- C. Missed abortion in the 1st trimester
- D. Cervical ripening in gynecology
- E. Management of 2nd trimester fetal death
- F. Induction of labor
- G. Augmentation of labor**
- H. Prevention of PPH
- I. Treatment of PPH

[return](#)

Uses in Obstetrics and Gynecology 600

When misoprostol is used for induction of labor...

1. What dose should be used?
2. What route?
3. What is the correct dosing interval?
4. How is the correct dose obtained? (2 correct options)

[return](#)



Answer,

Uses in Obstetrics and Gynecology 600

When misoprostol is used for induction of labor...

1. What dose should be used? **25ug of misoprostol**
2. What route? **Oral or vaginal**
3. What is the correct dosing interval?
If vaginal, every 6 hours;
If oral, every 2 hours
4. How is the correct dose obtained? (2 correct options)
Use a 25ug tablet (very hard to find) or dissolve a 200ug tablet in 200cc of water and administer 25cc of solution orally.

[Additional Information](#)

[return](#)

Uses in Obstetrics and Gynecology 800

Women who have had an incomplete abortion, and present with continued bleeding, and have uterine size of ≤ 12 weeks can be treated with 400ug of misoprostol sublingually, or 600ug of misoprostol orally.

How effective is this in completing uterine evacuation?

[return](#)



Answer,

Uses in Obstetrics and Gynecology 800

Women who have had an incomplete abortion, and present with continued bleeding, and have uterine size of ≤ 12 weeks can be treated with 400ug of misoprostol sublingually, or 600ug of misoprostol orally.

How effective is this in completing uterine evacuation?

91 – 99% effective

[Additional Information](#)

[return](#)

Uses in Obstetrics and Gynecology

1000

Describe the **pharmacologic** management of PPH from uterine atony in a woman who was given oxytocin 10 IU (IV or IM) for prevention of PPH.

[return](#)



Answer,

Uses in Obstetrics and Gynecology 1000

Describe the **pharmacologic** management of PPH from uterine atony in a woman who was given oxytocin 10 IU (IV or IM) for prevention of PPH.

FIGO: In a woman who has already received standard dose of oxytocin for PPH prevention, but has a hemorrhage, the provider can use either additional oxytocin (up to 40 units) IV or 800ug of sublingual misoprostol.

WHO: Intravenous oxytocin alone is the recommended uterotonic drug for the treatment of PPH.

If intravenous oxytocin is unavailable, or if the bleeding does not respond to oxytocin, the use of intravenous ergometrine, oxytocin-ergometrine fixed dose, or a prostaglandin drug (including sublingual misoprostol, 800 µg) is recommended.

There is no demonstrable benefit to the simultaneous use of both oxytocin and misoprostol in the management of PPH.

[return](#)

Pharmacology in PPH Prevention 200

The current global recommended dose of misoprostol for PPH prevention is:

- A. 200 mcg
- B. 400 mcg
- C. 600 mcg
- D. 800 mcg

[return](#)



Answer, Pharmacology in PPH Prevention 200

The current global recommended dose of misoprostol for PPH prevention is:

- A. 200 mcg
- B. 400 mcg
- C. 600 mcg**
- D. 800 mcg

[return](#)

Pharmacology in PPH Prevention 400

For the prevention of PPH which of the following are the **TWO** most preferred routes of administration? And why?

- A. Rectal
- B. Buccal
- C. Sublingual
- D. Oral
- E. Vaginal

[return](#)



Answer,

Pharmacology in PPH Prevention 400

For the prevention of PPH which of the following are the **TWO** most preferred routes of administration? And why?

- A. Rectal
- B. Buccal
- C. Sublingual**
- D. Oral**
- E. Vaginal

[Additional Information](#)

[return](#)

Pharmacology in PPH Prevention 600

The simultaneous administration of misoprostol plus oxytocin for prevention of PPH:

- A. Has no proven benefit
- B. Is more effective than oxytocin alone because they act on different receptors
- C. Is more effective than misoprostol alone because oxytocin should be given whenever it is available
- D. Is appropriate during cesarean section because of the increase risk of blood loss

[return](#)



Answer,

Pharmacology in PPH Prevention 600

The simultaneous administration of misoprostol plus oxytocin for prevention of PPH:

A. Has no proven benefit

B. Is more effective than oxytocin alone because they act on different receptors

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D. Is appropriate during cesarean section because of the increase risk of blood loss

[Additional Information](#)

[return](#)

Pharmacology in PPH Prevention 800

Misoprostol is which kind of prostaglandin?

- A. Prostaglandin E1
- B. Prostaglandin E2
- C. Prostaglandin F2 α
- D. Prostacyclin I2

[return](#)



Answer,

Pharmacology in PPH Prevention 800

Misoprostol is which kind of prostaglandin?

- A. Prostaglandin E1**
- B. Prostaglandin E2
- C. Prostaglandin F2 α
- D. Prostacyclin I2

[Additional information](#)

[return](#)

Pharmacology in PPH Prevention 1000

What is the time of onset of action of misoprostol given orally for the prevention of PPH?

[return](#)



Answer, Pharmacology in PPH Prevention 1000

What is the time of onset of action of misoprostol given orally for the prevention of PPH?

8 minutes

[Additional Information](#)

[return](#)

Pharmacokinetics of misoprostol: Routes

Misoprostol acts fast in all routes of administration

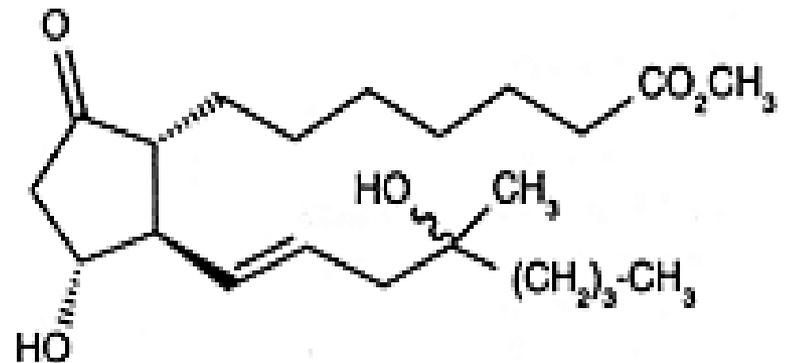
Route	Time to peak concentration	Duration of Action
Oral	30 minutes	2 h
Sublingual	30 minutes	3 h
Vaginal	75 minutes	4 h
Rectal	20-65 minutes	4 h

Source: Tang, IJGO 2007 (*Misoprostol: Pharmacokinetic profiles, effects on the uterus and side effects*)

[return](#)

What is Misoprostol?

- Prostaglandin E₁ analogue
- Uterotonic
- Contracts the uterus, ripens the cervix

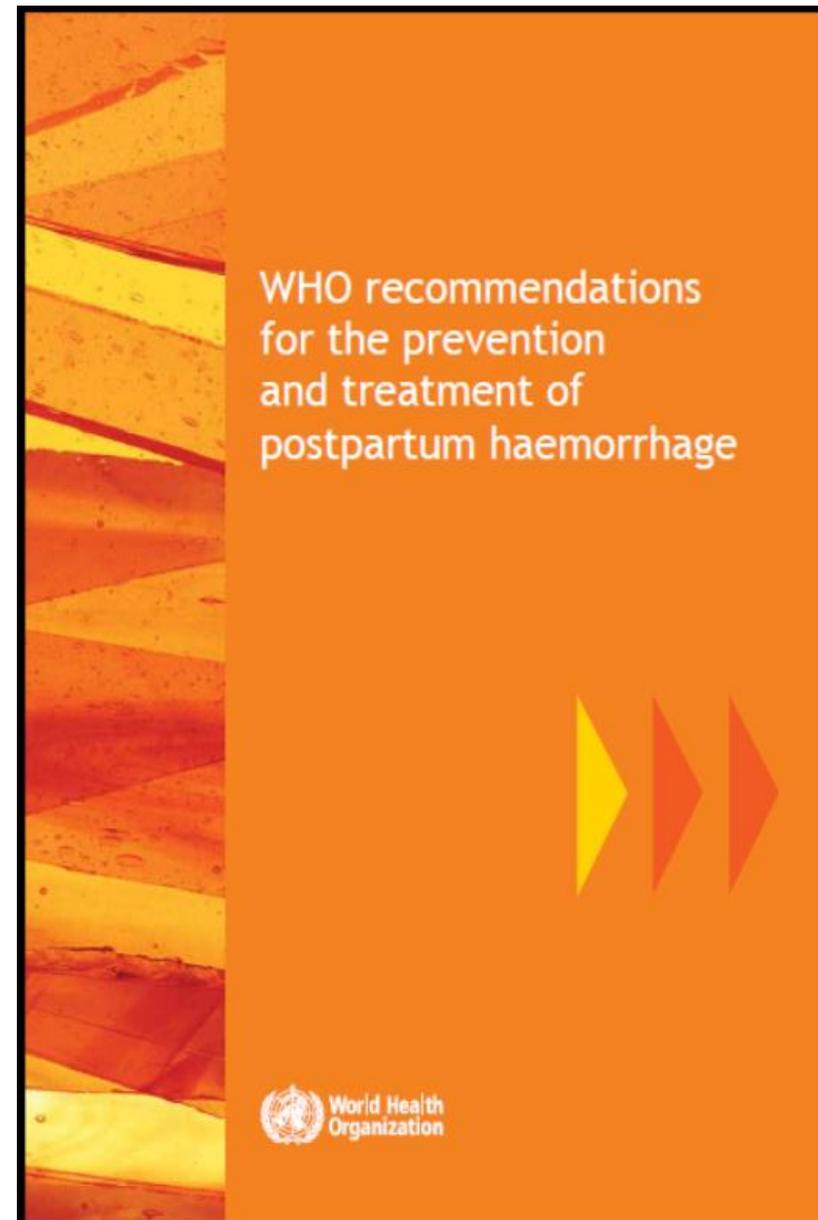


[return](#)

Uterotonic choice

- Oxytocin (10 IU, IV/IM) is the recommended uterotonic drug for the prevention of PPH.

(Strong recommendation, moderate-quality evidence)



[return](#)

Pharmacokinetics of misoprostol: Onset of action

Misoprostol acts fast in all routes of administration

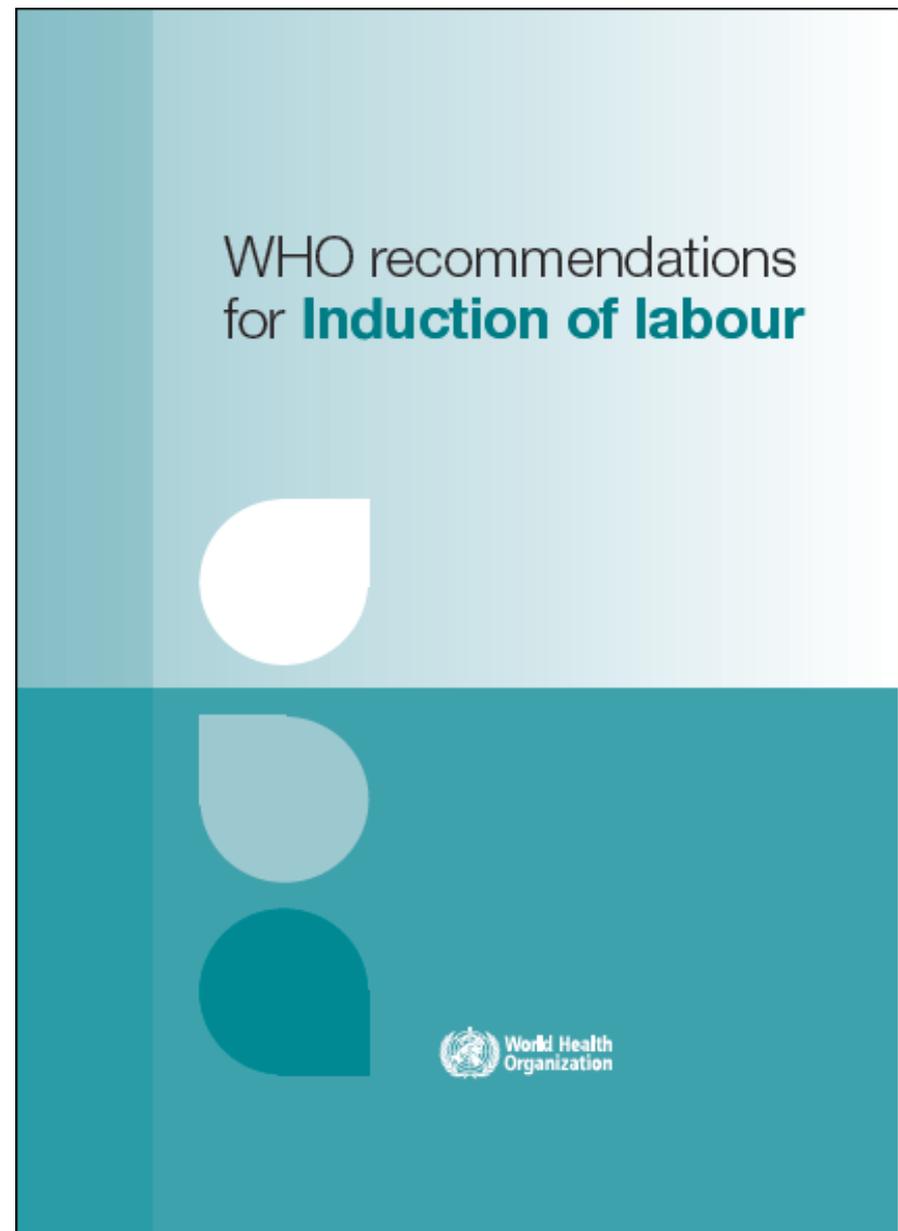
Route	Onset of action	Time to peak concentration	Duration of Action
Oral	8 minutes	30 minutes	2 h
Sublingual	11 minutes	30 minutes	3 h
Vaginal	20 minutes	75 minutes	4 h
Rectal	10 minutes	20-65 minutes	4 h

Source: Tang, IJGO 2007 (*Misoprostol: Pharmacokinetic profiles, effects on the uterus and side effects*

[return](#)

Misoprostol for Induction of Labor

- Oral misoprostol (25 µg, 2-hourly) is recommended for induction of labour.
- Low-dose vaginal misoprostol (25 µg, 6-hourly) is recommended for induction of labour



[return](#)

Misoprostol effectiveness for uterine evacuation in incomplete abortion

600 mcg oral misoprostol vs. MVA

Study (Location)	n	Efficacy
Dao et al. 2007 (Burkina Faso)	460	94.5% vs. 99.1%
Bique et al. 2007 (Mozambique)	100	91% vs. 100%
Shwekerela et al. 2007 (Tanzania)	300	99% vs. 100%
Taylor et al. 2010 (Ghana)	220	99% vs. 99.1%
Montesinos et al. 2011 (Ecuador)	203	94.3% vs. 100%

[return](#)

Results: *Mistimed Administration*

7 cases / 12, 615 women = rate of **0.06%**

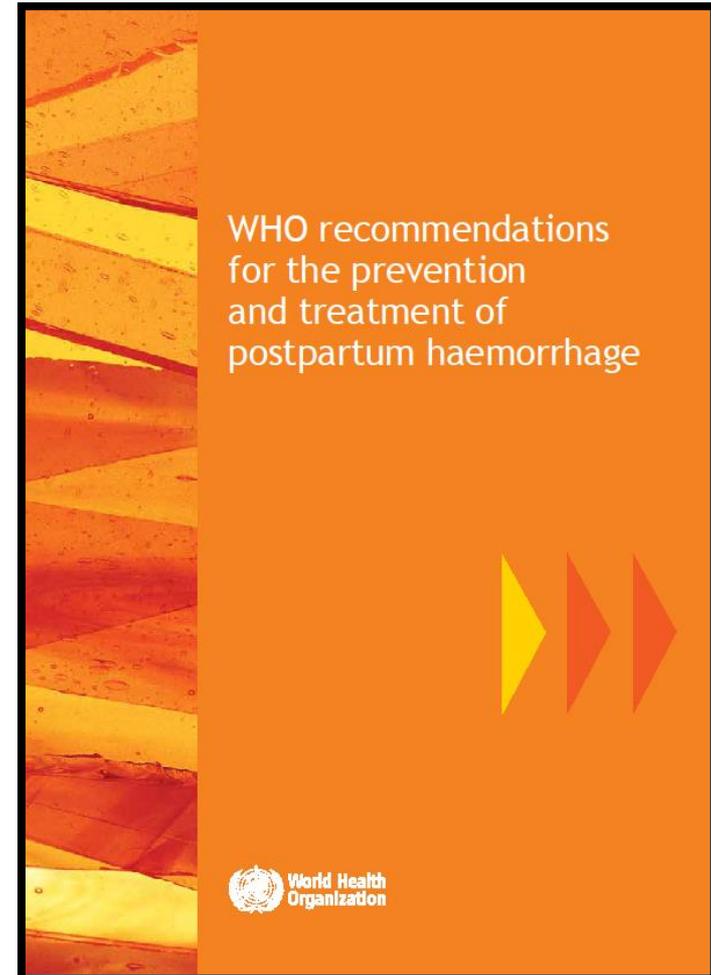
- Taking misoprostol before birth
- More cases reported when distributed at any ANC visit compared to home distribution
- More cases when distributed by health worker or ANC provider compared with distribution by any other distributing cadre.

[return](#)

WHO Recommendations for Prevention and Treatment of PPH (2012)

- *If a skilled attendant is not present, and oxytocin is not available (such as at unattended home birth), lay health workers should administer 600 mcg of oral misoprostol.*
- *There is insufficient evidence to recommend the antenatal distribution of misoprostol to pregnant women for self-administration for the prevention of PPH.*
 - The GDG acknowledged that a number of countries have embarked on community-level programmes of
 - misoprostol distribution and considered that this should be done in the context of research (where reliable
 - data on coverage, safety and health outcomes can be collected)

[return](#)



Results: *Distribution and Coverage Rates*

	Distribution Timing				Distributing Cadre			Administration Method		
	ANC Distribution		Home Visit (late pregnancy)	At home birth	CHW	TBA	Health worker	Self	TBA	SBA
	Any visit	Late visit								
Distribution Rate or Rate Range	22.5–49.1%	21.0–26.7%	54.5–96.6%	22.5–83.6%	54.5–96.6%	25.9–86.5%	21.0–49.1%	21.0–96.6%	25.9–86.5%	22.5%
Coverage Rate or Rate Range	16.8–65.9%	16.2–35.9%	55.7–93.8%	16.8–73.5%	87.9–93.8%	35.9–73.5%	16.2–65.9%	16.2–93.8%	35.9–73.5%	16.8%

Distribution of misoprostol by community workers (TBAs or CHWs) during home visits late in pregnancy achieved greatest distribution and coverage.

[return](#)

Distribution and Coverage Rates

- Distribution rates: 21.0% - 96.6%
 - % of women in target population who got misoprostol
- Coverage rates: 16.2% – 93.8%
 - % of women who delivered at home who used misoprostol

[return](#)

Thank you!

www.mchip.net

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Prevention of Post-partum Hemorrhage through use of Misoprostol in Nepal

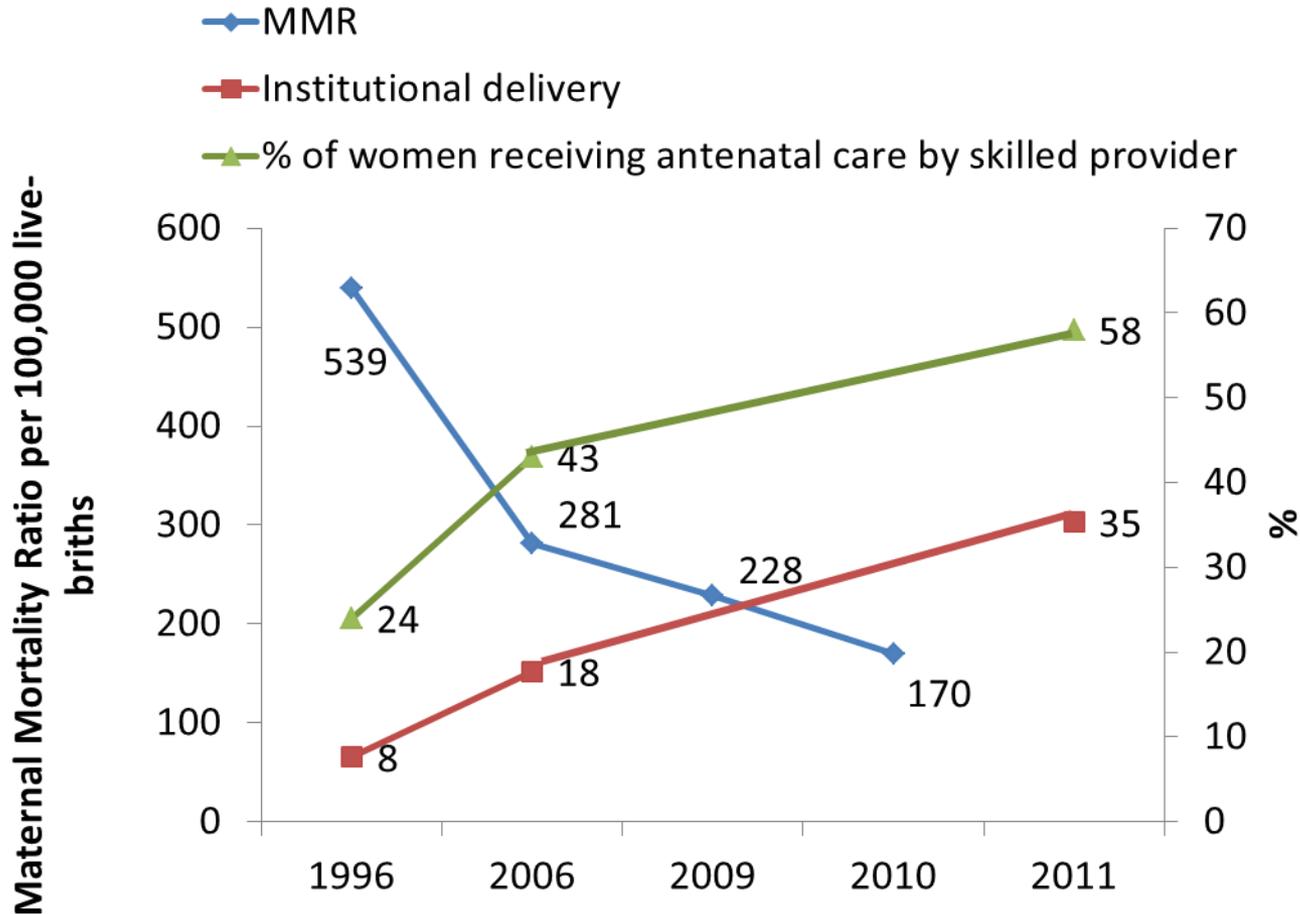
Om Khanal
Family Health Division, DoHS
Nepal

Background



- PPH one of the leading causes of maternal deaths
- Low uterotonic coverage (oxytocin or misoprostol)
- High home births & low institutional deliveries
- Low staff retention & high absenteeism in remote areas

Maternal health status



- ✓ Legalization of Abortion (2002)
- ✓ Safe Abortion Service (2004)
- ✓ Introduction of financial incentive (2006- MIS)
- ✓ SBA Policy (2006)
- ✓ CEONC (2006)
- ✓ Human resources provision (ANM, SN)
- ✓ Safe Blood Programme (2008)
- ✓ Aama (2008)
- ✓ Expansion of Birthing Centers, hospitals
- ✓ Focus on key interventions
- ✓ Overall socio-economic development
- ✓ Policy and political commitment
- ✓ Maternal Death Review

Current Strategy of Government of Nepal for Preventing PPH

Prevention of PPH

Active Management of Third Stage of Labour (AMTSL)

Use of Misoprostol at homebirth

Only Health Workers can do AMTSL

Feasible in community setting



Preliminary work for piloting Misoprostol in Nepal

Policy considerations

Jan 2004 - Nepal GoN committed to pilot following Bangkok workshop

Apr 2004 - Discussion with professional organizations, Safe Motherhood Sub-Committee

Sept 2004- Formation of Technical Advisory Committee

Feb 2005- NHRC approval for pilot

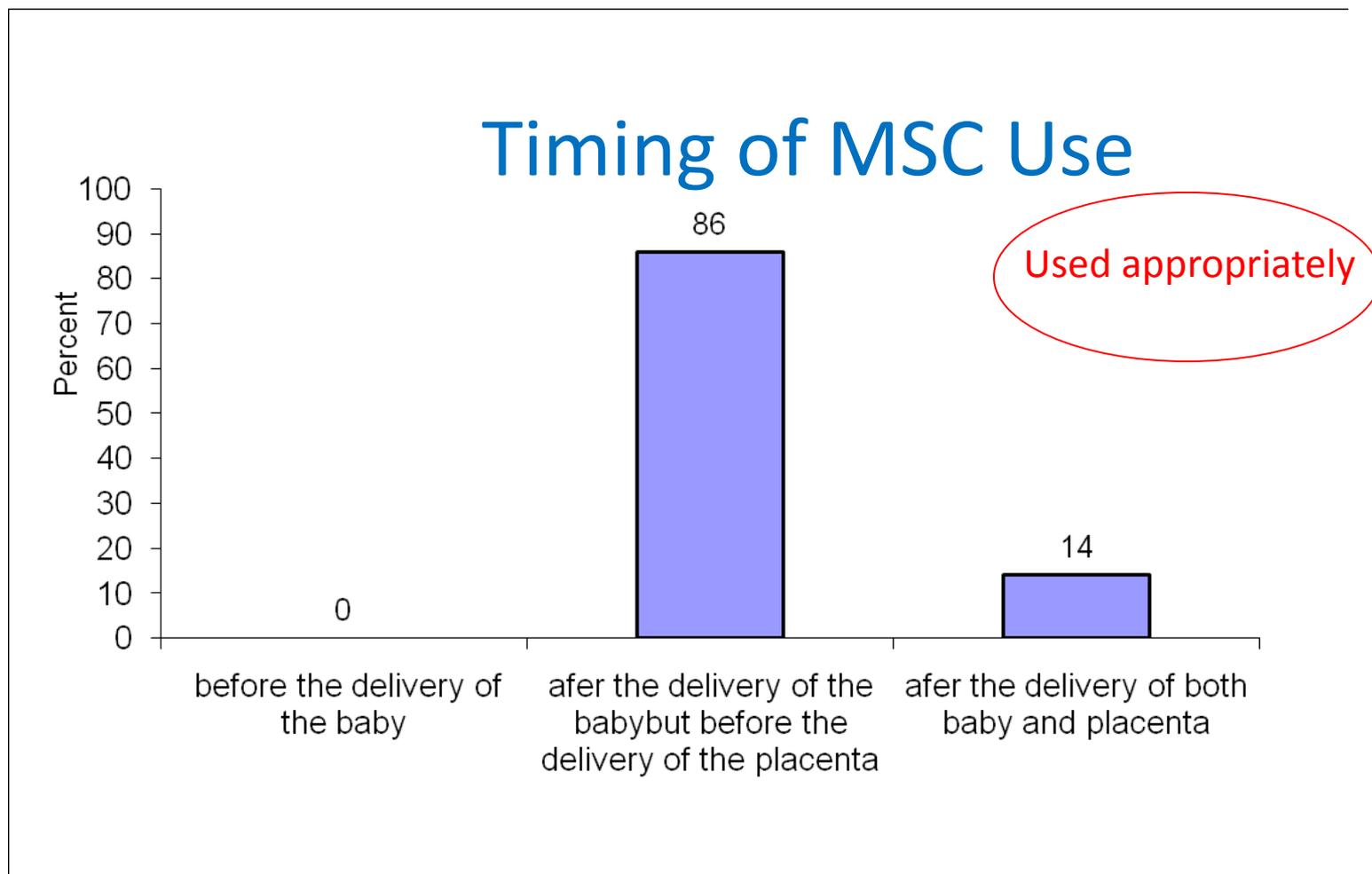
Introduction and pilot

Professional experience and hospital data suggesting high risk for PPH

Background of PPH prevention through use of Misoprostol programme (Misoprostol programme)

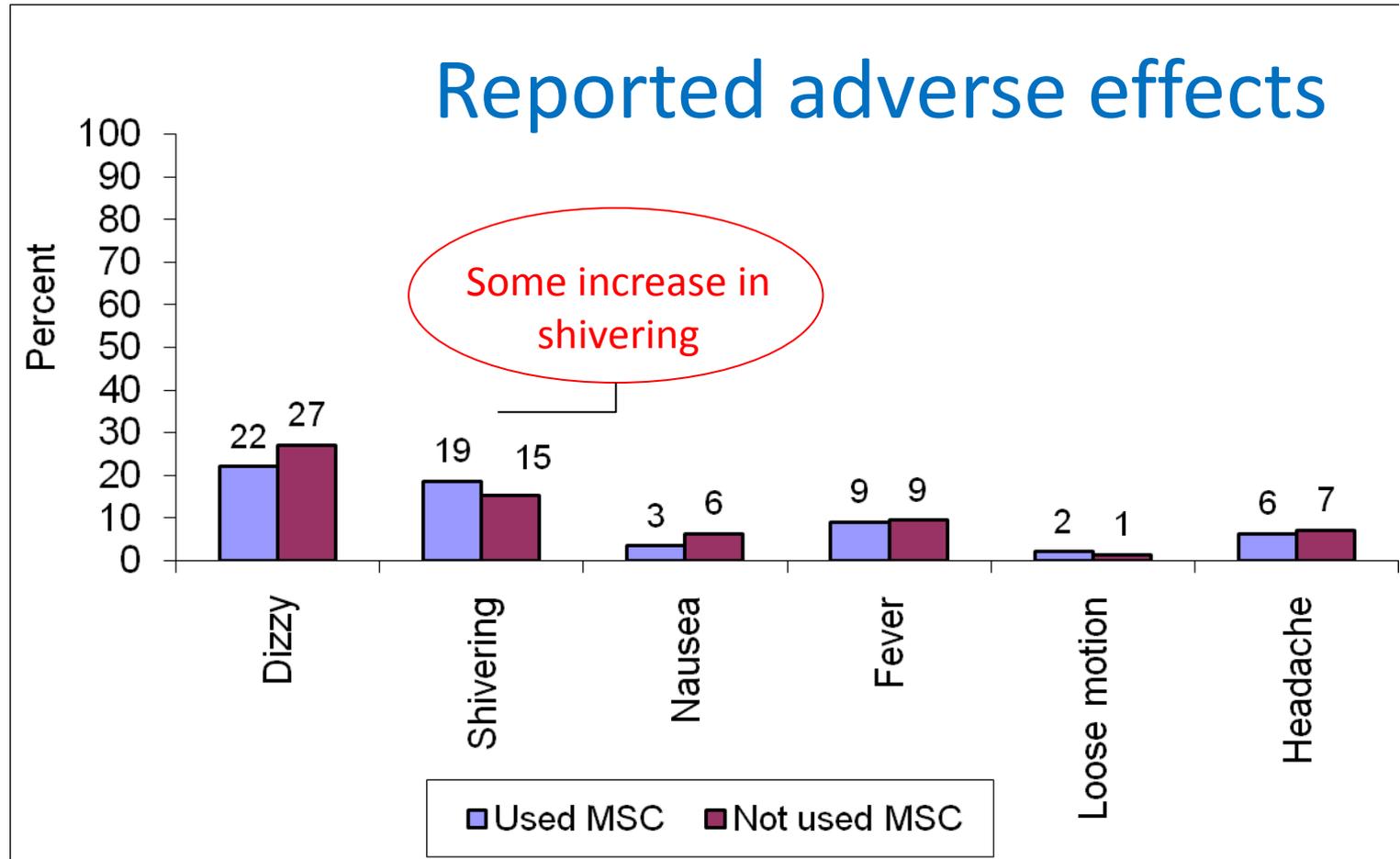
- Initiated in 2005 as pilot programme
- Piloted in Banke district (southern plain) with high caseload of PPH
- Evaluation was conducted at the end of piloting phase

Results from follow-up survey

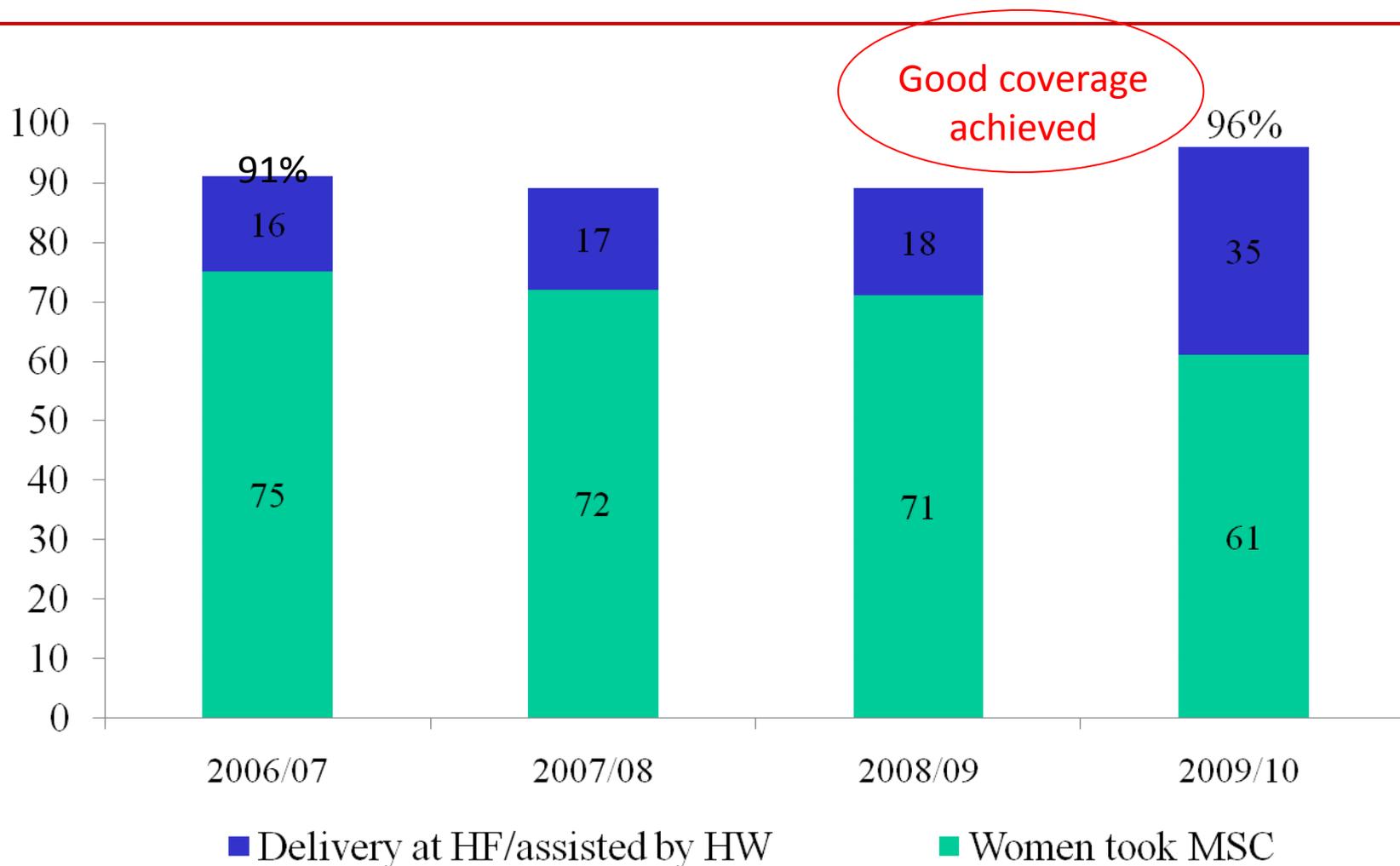


(Data source: NFHP follow-up survey, 2007)

Results from follow-up survey

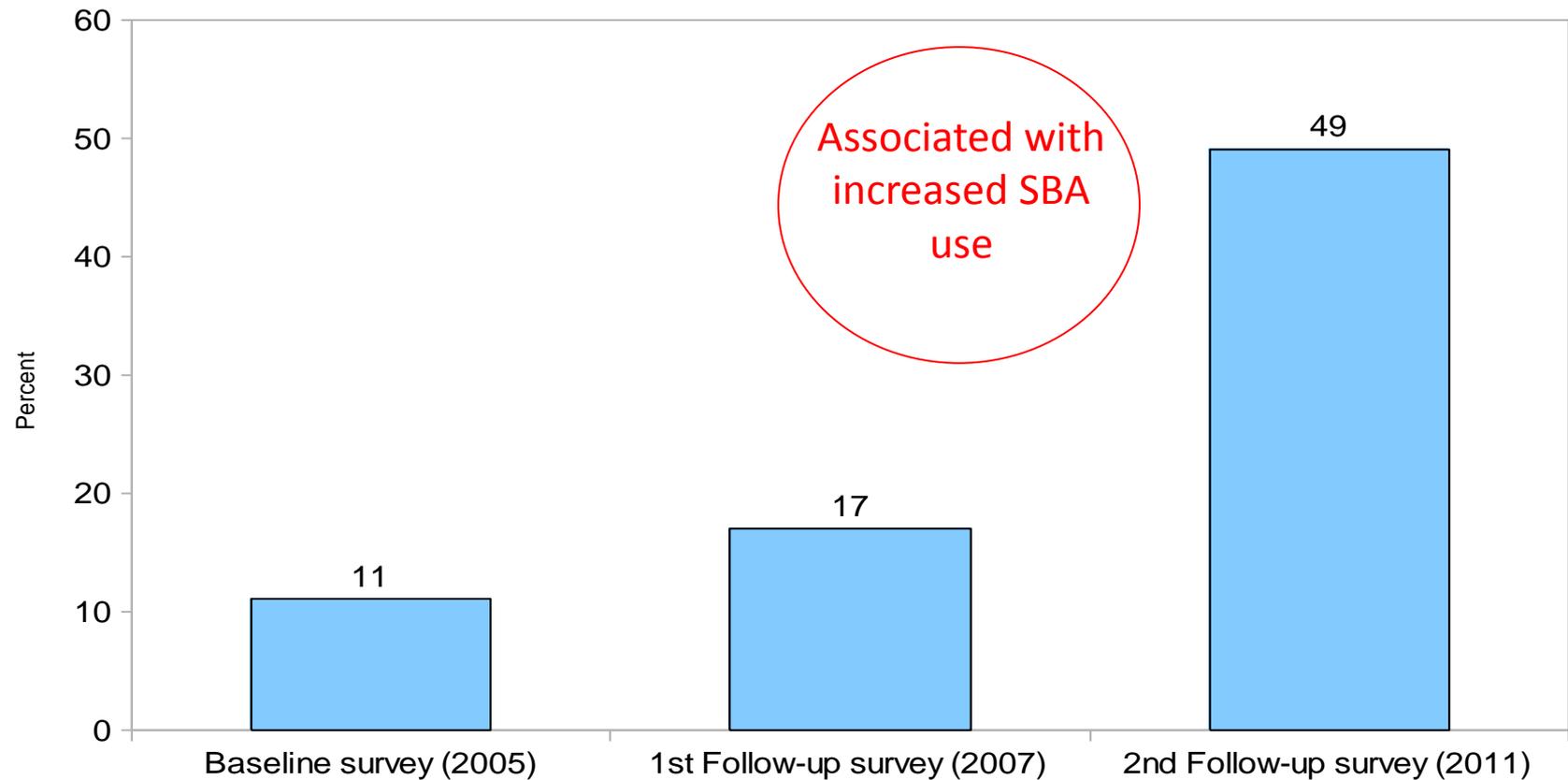


Results from follow-up survey



(Assumes oxytocin use)

Results from follow-up survey



Conclusion: Pilot Success in Banke

- Significant increase of uterotonic coverage
- High coverage in government system with mobilization of FCHVs
- Adverse effects were not a significant problem
- Misoprostol can and should be implemented with efforts to increase Skilled Birth Attendants use
- High degree of correct use, efficacy and safety
- Suggestive to scale-up in other districts



Increase the ANC visit, Institutional delivery and PNC visit.

Scale up from pilot

Policy considerations

Mar 2010-

Nepal country team committed for national level expansion of MSC (Reconvening BKK conference)

April/May 2010-

Sharing and advocacy at the national level

June 2010-

MOHP approved for national level expansion

July 2010-

Developed implementation guidelines

Expansion to national level

Programme has been expanded to

30 districts

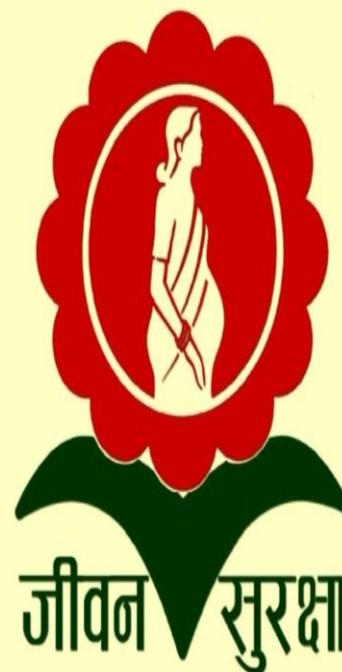
10 Districts are expanding this year

Misoprostol has been listed as essential drug

Programme will be gradually expanded to 75 districts

Integration of the programme through Birth Preparedness Package

“समुदायमा आधारित मातृ तथा नवशिशु स्वास्थ्य सेवा सुदृढीकरण”



नेपाल सरकार
स्वास्थ्य तथा जनसंख्या मन्त्रालय
स्वास्थ्य सेवा विभाग
परिवार स्वास्थ्य महाशाखा, टेकु

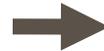
Component of BPP

1. Care during delivery
2. Birth Preparedness (Preparation of essential items for delivery, such as clean delivery kit)
3. Post partum care
4. Complication readiness (arranging access to funds, means for emergency transportation and medical care and prior identification of blood donors)
5. New born care
6. Danger signs
- 7. Misoprostol (Matri Suraksha Chakki)**
8. Family Planning

Community service delivery system



Health workers/
Health facilities



FCHV



Woman & newborn

- FCHVs and HWs work closely for promotion of ANC, Institutional delivery and PNC
- At 8th month, FCHVs distributes Misoprostol.
- During PNC home visits confirms use and retrieves if unused

What FCHV do

- **On first visit during pregnancy**
 - Counsel using Jeevan surakshya flip chart.
 - Provide jeevan surakshya card to pregnant mother.
- **On 8th month of pregnancy**
 - Counsel using jeevan Surkshya flip chart.
 - Provide Misoprostol after counselling
- **On Post partum visit**
 - Incase of institutional delivery- take back mesoprostol
 - Incase of Home delivery - ensure use of mesoprostol



FCHV identify pregnant mother and Counsel her and her family member using flip chart



FCHV Provides health education to mothers group on mothers group meeting

"समुदायमा आधारित मानु तथा नवशिशु स्वास्थ्य सेवा मुद्राङ्कण"

मातृ तथा नवशिशु स्याहार

महिलाको नाम:
डेगाना:

बच्चा जन्मने अनुमानित महिना

वै जे अ सा भा आ का म पी मा फा वै

गर्भावस्थामा गर्नुपर्ने आवश्यक तयारीहरू

 स्वास्थ्य सस्थामा जाँच गर्नु पर्ने महिना	 जुकाको औषधी खाने	 टि. टि. खोप लगाउने	<p>महिना</p> <table border="1"> <tr> <td>चौधौ</td> <td>पाँचौ</td> <td>छैटौ</td> <td>सातौ</td> <td>आठौ</td> <td>नवौ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>गर्भावस्थामा आईरन चककी खाने</p>			चौधौ	पाँचौ	छैटौ	सातौ	आठौ	नवौ						
चौधौ	पाँचौ	छैटौ	सातौ	आठौ	नवौ												

 गर्भावस्थामा पोषितो खानेकुरा खाने	 सुख, हात, नङ्ग, गुप्ताङ्ग तथा शरीर सफा राख्ने	 रक्सी चुरोट नखाने	 आराम गर्ने र गडौं भारी नबोक्ने
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 पैसाको व्यवस्था रू.	 स्वास्थ्यकर्मीको पहिचान नाम:	 स्वास्थ्य सस्थामा बच्चा जन्माउने तयारी नाम:	 यातायातको साधनको तयारी सम्यक:	 मुत्केरी सामग्री तयार राख्ने
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जन्म विवरण

स्थान:

 बच्चा जन्मेको मिति: साल महिना गते	 समय:	 स्वास्थ्य सस्थामा	 स्वास्थ्यकर्मीको सहयोगमा घरैमा	 घरैमा	 मातृ सुरक्षा चककी खाएको
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नवशिशुलाई जन्मने वित्तिकै गरिने अत्यावश्यक स्याहार

 शिशुलाई नरम, सफा र सुख्खा कपडाले पुछ्ने	 आमाको छातीमा टाँसेर राख्ने	 शिशु जन्मेको १ घण्टा भित्रै आमाको विगीती दूध खुवाउने	 कबच बाहेक नाभिमा केही पनि नलगाई सुख्खा र सफा राख्ने	 शिशु जन्मेको २२ घण्टापछि मात्र नुहाईदिने
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सुत्केरी स्याहार

 २४ घण्टा भित्र आमा र शिशुलाई जचाउने	 आईरन चककी खाने	 भिटामिन ए क्याप्सुल खाने	 शिशुलाई स्तनपान गराइराख्ने	 शिशुलाई खोप लगाउने	 परिवार नियोजनको साधन अपनाउने
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"प्रसूती गराउन स्वास्थ्य संस्थाभै जाओ"



खतराका लक्षणहरू

आमा र शिशुलाई तलका कुनैपनि खतराका लक्षणहरू देखिएमा तुरुन्त स्वास्थ्य संस्था लैजानुपर्छ

गर्भावस्थामा देखा पर्ने सक्ने खतराका लक्षण

 टाउको साँढे दुबेमा	 अर्खा तिरमिराएर धमिलो देख्ने भएमा वा हात तथा मुख सुनिएमा	 कडासित तल्लो पेट दुबेमा	 हात बुट्टा अररो भई काँप छुटेमा वा मुख परेमा	 योनीबाट अलिकति पति रगत बगेमा
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बच्चा जन्माउने बेलामा देखा पर्ने सक्ने खतराका लक्षणहरू

 ८ घण्टा भन्दा लामो सुत्केरी व्यथा लागेमा	 पहिना हात, खुट्टा वा नाल निस्केंमा	 हात बुट्टा अररो भई काँप छुटेमा वा मुख परेमा	 बच्चा जन्माउनु अघि अथवा बच्चा जन्मिसकेपछि पति धेरै रगत बगेमा
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सुत्केरी अवस्थामा देखा पर्ने सक्ने खतराका लक्षणहरू

 ज्वरो आएमा	 योनीबाट गन्नाउने पानी बगेमा वा तल्लो पेट (पाटेघर) दुबेमा	 धेरै रगत बगेमा	 टाउको साँढे दुबेमा	 हातबुट्टा अररो भई मुख परेमा
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नवशिशुमा देखिन सक्ने खतरा (संक्रमण)का लक्षणहरू

 आमाको दूध राधरी चुस्न नसकेमा	 सुस्त वा बेहोस / कम चलाई भएमा	 छिट्टो सास फेरेमा	 कडा कोखा हानेमा
 ज्वरो आएमा	 शिताङ्ग भएमा	 छालामा फोकाहरू आएमा	 नाइटो पाकेमा



FCHV provides Jeevan Surakshya Card to pregnant mother after counseling her

Misoprostol Messages incorporated in Jeevan Surakshya Flip Chart.



When to take misoprostol

Matri Suraksha Chakki (Misoprostol)



Side effect and its management

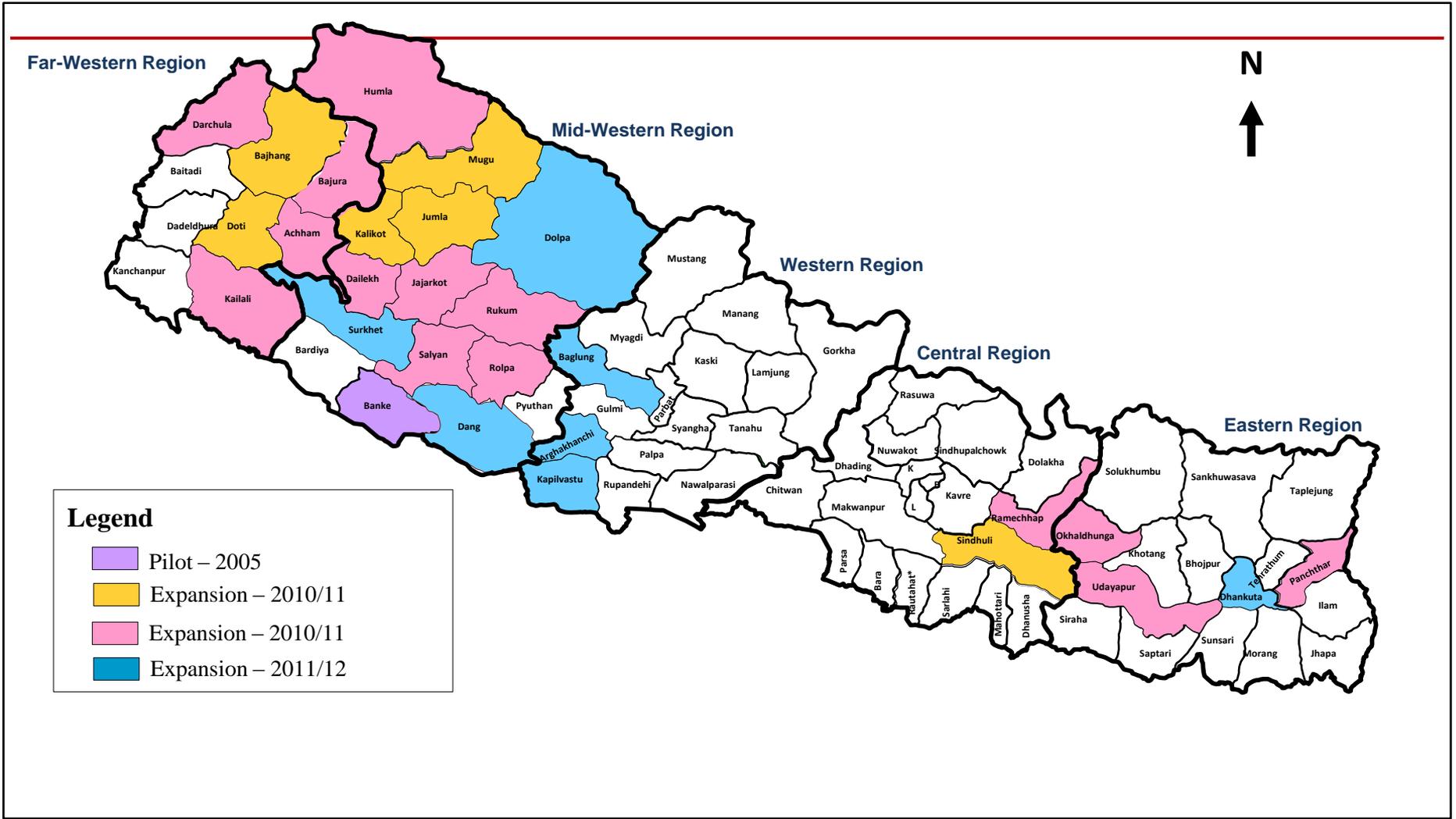


Warning: Not to take misoprostol before delivery of baby



What to do if PPH continuous

Misoprostol implemented districts



Support of EDPs/INGOs

In 2011/12 several external development partner (EDPs) such as NFHP II/USAID, UNICEF, UNFPA UMN, RHDP/SDC, Care Nepal and Plan Nepal

Supported this initiative

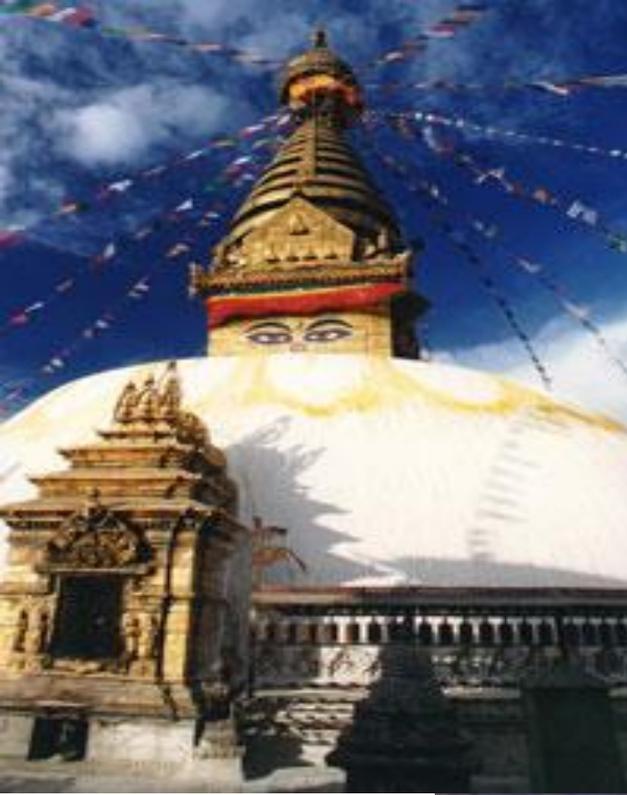


Challenges/Problems



- Distribution of Misoprostol, ensuring availability, and transportation upto remote areas.
 - Collection of reports from grassroots level.
 - Program expansion/coverage only in partner-supported districts limiting the expansion in some priority districts
 - Ensuring the quality of training to FCHVs
 - Ensuring the use of Misoprostol only in PPH
 - Misoprostol distribution from social marketing following recommended steps
-

THANK YOU





USAID
FROM THE AMERICAN PEOPLE



Maternal and Child Health
Integrated Program

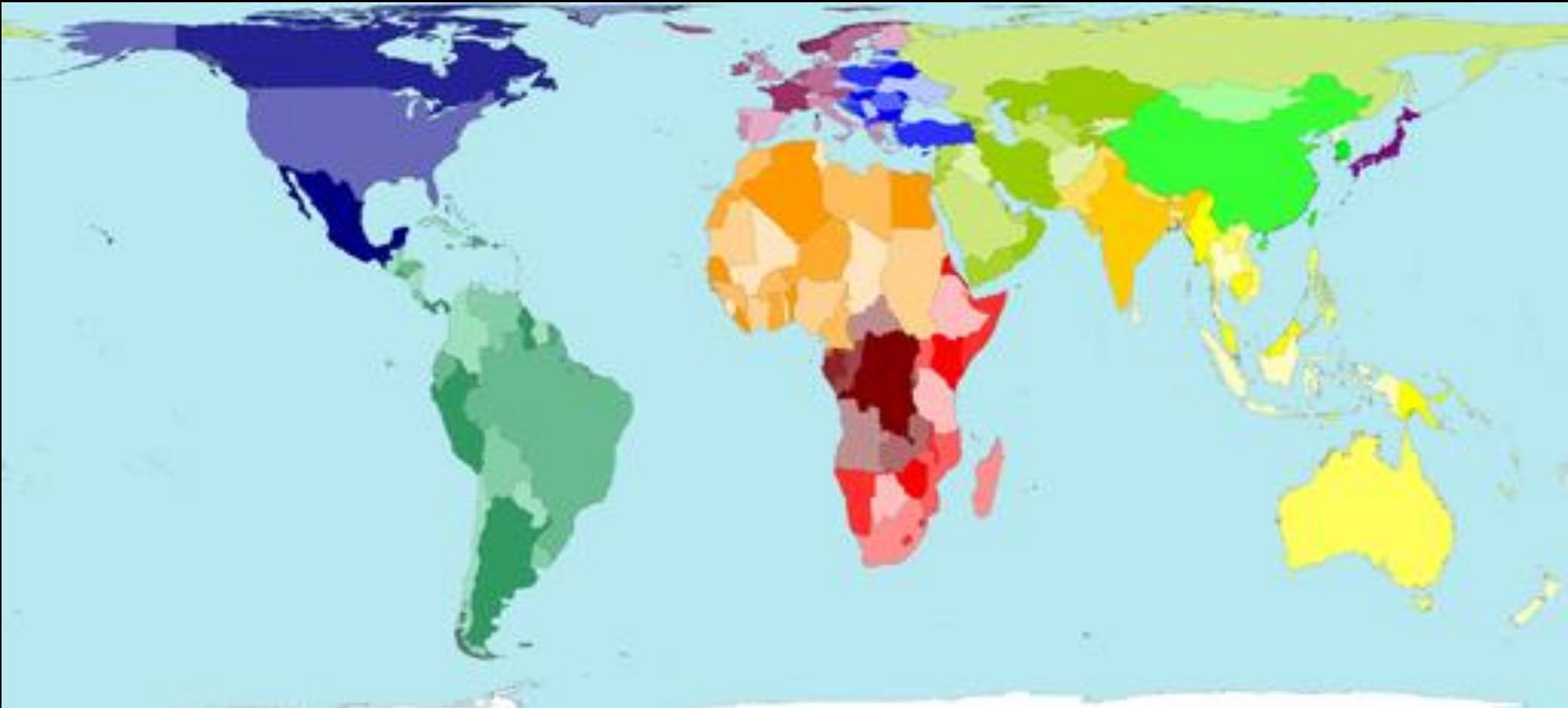
Postpartum Hemorrhage: Prevention & Management

The Context for Action

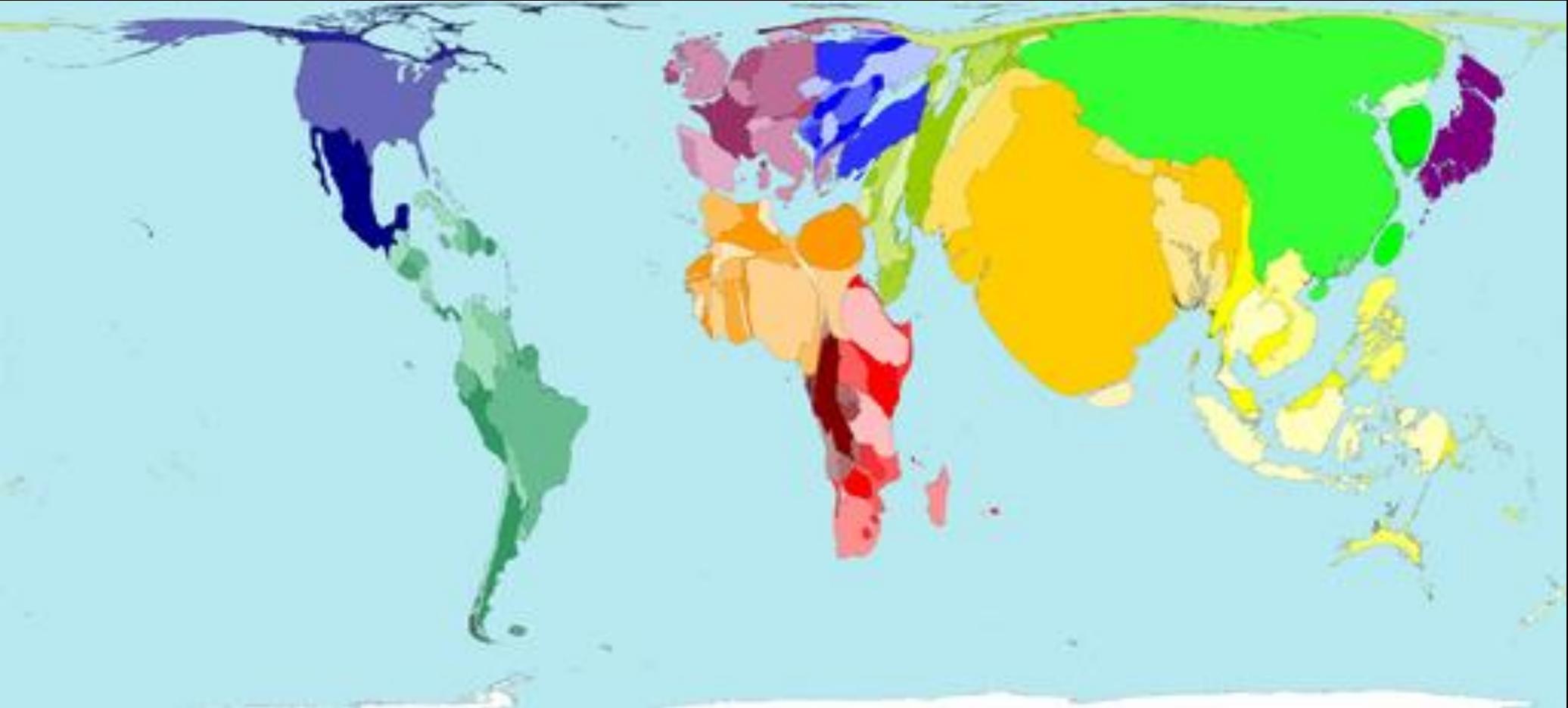
December 2013



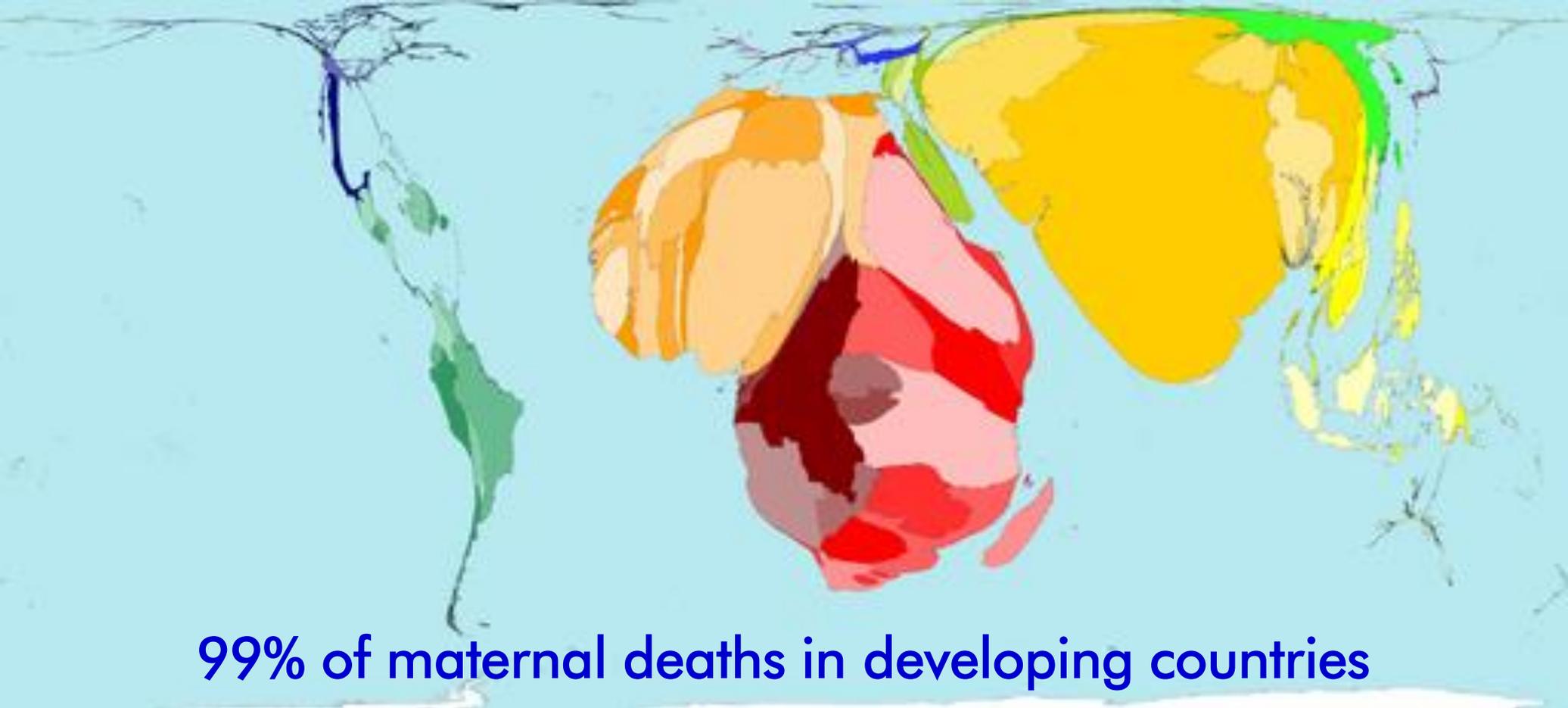
World Political Map



World Map in Proportion to Population



World Map in Proportion to MMR



99% of maternal deaths in developing countries

Maternal mortality is the global health indicator with largest disparity between developed and developing countries

Causes of Maternal Death

- Hemorrhage
- Eclampsia
- Sepsis
- Abortion
- Obstructed labor
- HIV

- 75% of maternal death due to 5 main causes

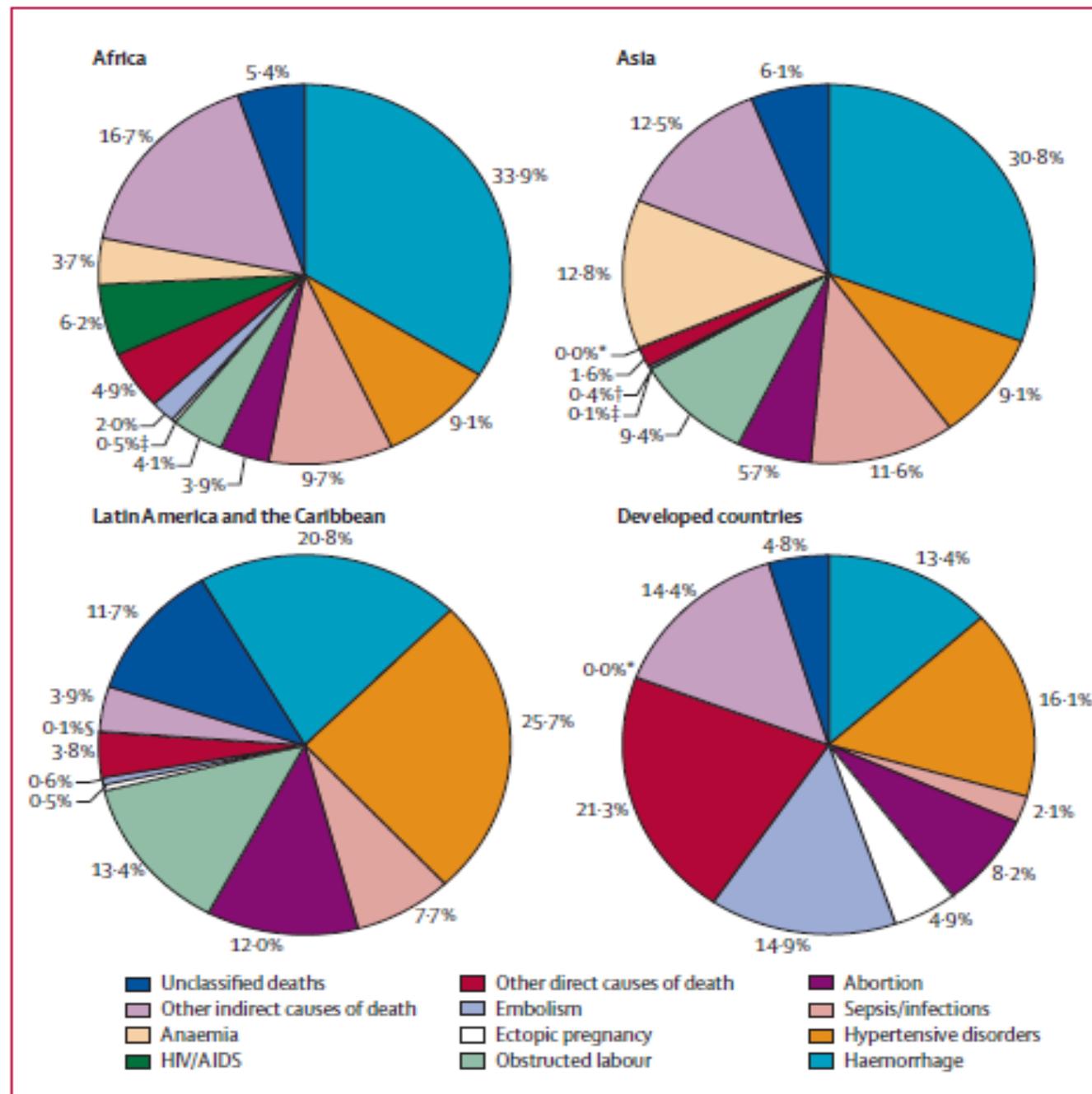


Figure 3: Geographical variation in distribution of causes of maternal deaths
 *Represents HIV/AIDS. †Represents embolism. ‡Represents ectopic pregnancy. §Represents anaemia.

Comprehensive PPH Reduction Approach

PROMOTION OF COMPREHENSIVE PACKAGE OF INTERVENTIONS TO PREVENT AND MANAGE PPH

**EDUCATION: Birth planning/complication readiness;
Promotion of ANC; encouragement of facility birth with SBA**

Facility Birth:

- Correct management of labor and birth, including partograph
- Routine administration of uterotonic immediately after birth (oxytocin preferred, if not, misoprostol)
- Uterotonic availability and quality
- Postpartum vigilance for PPH
- Proper management of PPH

Transport:

- Initial dose of uterotonic
- Use of Non-pneumatic Anti Shock Garment

Home Birth:

- Education about PPH detection
- Education about use of misoprostol
- Advanced distribution of misoprostol for self administration after birth
- Education about what to do for continued bleeding

PPH Prevention & Management

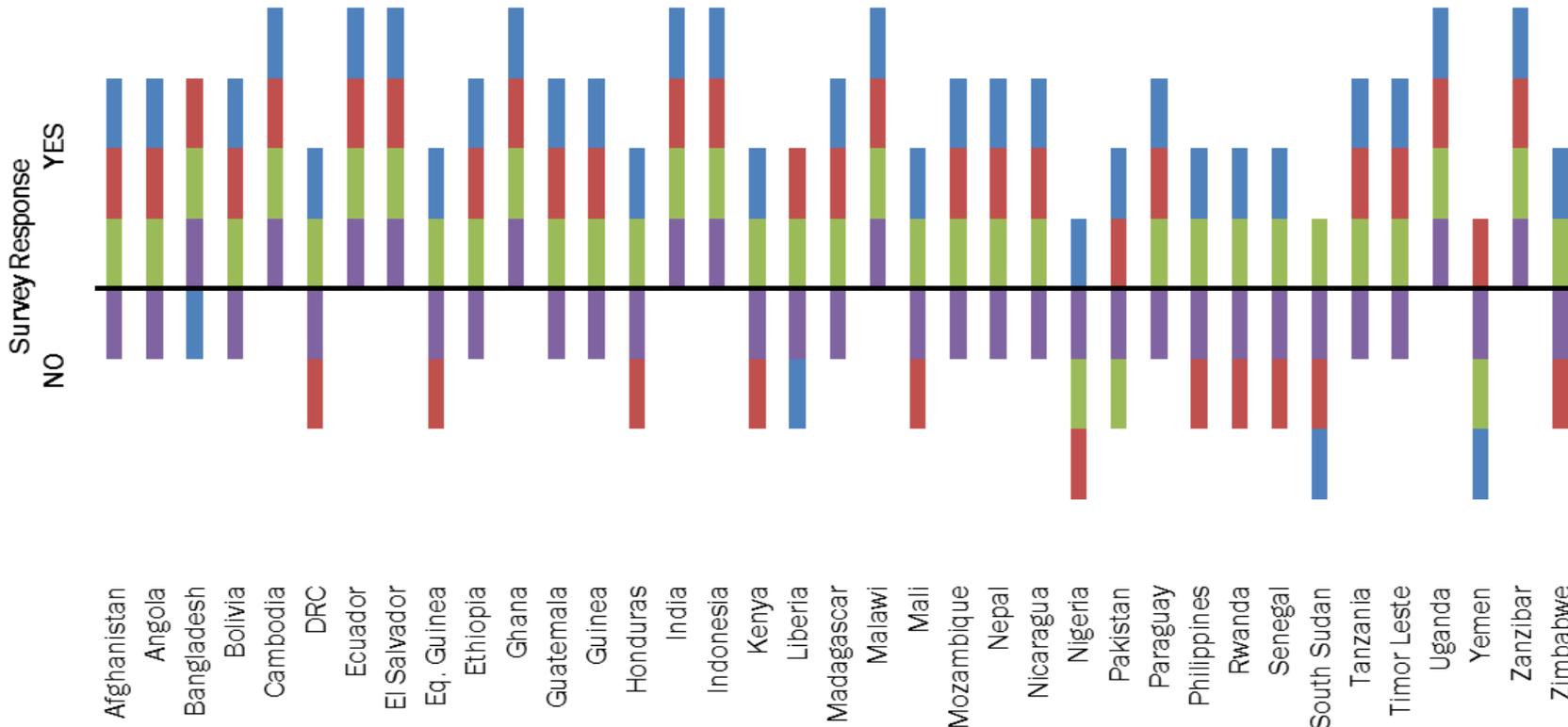
	PPH PREVENTION	PPH MANAGEMENT
WITHOUT AN SBA	<ul style="list-style-type: none"> Community awareness—BCC/IEC Birth preparedness/complication readiness (BP/CR) Promotion of skilled attendance at birth Family planning and birth spacing Prevention, detection and treatment of anemia Advanced distribution of misoprostol for self-administration 	<ul style="list-style-type: none"> Complication readiness Community emergency planning Transport planning Referral strategies Use of misoprostol to treat PPH
WITH AN SBA	<ul style="list-style-type: none"> Community awareness—BCC/IEC Antenatal care (including BP/CR) Prevention, 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 3rd stage of labor (AMTSL) Routine inspection of placenta for completeness Routine inspection of perineum/vagina for lacerations Routine immediate postpartum monitoring Vigilant monitoring during “4th stage” of labor 	<ul style="list-style-type: none"> Active triage of emergency cases Rapid assessment and diagnosis Emergency protocols for PPH management Basic emergency obstetric and newborn care (EmONC) Intravenous fluid resuscitation Manual removal of placenta, removal of placental fragments, suturing genital lacerations Parenteral uterotonic drugs and antibiotics Comprehensive EmONC Blood bank/blood transfusion Operating theater/surgery

Theme 1A: Availability of Uterotonics

Survey responses from 37 countries: Drug availability - uterotonics

Survey Questions

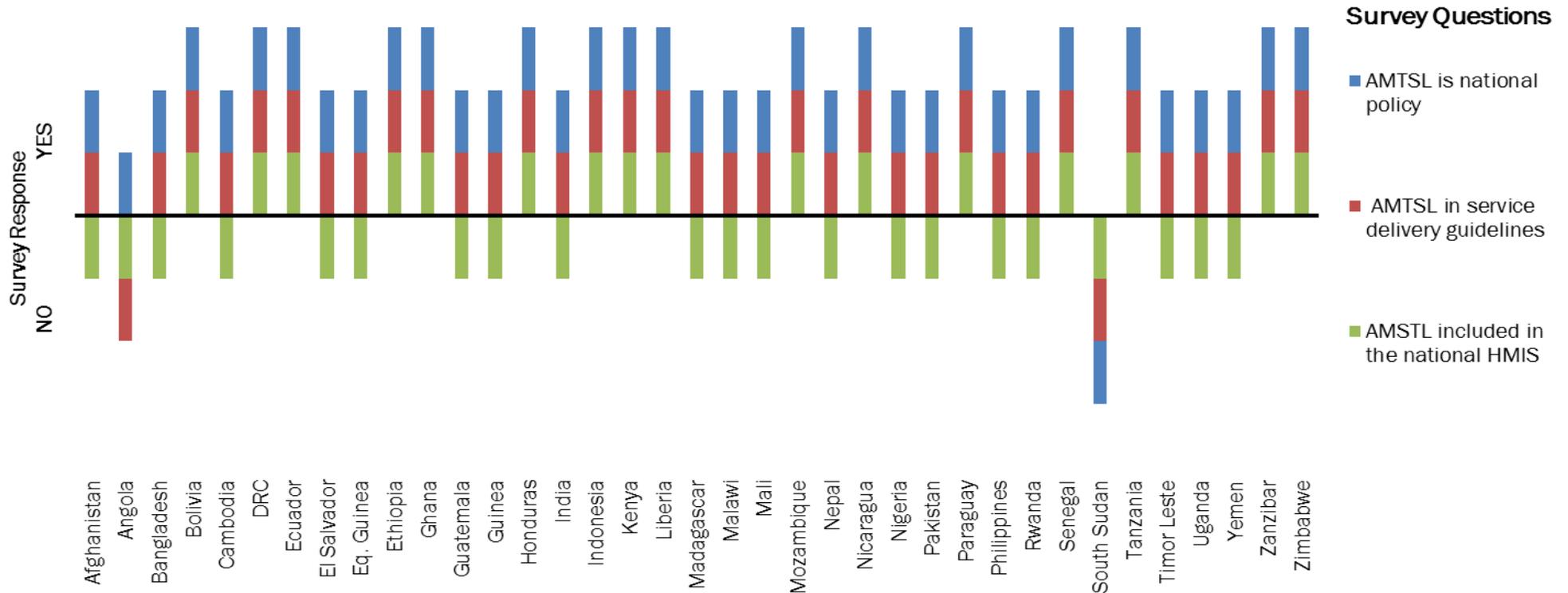
- Oxytocin regularly available in facilities
- Oxytocin free of charge to patients at public facilities
- Oxytocin currently available at the MOH medical store
- Misoprostol regularly available in facilities



USAID-supported countries surveyed January to March 2012

Theme 3: AMTSL

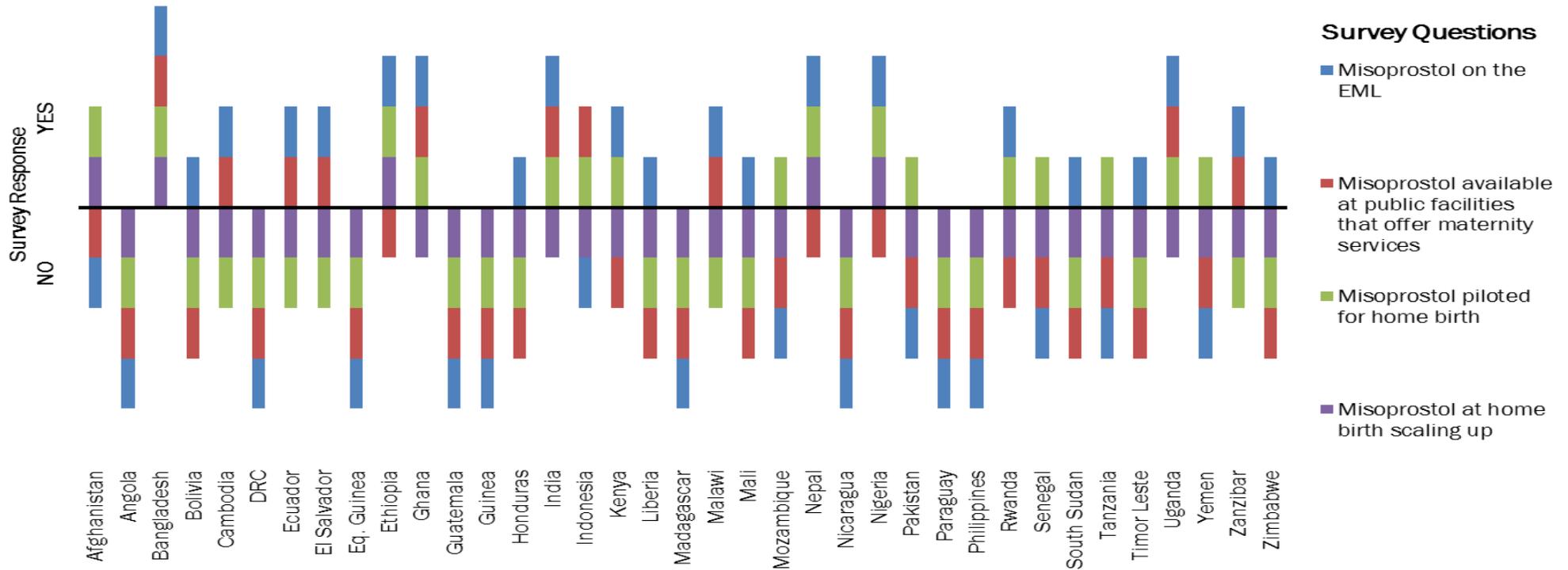
Survey responses from 37 countries: AMTSL



USAID-supported countries surveyed January to March 2012

Theme 4: Misoprostol

Survey responses from 37 countries: Misoprostol



USAID-supported countries surveyed January to March 2012

Active Management of the Third Stage of Labor (AMTSL)



1. Administration of a uterotonic agent within one minute after the baby is born (oxytocin is the uterotonic of choice);
2. Controlled cord traction while supporting and stabilizing the uterus by applying counter traction;
3. Uterine massage after delivery of the placenta.

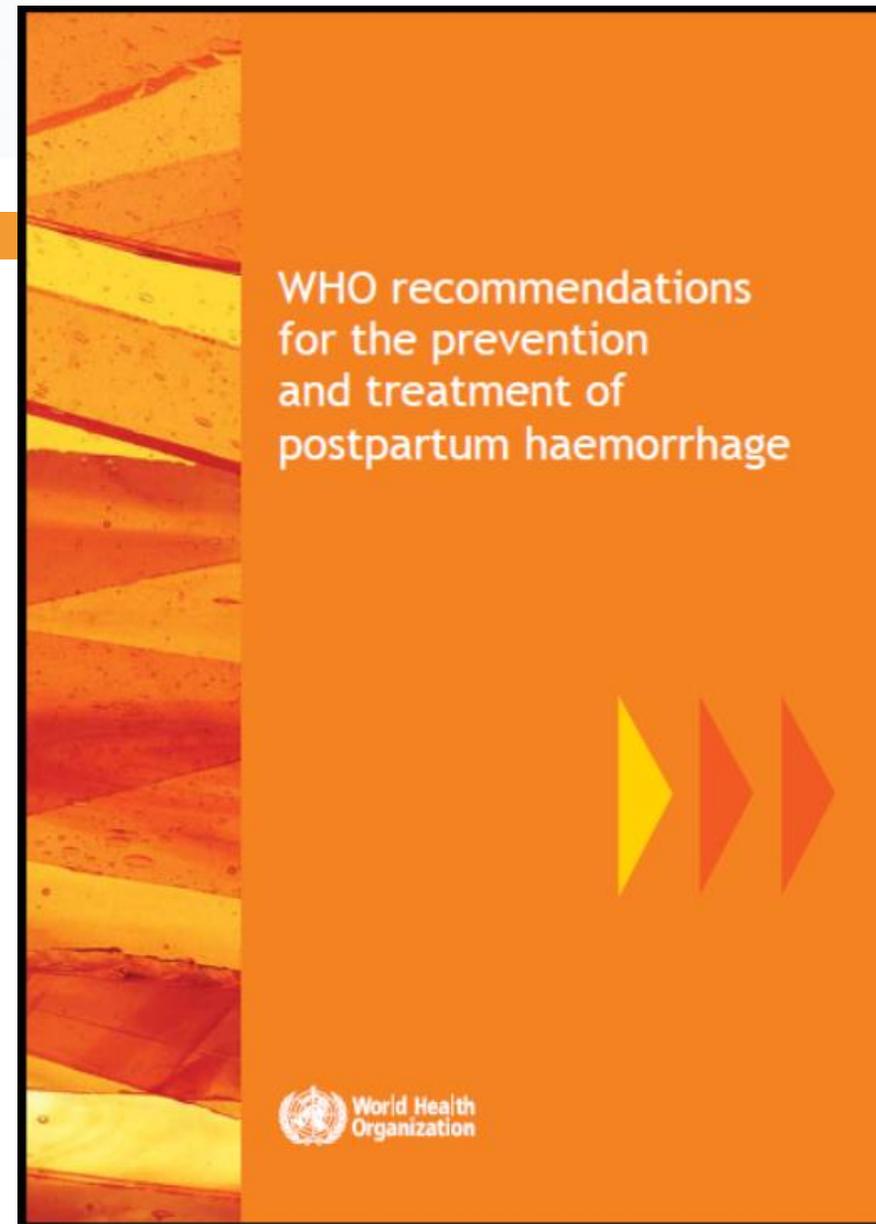
Active Management of the Third Stage of Labor (AMTSL) – new approach



1. Administration of a **uterotonic** agent within one minute after the baby is born (oxytocin is the uterotonic of choice);
2. **Delayed cord clamping** of 1 – 3 minutes while starting ENC
 - +/- Controlled cord traction
3. **Postpartum vigilance** to ensure uterine tone and no bleeding
 - +/- Uterine massage after delivery of the placenta.

New WHO Guidelines September 2012

- Main changes:
 - Focus on uterotonic in AMTSL
 - Promote delayed cord clamping
 - Misoprostol can be administered by community-level health worker
 - Advanced distribution of misoprostol for self administration – in context of research or strong M&E



Focus on Uterotonic: UN Commodities Commission

- Maternal Health:
 - Oxytocin, MgSO₄ and misoprostol
- Quality of medicines
 - Manufacturing and storage
- Appropriate use & appropriate demand
- Market shaping



© Frog974 * www.ClipartOf.com/27412

Active Management of the Third Stage of Labor (AMTSL) – **Main messages**

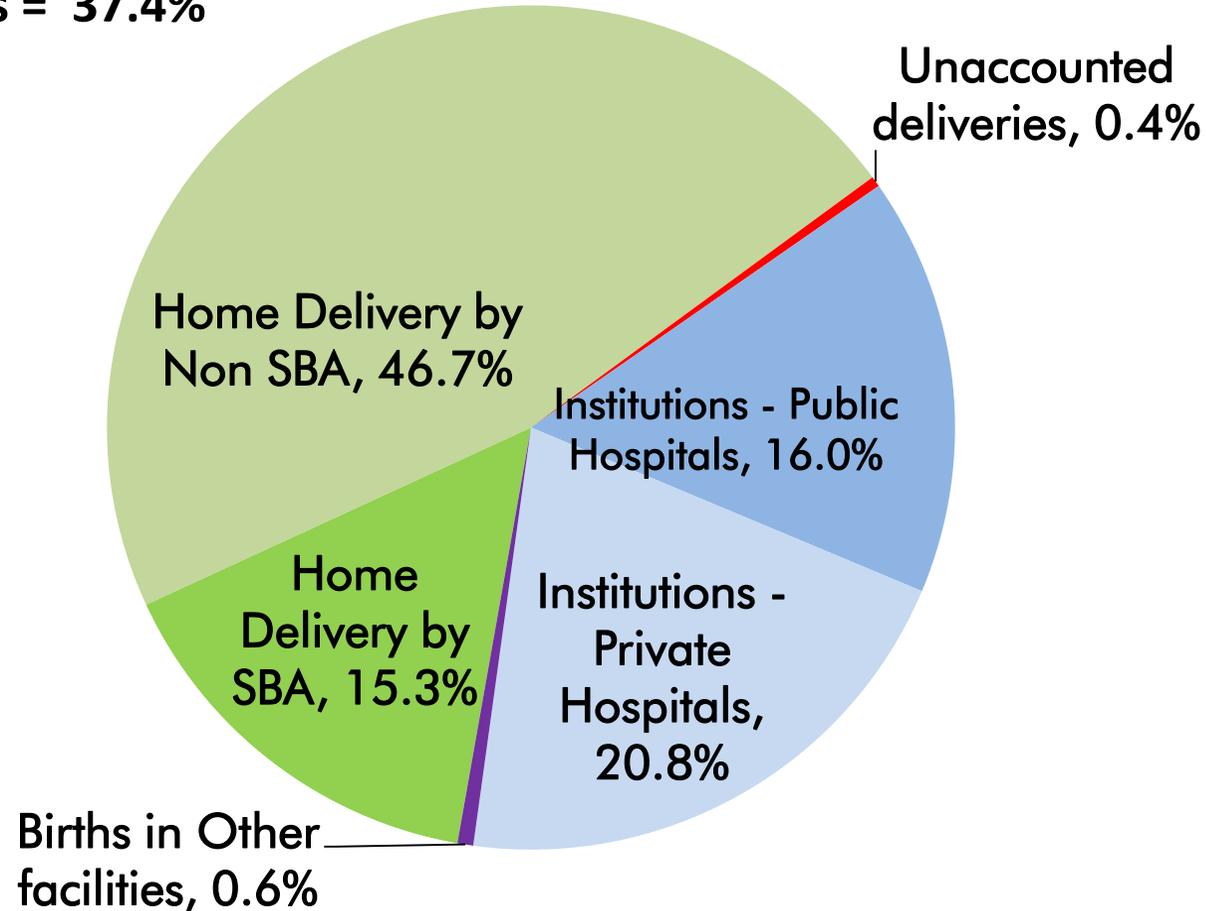
1. **Every woman should be given a uterotonic agent**, preferably oxytocin, within one minute after the baby is born
2. **Quality and supply** of oxytocin must be given priority
3. **Postpartum vigilance must be carried out for all women following delivery** to control any persistent bleeding and to prevent unrecognized postpartum hemorrhage.



STEP 2: LOCATION OF BIRTHS JHARKHAND (AHS, 2010 - 2011)

Home deliveries = 62.0%

Institutional deliveries = 37.4%



STEP 3: ESTIMATED COVERAGE ESTIMATE FOR UUTSL IN JHARKHAND (WITHOUT DRUG QUALITY ADJUSTMENT)

	% Births	Effective % UUTSL	Contribution to state covg.
HOME BIRTH – Attended by SBA	15.3%	85%	13.0%
HOME BIRTH – NOT Attended by SBA	46.7%	0%	0%
PRIVATE FACILITIES	20.8%	90%	18.7%
PUBLIC FACILITIES – HOSPITALS AND HEALTH CENTERS	15.8%	75%	11.8%
PUBLIC FACILITIES – Births by non-skilled personnel	0.2 % (1% of 16%)	0%	0%
COVERAGE ESTIMATE – UTEROTONIC USE IN 3RD STAGE			43.5%

* Numbers in the table with appreciable uncertainty

The expert panel believes this number is probably quite close to the true value; given the level of precision of the estimate, it is reported to the nearest whole number.

Access to Health Services

Formal Health System

Community Health System

Private Health System

Commercial Health System

Prevention when possible

Advanced distribution of
misoprostol
for self administration
by the woman/family
at home
in the case of home birth



Post Partum Haemorrhage (PPH) Prevention in India: Challenges and Solutions

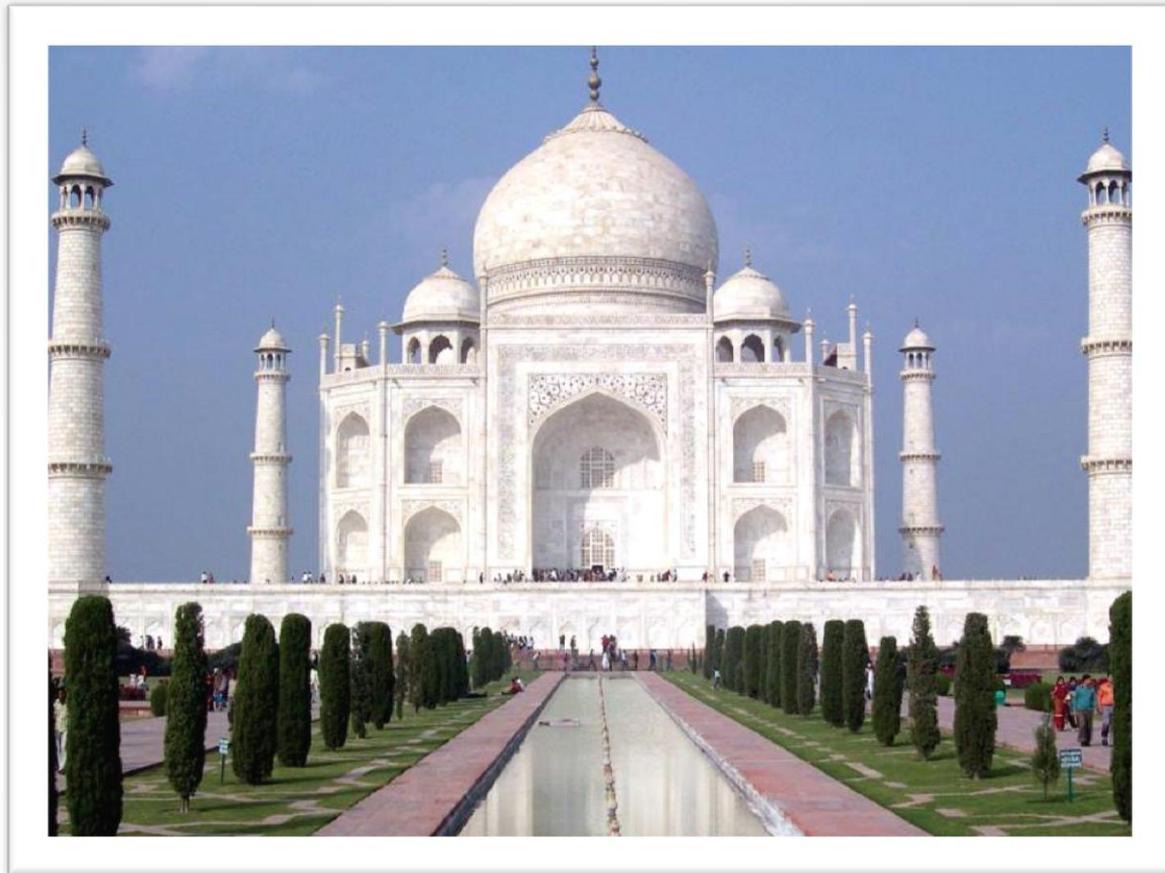
Dr. Manisha Malhotra
Deputy Commissioner (DC-MH)
MOHFW, GoI, New Delhi



Government of India

NATIONAL RURAL HEALTH MISSION
Ministry of Health & Family Welfare
Govt. of India





History of Tajmahal !!!

Presentation Outline

- Situation analysis of maternal mortality in India
- PPH facts and figures
- PPH management and program implementation steps
- Challenges in Indian context
- Proposed solutions

Maternal Health Scenario

Global

- 180–200 million pregnancies per year
- 287000 maternal deaths (MMEIG - 2010)
- 1 maternal death = 30 maternal morbidities

Hogan et al., 2010

India

- 26 -30 million pregnancies per year
- 212 maternal deaths per lakh live births (SRS 2007-09)
- About 56000 maternal deaths per year (up to 19 % of global burden)

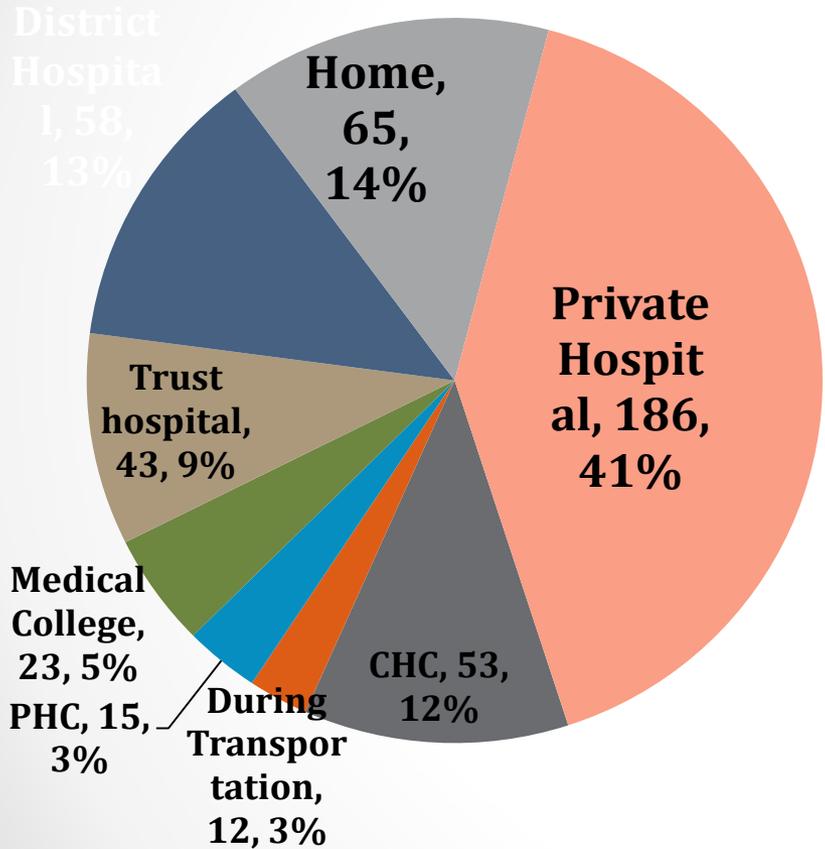
Estimate from Census 2011 figures

At the country level, two countries account for one third of global maternal deaths: India at 19% (56 000) of all global maternal deaths, followed by Nigeria at 14% (40 000)

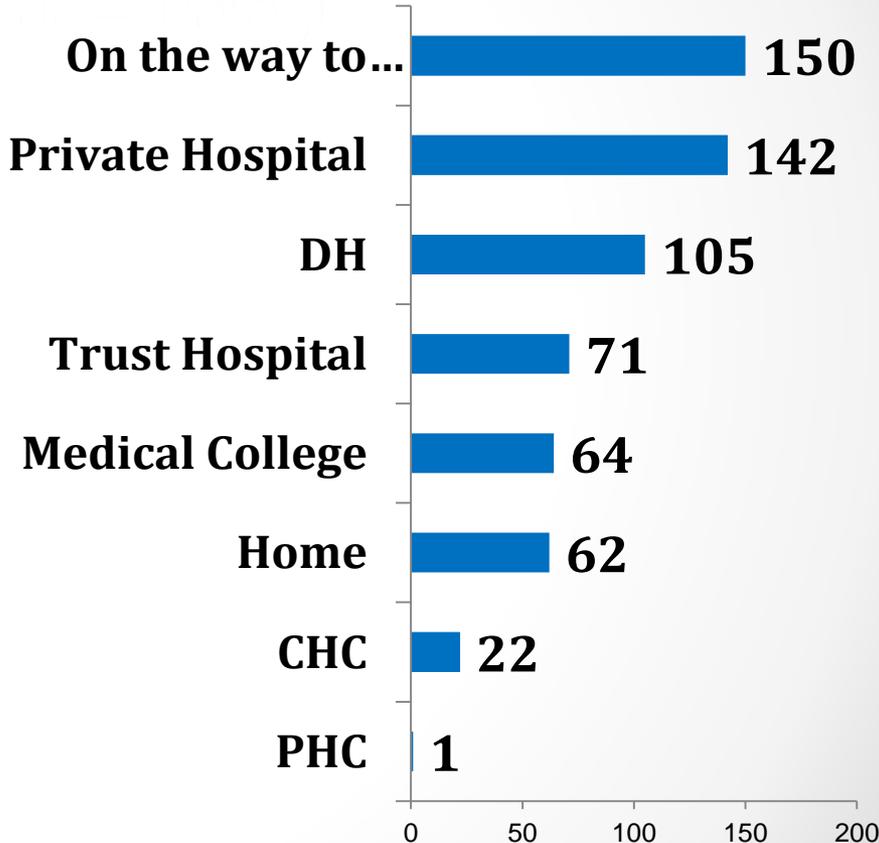
Place of delivery and place of death of deceased

(n=455)

Place of Delivery



Place of Death

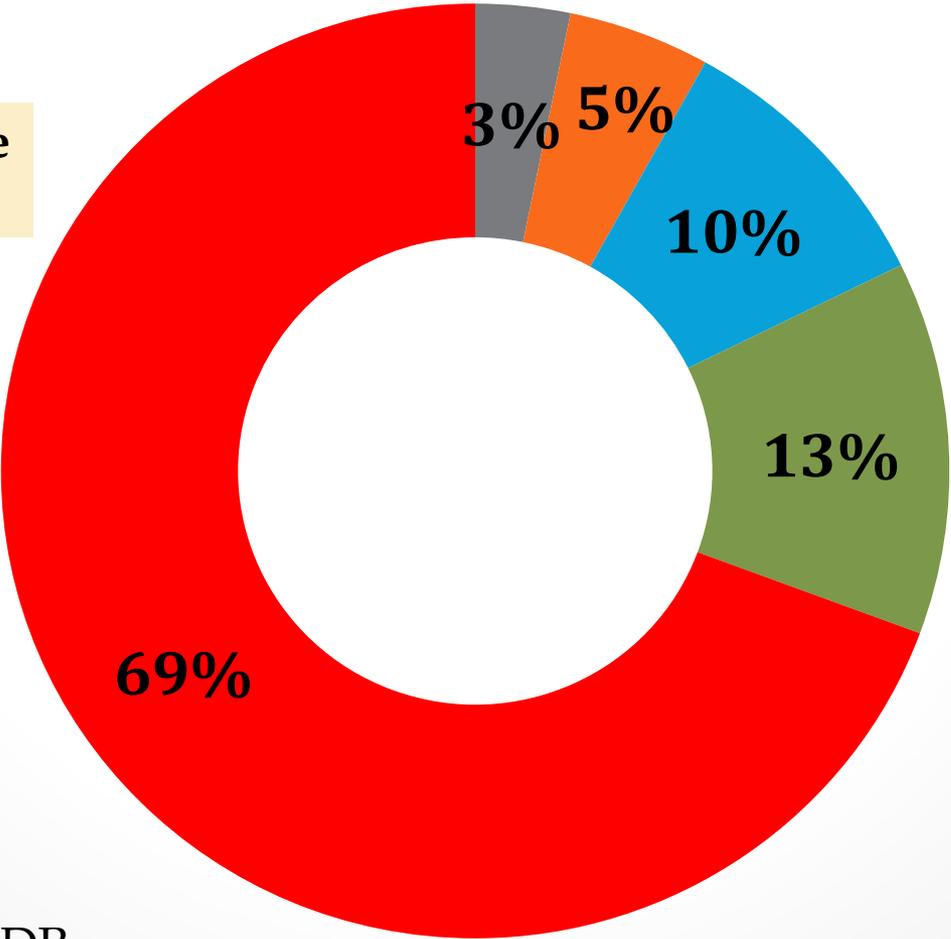


Source: Gujarat MDR

Who conducted home delivery in home deaths (n=62)

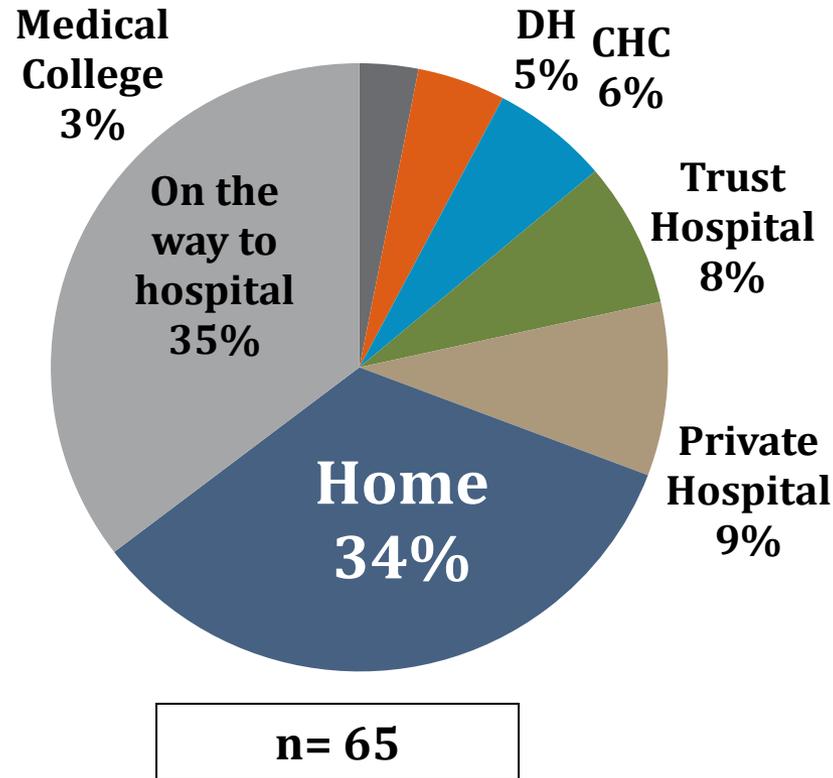
■ FHW/FHS ■ Doctor ■ Others ■ Relative ■ Dai

SBA not available
at home delivery



Source: Gujarat MDR

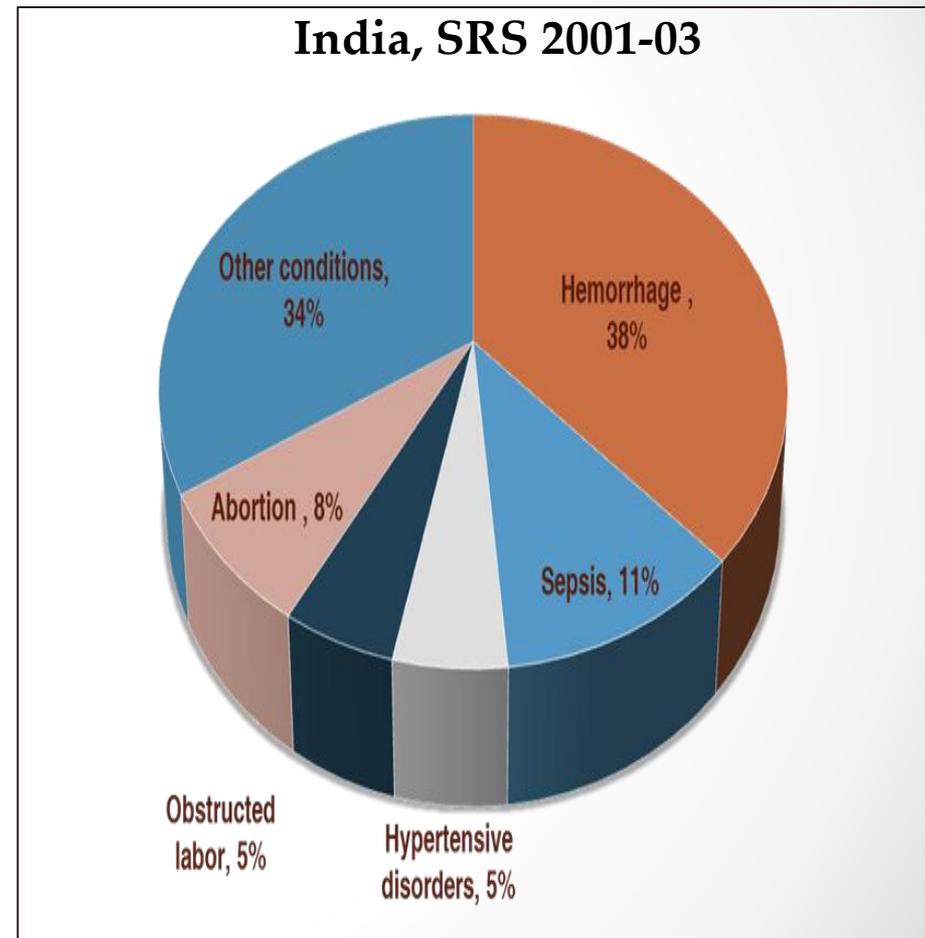
Place of death in home delivery cases



Among maternal deaths who had home delivery 34% died at home and 35% died en route.

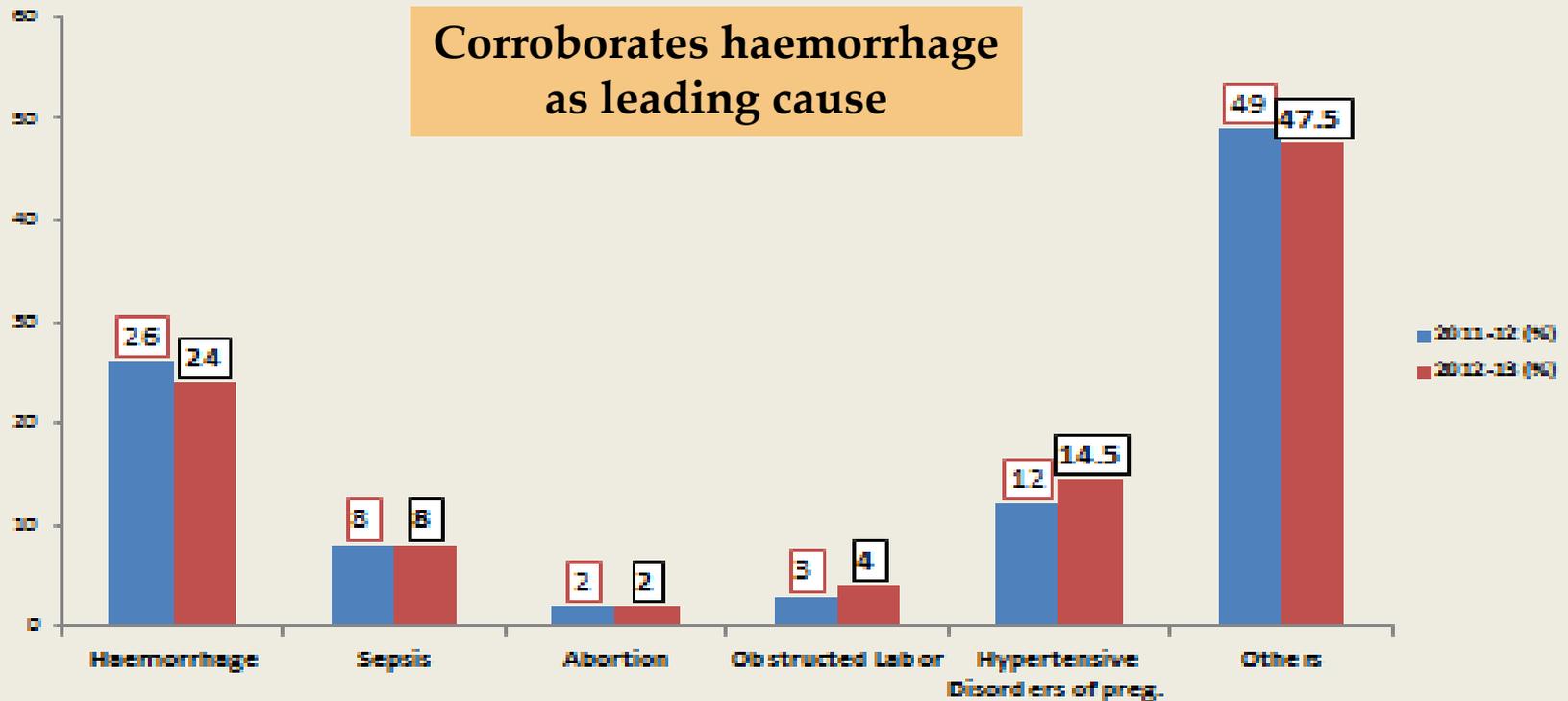
Leading cause of Maternal Mortality

- Hemorrhage is a leading cause of maternal deaths
 - 35% of global maternal deaths
 - Estimated 132,000 maternal deaths
- 14 million women in developing countries experience PPH—26 women every minute, affects 2% of women who give birth
- More than 20000 women die annually from PPH In India



MDR analysis

(Source: Monthly MDR Reports)



PPH Prevention and Management Steps

Pre-labor

- Birth preparedness
- Identification, monitoring and timely referral of high risk pregnancies esp. anemia, grand multipara, multiple pregnancies , GDM
- Supportive practices
 - Hb. Estimation
 - No Routine induction

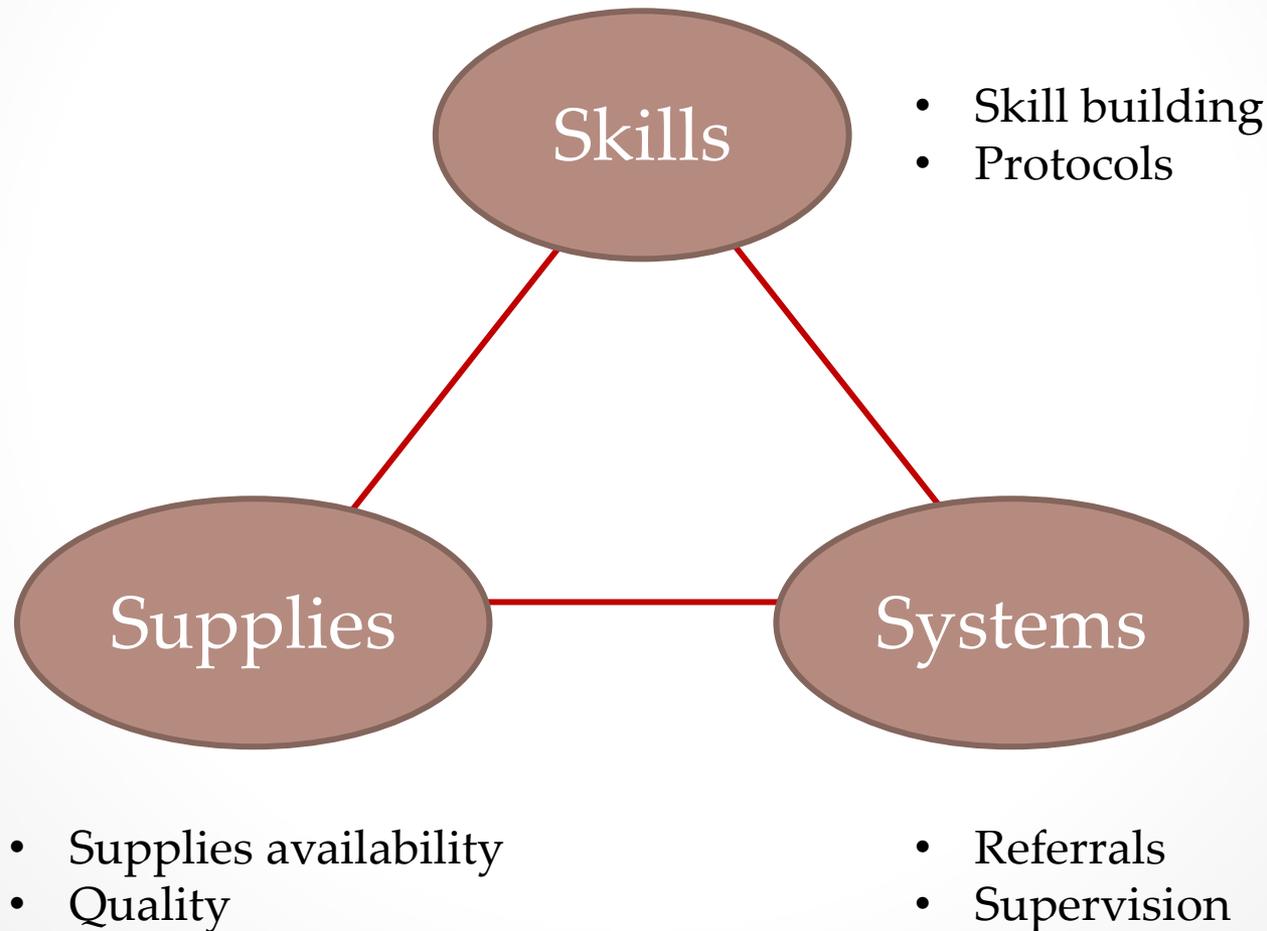
Labor

- Intensive monitoring in second and third stages
- Avoid aggressive unnecessary augmentation of labor with oxytocin
- Active management of third stage of labor (Uterotonics)
- Prompt management of PPH
- Referral if needed

Postpartum

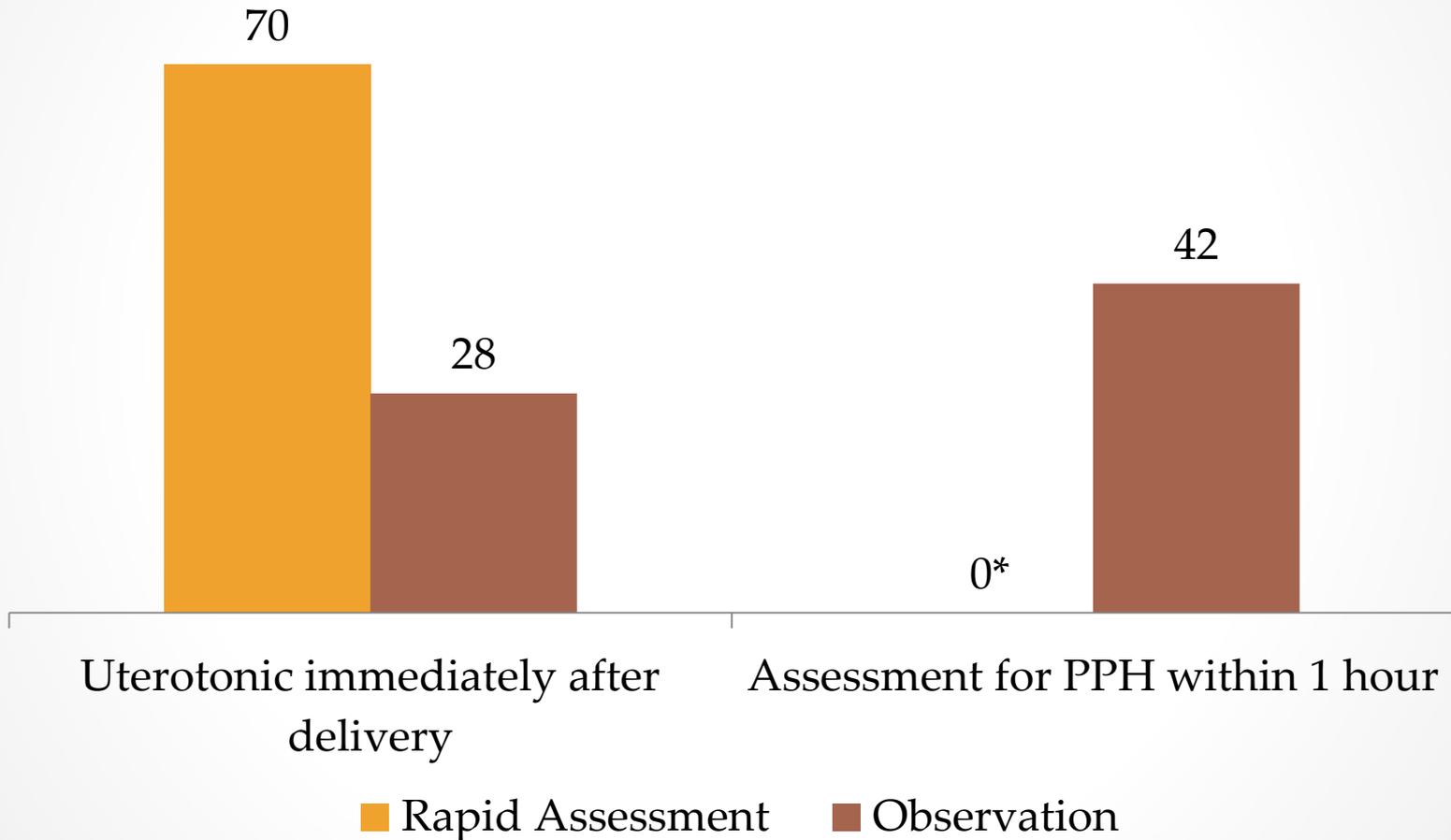
- Monitoring of PP period in hospital: Discharge after 48 hrs.
- Prompt management of PPH
- Referral if needed

PPH Program Implementation: Components



Program Implementation: Status

Practices



Source: Jhpiego's rapid assessment of 200 health facilities and observational study in 12 facilities (unpublished)

* Not measured in rapid assessment of facilities

Providers' Perspectives on Uterotonic Use

Uttar Pradesh

- Injectable uterotonic use for the purposes of labour augmentation widespread in both clinical and community settings.
- Use of uterotonics for postpartum haemorrhage prevention and treatment relatively limited

Karnataka

- Augmenting labor is the most common use of uterotonics
- Both health providers and chemists appeared to have incomplete and inconsistent knowledge about uterotonics, including appropriate dosage, required monitoring, and storage requirements.

Source:

1. Deepak NN, Mirzabagi E, Koski A, Tripathi V. Knowledge, Attitudes, and Practices Related to Uterotonic Drugs during Childbirth in Karnataka, India: A Qualitative Research Study. PLoS ONE. 2013 Apr 29;8(4):e62801.
2. Mirzabagi E, Deepak NN, Koski A, Tripathi V. Uterotonic use during childbirth in Uttar Pradesh: accounts from community members and health providers. Midwifery. 2013 Aug;29(8):902–10.

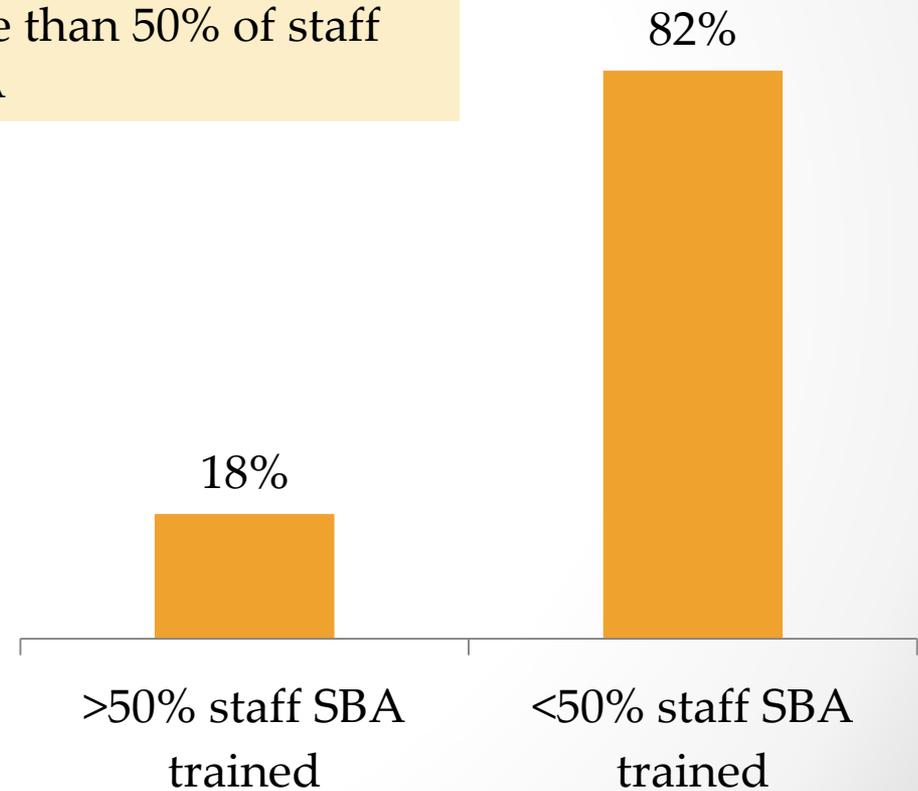
Resource availability

A real example

N= 200

Proportion of health facilities with more than 50% of staff posted in the labor room trained in SBA

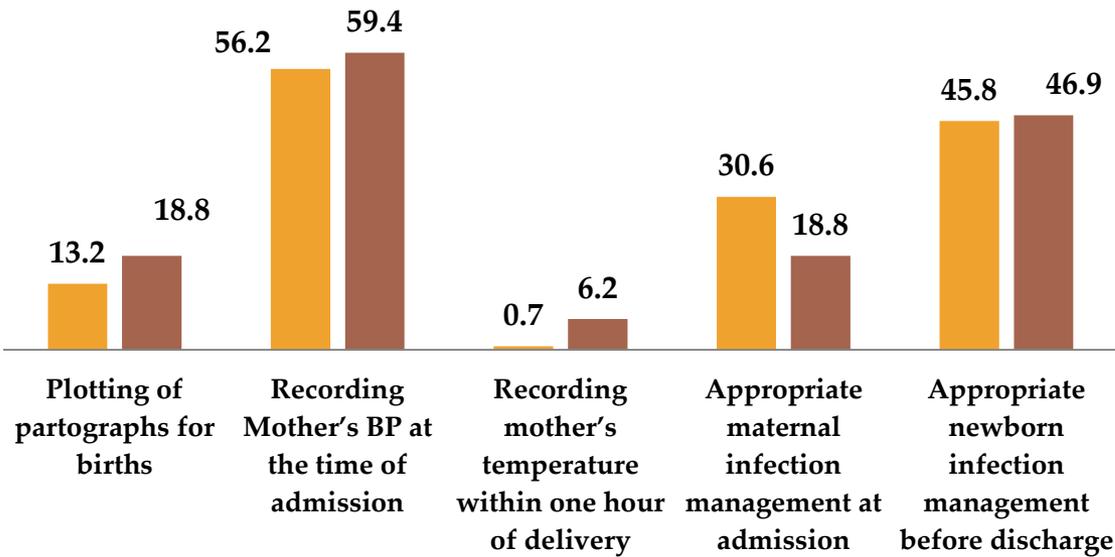
- Inadequate numbers trained in SBA
- Trained workers irrationally deployed



Resource availability

■ <50% SBA trained ■ >50 % SBA trained

n= 200



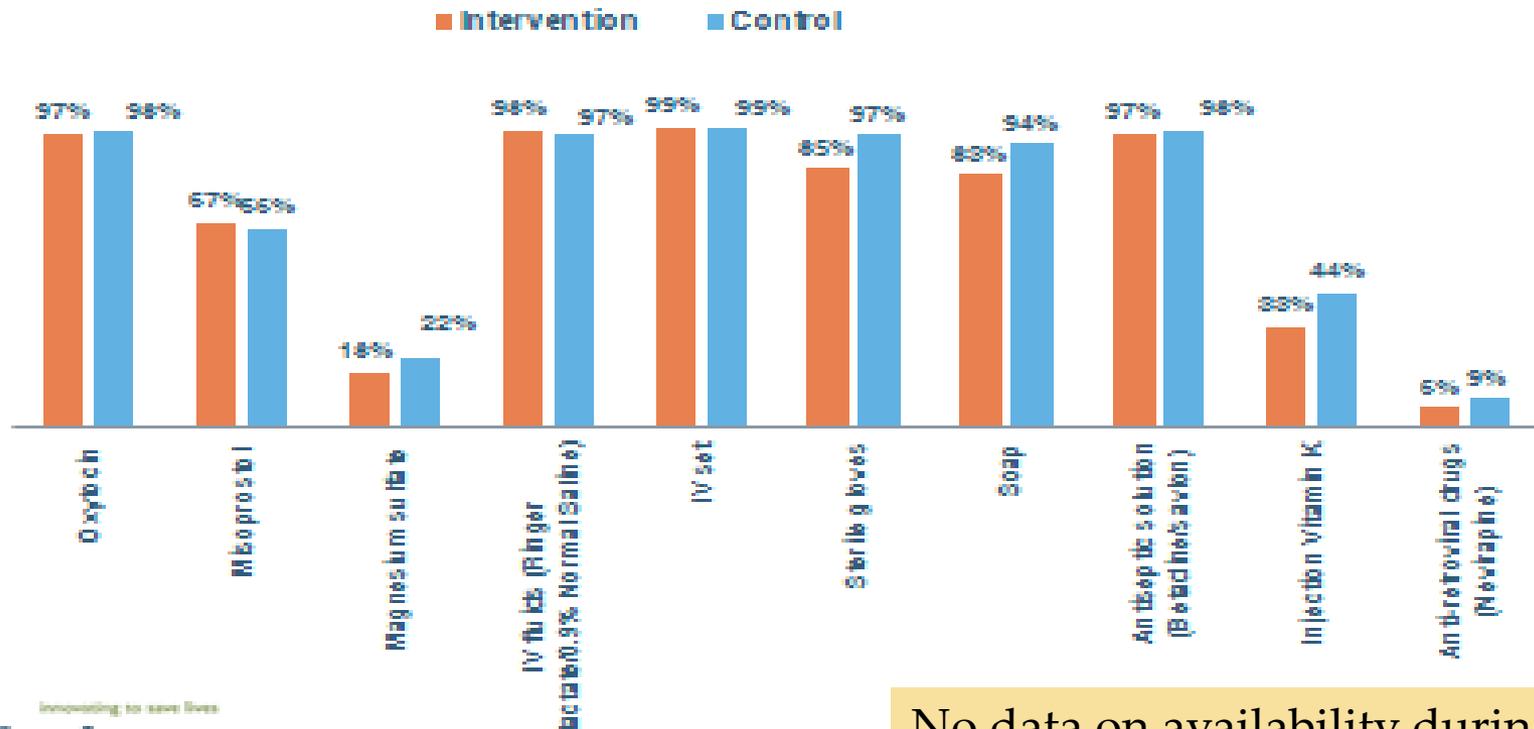
Proportion of facilities with adherence to key clinical practices

- Quality of trainings not good enough
- Trained providers are not enabled to translate learning into practice
- Lack of motivation

Resource Availability

Drug/Supplies in the Labour Room

[utilization for the month of Aug.2012] (N=101 for Intervention & N =99 for Control)

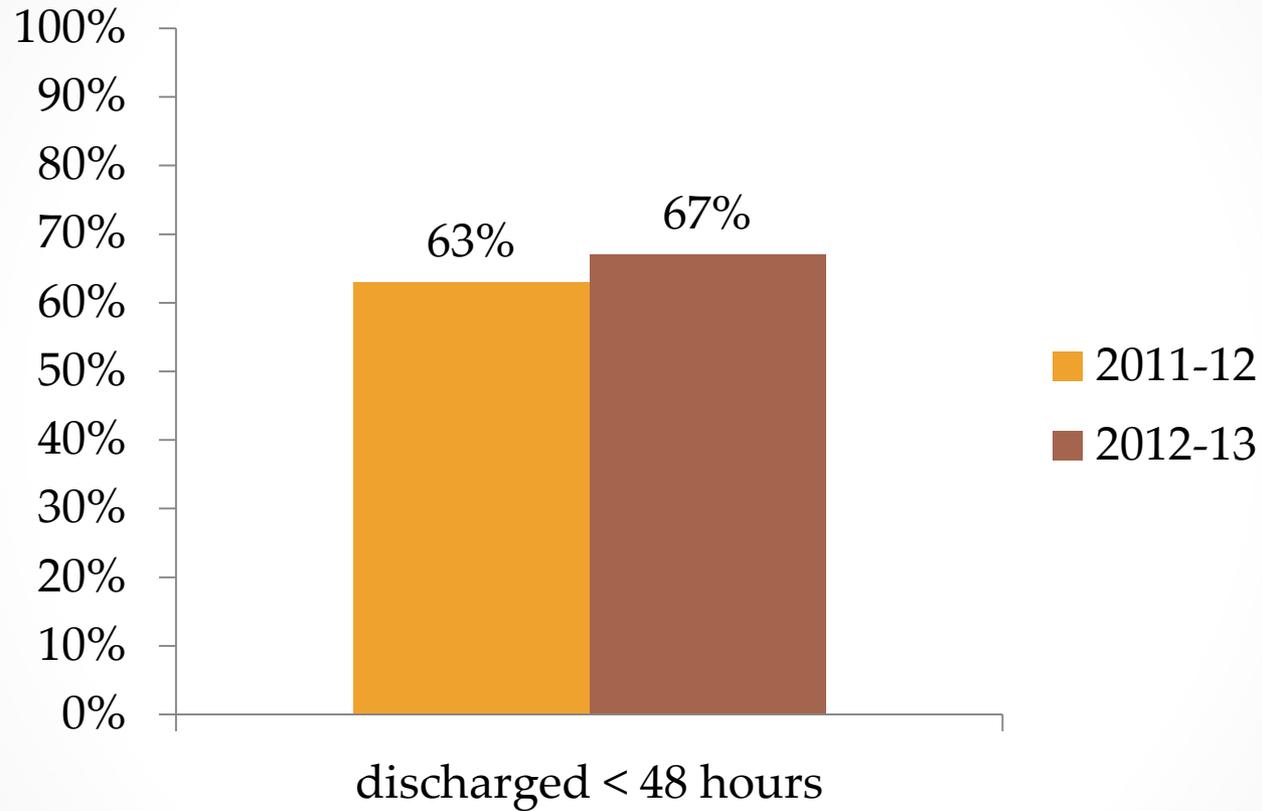


No data on availability during home births

Key Findings: Uterotonic Drug Quality

- Accessibility of uterotonic drugs
 - ✓ A problem in Karnataka - likely due to lack of availability
 - ✓ Not a problem in UP
- Uterotonics potency is an issue in all 4 districts
- More serious for methylergometrine, and particularly in Karnataka (nearly 100% do not meet API specification)
- **Oxytocin:**
 - **Best case:** Gorakhpur w/ 1 in 5 oxytocin ampoules out of specification
 - **Worst case:** Agra w/ 1 in 2 oxytocin ampoules out of specification
- **HOWEVER:** < 10% of all samples tested were \leq 50% API

Facility Stay



What about Home Births?

HMIS:

- Total homebirths in India: 34,00,000
- Total homebirths attended by non SBA: 23,00,000
- Till recently, **only SBAs** were allowed to administer misoprostol during home deliveries
- In **67%** of home births, delivery was conducted by non SBA

Are we doing enough to prevent mortality from PPH in home births?

Summary of Challenges

Practices (PPH Prevention and Management)

- Augmentation of labor without indication
- Poor intrapartum care (poor use of AMTSL techniques including uterotonics)
- Poor monitoring of fourth stage of labour (women shifted to ward 15-30 minutes after delivery)
- Poor understanding of management techniques

Summary of Challenges

Resources

- Facility for blood transfusion, management of retained placenta etc.
- Quality of uterotonic storage at facilities
- Uterotonics availability for home births

System

- Poor coverage of home births by SBAs
- Poor monitoring of quality of services, resource availability and storage
- Using uterotonics for home births
- Issues with referral mechanisms including availability of patient transport ambulances
- Facility stay less than 48 hours

Proposed Solutions



Strategic skill building

Skills Labs

- Structured strengthening of targeted competencies of all in-service workers

Pre-service nursing education

- Establishment of nodal centres
- Strengthening of GNM and ANM schools
- Competency based certification

Skill assessment

- Phase-wise assessment of skills of in-service workers

Onsite training

- Low dose high frequency
- Adaptive to requirements of facilities
- Initiated for FP services; to be extended to all areas

PPH prevention and management to be integrated into all skill building models

Strengthening of Supervision & Prioritization of Resources

- Oxytocin and misoprostol in Essential Drug List

- Focus on availability and use during integrated supportive supervision visits

- Addressing gaps related to PPH preventions based on MDR findings



**Operational Guidelines
&
Reference Manual**

**Prevention of Postpartum Haemorrhage
through Community Based Distribution
of Misoprostol**

November 2013

Maternal Health Division
Ministry of Health and Family Welfare
Government of India



Operational Guidelines for Prevention of Postpartum Hemorrhage through Community Based Distribution of Misoprostol

Rationale

- PPH - largest contributor to MMR
- Persistent home deliveries in many districts/pockets .. women of marginalised and underserved sub-populations (*50 lakh women still deliver at home*)
- Complications common esp. PPH
- Oral Misoprostol recommended for prevention of PPH where Inj. Oxytocin unavailable
- Miso administration - no special skills, no refrigeration; easy to store and use
- Global evidence supports distribution by CHWs

Haemorrhage (PPH) : >20,000 out of 56,000 maternal deaths in one year

Rationale

The Evidence and Research

WHO Guidelines

WHO recommendations

Optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting

OPTIMIZE MNH



Integrative Review

Smith et al. *BMC Pregnancy and Childbirth* 2013, **13**:44
<http://www.biomedcentral.com/1471-2393/13/44>



RESEARCH ARTICLE

Open Access

Misoprostol for postpartum hemorrhage prevention at home birth: an integrative review of global implementation experience to date

Jeffrey Michael Smith^{1††}, Rehana Gubin^{2†}, Martine M Holston^{3†}, Judith Fullerton⁴ and Ndola Prata^{5†}

Abstract

Background: Hemorrhage continues to be a leading cause of maternal death in developing countries. The 2012 World Health Organization guidelines for the prevention and management of postpartum hemorrhage (PPH) recommend oral administration of misoprostol by community health workers (CHWs). However, there are several outstanding questions about distribution of misoprostol for PPH prevention at home births.

Methods: We conducted an integrative review of published research studies and evaluation reports from programs that distributed misoprostol at the community level for prevention of PPH at home births. We reviewed methods and cadres involved in education of end-users, drug administration, distribution, and coverage, correct and incorrect usage, and serious adverse events.

Results: Eighteen programs were identified; only seven reported all data of interest. Programs utilized a range of strategies and timings for distributing misoprostol. Distribution rates were higher when misoprostol was distributed at a home visit during late pregnancy (54.5-96.9%) or at birth (22.5-83.6%), compared to antenatal care (ANC) distribution at any ANC visit (22.5-49.1%) or late ANC visit (21.0-26.7%). Coverage rates were highest when CHWs and traditional birth attendants distributed misoprostol and lower when health workers/ANC providers distributed the medication. The highest distribution and coverage rates were achieved by programs that allowed self-administration. Seven women took misoprostol prior to delivery out of more than 12,000 women who were followed-up. Facility birth rates increased in the three programs for which this information was available. Fifty-one (51) maternal deaths were reported among 86,732 women taking misoprostol: 24 were attributed to perceived PPH; none were directly attributed to use of misoprostol. Even if all deaths were attributable to PPH, the equivalent ratio (59 maternal deaths/100,000 live births) is substantially lower than the reported maternal mortality ratio in any of these countries.

Conclusions: Community-based programs for prevention of PPH at home birth using misoprostol can achieve high distribution and use of the medication, using diverse program strategies. Coverage was greatest when misoprostol was distributed by community health agents at home visits. Programs appear to be safe, with an extremely low rate of ante- or intrapartum administration of the medication.

Keywords: Community-based distribution mechanisms, Misoprostol, Coverage, Safety, Serious adverse events, Home birth, Postpartum hemorrhage

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Effectiveness, Feasibility and Safety of Community based advance distribution of Misoprostol

Key policy decision

Recommendations of Core Group of Experts

- ***Community based advance distribution of Misoprostol by ANMs and ASHAs to pregnant women likely to deliver at home***

Objective : Bring this life saving commodity to the doorstep of those pregnant women ...

- Not likely to access a health facility for delivery
- ANM not likely to attend the delivery

Special Scenarios

- Intended Inst. Del. , but deliver at home
- Deliver in transit



Conditionalities for Community Based Distribution of Misoprostol

Criteria for selection of areas-*(pre-identified/pre-notified by state)*

Steps for identification of pregnant women

Responsibility for advance distribution

Process of distribution

Adverse events



5 X 5 matrix for High Impact RMNCH+A Interventions



when Implemented with High Coverage and High Quality

R eproductive Health	M aternal Health	N ewborn Health	C hild Health	A dolescent Health
<ul style="list-style-type: none"> Focus on spacing methods, particularly PPIUCD at high case load facilities Focus on interval IUCD at all facilities including subcentres on fixed days Home delivery of Contraceptives (HDC) and Ensuring Spacing at Birth (ESB) through ASHAs Ensuring access to Pregnancy Testing Kits (PTK- "Nischay Kits") and strengthening comprehensive abortion care services. Maintaining quality sterilization services. 	<ul style="list-style-type: none"> Use MCTS to ensure early registration of pregnancy and full ANC Detect high risk pregnancies and line list including severely anemic mothers and ensure appropriate management. Equip Delivery points with highly trained HR and ensure equitable access to EmOC services through FRUs; Add MCH wings as per need Review maternal, infant and child deaths for corrective actions Identify villages with low institutional delivery & distribute Misoprostol to select women during pregnancy; incentivize ANMs for domiciliary deliveries 	<ul style="list-style-type: none"> Early initiation and exclusive breastfeeding Home based newborn care through ASHA Essential Newborn Care and resuscitation services at all delivery points Special Newborn Care Units with highly trained human resource and other infra structure Community level use of Gentamycin by ANM 	<ul style="list-style-type: none"> Complementary feeding, IFA supplementation and focus on nutrition Diarrhoea management at community level using ORS and Zinc Management of pneumonia Full immunization coverage Rashtriya Bal Swasthya Karyakram (RBSK): screening of children for 4Ds' (birth defects, development delays, deficiencies and disease) and its management 	<ul style="list-style-type: none"> Address teenage pregnancy and increase contraceptive prevalence in adolescents Introduce Community based services through peer educators Strengthen ARSH clinics Roll out National Iron Plus Initiative including weekly IFA supplementation Promote Menstrual Hygiene

Health Systems Strengthening

- Case load based deployment of HR at all levels
- Ambulances, drugs, diagnostics, reproductive health commodities
- Health Education, Demand Promotion & Behavior change communication
- Supportive supervision and use of data for monitoring and review, including scorecards based on HMIS
- Public grievances redressal mechanism; client satisfaction and patient safety through all round quality assurance

Cross cutting Interventions

- Bring down out of pocket expenses by ensuring JSSK, RBSK and other free entitlements
- ANMs & Nurses to provide specialized and quality care to pregnant women and children
- Address social determinants of health through convergence
- Focus on un-served and underserved villages, urban slums and blocks
- Introduce difficult area and performance based incentives



5 X 5 matrix for High Impact RMNCH+A Intervention



List of Minimum Essential Commodities

R eproductive Health	M aternal Health	N ewborn Health	C hild Health	A dolescent Health
<ul style="list-style-type: none"> • FP commodities: Tubal Rings, IUCD 380-A, IUCD 375 • Oral Contraceptive Pills (OCPs) / (Mala-N), Condoms •Emergency Contraceptive Pills(ECP) -(Levonorgestrel 1.5mg) •Pregnancy Testing Kits (PTKs) - Nischay •Tablet Mifepristone (Only at facilities conducting Safe Abortion Services) 	<ul style="list-style-type: none"> • Injection Oxytocin • Tablet Misoprostol • Injection Magnesium Sulphate 	<ul style="list-style-type: none"> •Injection Vitamin K •Mucous extractor •Vaccines - BCG, Oral Polio Vaccine (OPV), Hep B 	<ul style="list-style-type: none"> • Oral Rehydration Salt (ORS) • Zinc Sulphate Dispersible Tablets • Syrup Salbutamol & Salbutamol nebulising solution • Vaccines - DPT, Measles JE (19 States), Pentavalent vaccine (in 8 States) • Syrup Vitamin A 	<ul style="list-style-type: none"> •Tablet Albendazole •Tablet Dicyclomine

Cross cutting Commodities as per level of facility

- Iron & Folic Acid (IFA) Tablet, IFA small tablet, IFA syrup
- Syrup /tablets : Paracetamol, Trimethoprim & Sulphamethoxazole, Chloroquin and Inj. Dexamethasone
- Antibiotics : Cap /Inj. Ampicillin, Metronidazole, Amoxycillin; Inj. Gentamicin, Inj. Ceftriaxone;
- Clinical /Digital Thermometer; Weighing machine; BP apparatus; Stop Watch; Cold box; Vaccine carrier; Oxygen; Bag & mask
- Testing equipments for Haemoglobin, urine and blood sugar

Thank You!



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innovating to save lives
Jhpiego
an affiliate of Johns Hopkins University

Prevention of Postpartum Hemorrhage (PPH) at Homebirth in Afghanistan



Dr Sadia Fayeq,
Reproductive Health Director
MoPH, Afghanistan

Outline of the Presentation



- Background
- Results of the interventions
- Advocacy
- Current Status
- Way forward
- Challenges

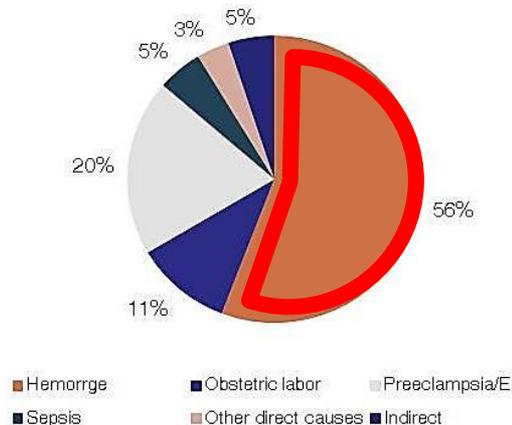




Background

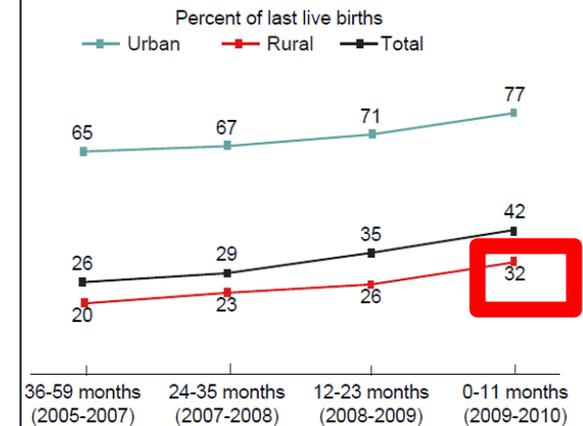
High Maternal Mortality Ratio
327 (100,000 live births)

Causes of Maternal Mortality



Prevention of PPH at homebirths will substantially contribute to reduction of maternal mortality

Figure 10. Trends in Delivery Care from a Medically Skilled Provider by Urban-Rural Residence, Afghanistan 2010



Date Source: AMS, 2010

Background #2



Prevention of PPH at homebirth in Afghanistan

- Piloted in 6 districts in 2006
 - To demonstrate the safety, acceptability, feasibility, and program effectiveness (SAFE) of community-based distribution of misoprostol by Community Health Workers (CHWs)
- Expanded in 20 districts in 2008
 - To demonstrate that quality of the initiative can be maintained during scale up
 - To monitor adverse events as the service delivery is expanded

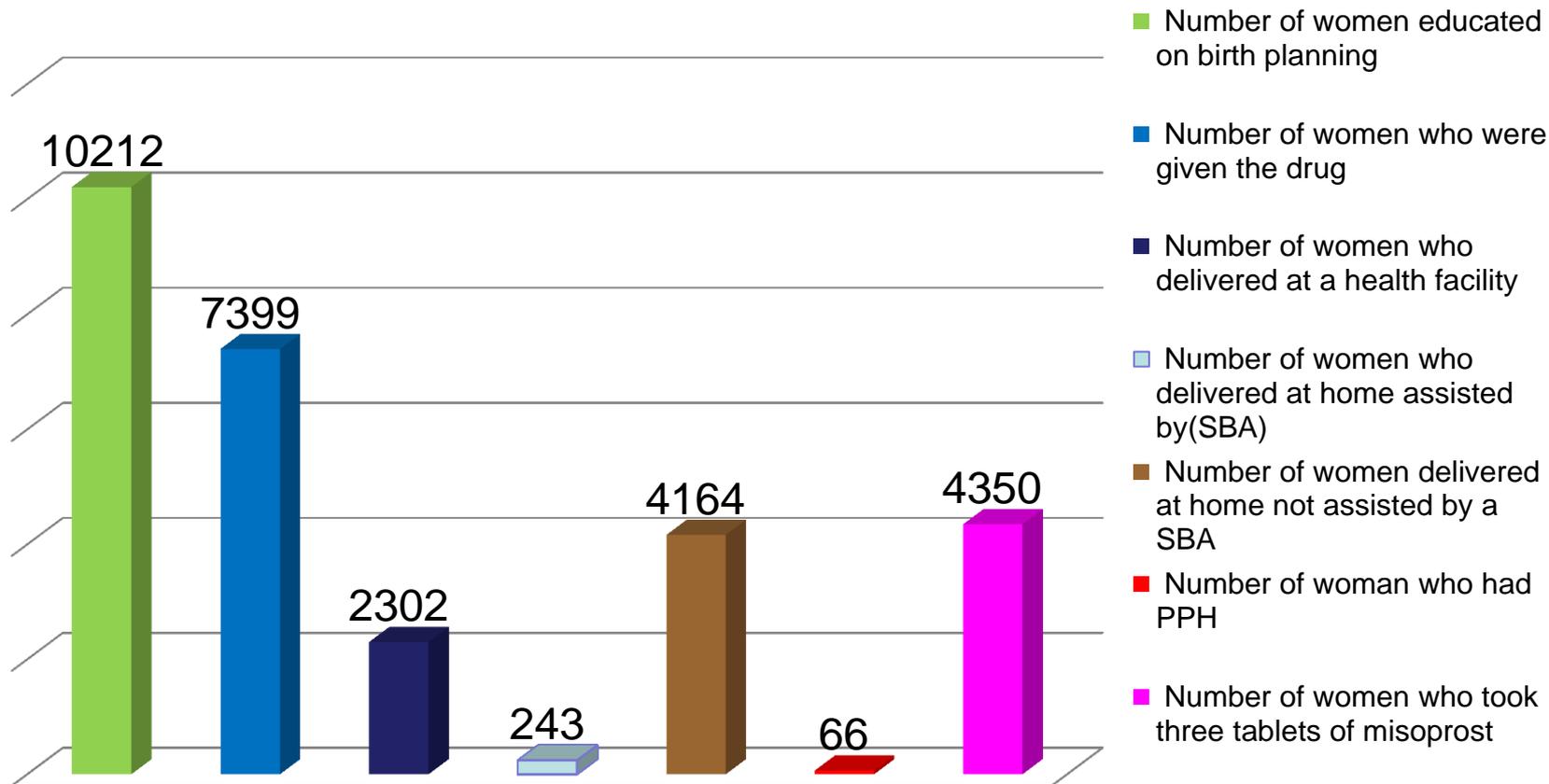
Prevention of PPH Pilot Project Results



Pregnant women received misoprostol from CHWs	1421
Took misoprostol <i>before</i> baby was born	0 (0%)
Took misoprostol <i>after</i> baby was born and before placenta was born	1361 (95.8%)
Took misoprostol <i>after</i> baby and placenta were born	60 (4.2%)
Recommend the drug to friends	92%
Will buy misoprostol in future	88%

Uterotonic drugs	Control (1148)	Intervention (2039)
Used only misoprostol	0	67%
Used only injection	25.7%	26.5%
Used any uterotonic	25.7%	96.2 %
Did not use any uterotonic	74.3%	3.8%

Prevention of PPH Expansion Results



Advocacy for Integration into the Health System



- Regional and National consensus building workshops held in 2013
 - Recommended to:
 - Include misoprostol in the essential drug list
 - Obtain approval from Technical Advisory Group (TAG) and the MoPH Executive Board
 - Issue an amendment to integrate the intervention in the Basic Package Health Services (BPHS) contracts
 - Integrate community based PPH prevention in the future revisions of BPHS

Current Status



- Essential Drug List committee included misoprostol in the “especial drug list” to be nationally distributed for PPH program
- Donors expressed their willingness to invest in the integration
- The PPH integration proposal is prepared to submit to TAG

Way Forward



- Obtain approval from MoPH TAG and Executive Committee
- Instruct BPHS implementers to start the PPH initiative under the auspice of Reproductive Health and Community Based Health Care departments
- Integrate PPH initiative in the maternal health promotion package
- Train health providers and managers
- Include appropriate indicators in HMIS and M&E

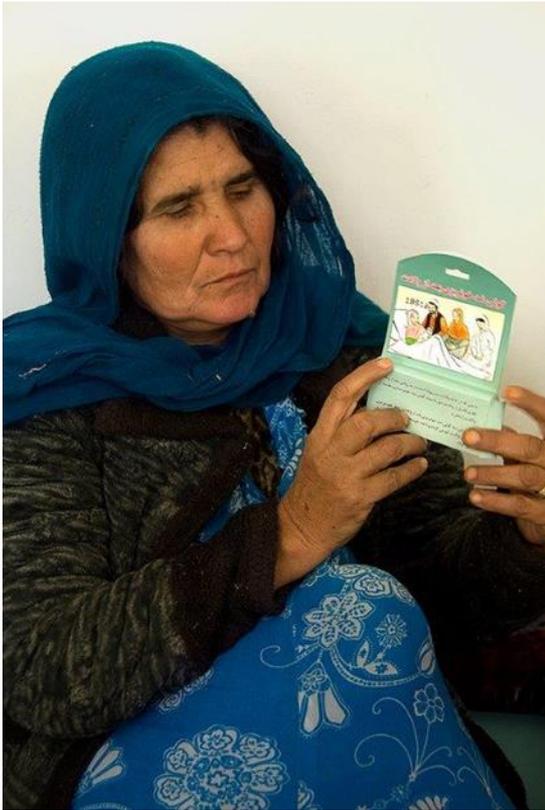
Universal coverage with AMTSL and SBA services should remain the primary mandate of MoPH

Challenges



- Lack of CHWs in extremely remote area
- Overburden of CHWs (as volunteer workers)
- Geographical and security barriers
- Availability of funds for training, misoprostol and human resource





Thank You

Workshop Goal

To provide implementing agencies with the knowledge and tools needed for successful expansion of PPH prevention programs which incorporate the advance distribution of misoprostol for self-administration.

Workshop Objectives

At the end of this workshop, participants will be able to describe:

- The evidence base for PPH program design
- The three phases of program expansion and the scope of activities to include in a comprehensive work plan
- Training approaches and content for facility and community based health workers
- The necessary training, BCC/IEC, supportive supervision and M&E program materials, how to access examples and considerations when standardizing nationally
- The basics of commodity procurement and distribution for misoprostol
- The recommended core M&E indicators



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Technical Information About Misoprostol for PPH Prevention

Comprehensive PPH Reduction Approach

PROMOTION OF COMPREHENSIVE PACKAGE OF INTERVENTIONS TO PREVENT AND MANAGE PPH

**EDUCATION: Birth planning/complication readiness;
Promotion of ANC; encouragement of facility birth with
SBA**

Facility Birth:

- Correct management of labor and birth, including partograph
- Routine administration of uterotonic immediately after birth (oxytocin preferred, if not, misoprostol)
- Uterotonic availability and quality
- Postpartum vigilance for PPH
- Proper management of PPH

SBA

Transport:

- Initial dose of uterotonic
- Use of Non-pneumatic Anti Shock Garment

Home Birth:

- Education about PPH detection
- Education about use of misoprostol
- Advanced distribution of misoprostol for self administration after birth
- Education about what to do for continued bleeding



JEOPARDY!

PPH Program Implementation Round

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Pharmacology in PPH Prevention	Uses in Obstetrics and Gynecology	Side Effects and Risks	Global Guidance	Program Approaches
<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
<u>600</u>	<u>600</u>	<u>600</u>	<u>600</u>	<u>600</u>
<u>800</u>	<u>800</u>	<u>800</u>	<u>800</u>	<u>800</u>
<u>1000</u>	<u>1000</u>	<u>1000</u>	<u>1000</u>	<u>1000</u>

Program Approaches 200

Who is the best person to store the drug and make sure it is available at the time of delivery?

[return](#)



Answer, Program Approaches 200

Who is the best person to store the drug and make sure it is available at the time of delivery?

The woman herself

[return](#)

Program Approaches 400

Greatest coverage of use of misoprostol for prevention of PPH at home birth has been through:

1. Distribution by whom?
2. Distribution when?
3. Distribution where?
4. Administration by whom?

[return](#)



Answer, Program Approaches 400

Greatest coverage of use of misoprostol for prevention of PPH at home birth has been through:

1. Distribution by whom? **Distribution by CHWs or TBAs**
2. Distribution when? **Distribution late in pregnancy**
3. Distribution where? **Distribution at home visits**
4. Administration by whom? **For self-administration**

[Additional information](#)

[return](#)

Program Approaches 600

Describe the difference between the **distribution rate** of misoprostol and the **coverage rate** of misoprostol?
Why is it important?

[return](#)



Answer, Program Approaches 600

Describe the difference between the **distribution rate** of misoprostol and the **coverage rate** of misoprostol? Why is it important?

Distribution rate is the proportion of pregnant women in the catchment area **who received misoprostol** for the prevention of PPH

Coverage rate is The proportion of women who delivered at home in the catchment area (actual or estimated) **who used misoprostol** for the prevention of PPH.

If there is a large difference between the distribution rate and the coverage rate it could mean that women / families do not have confidence in the counseling or the messages being provided.

[Additional Information](#)

[return](#)

Program Approaches 800

Six countries in the world currently have a national strategy / policy for national scale up of programs for advanced distribution of misoprostol for self-administration. Name FOUR of them.

[return](#)



Answer, Program Approaches 800

Six countries in the world currently have a national strategy / policy for national scale up of programs for advanced distribution of misoprostol for self-administration. Name FOUR of them.

Afghanistan, Nepal, Bangladesh, Nigeria, South Sudan and Mozambique.

[return](#)

Program Approaches 1000

Programs that use ANC as the only distribution method for misoprostol will achieve about how much coverage compared to programs that use home visits by community workers?

[return](#)



Answer, Program Approaches 1000

Programs that use ANC as the only distribution method for misoprostol will achieve about how much coverage compared to programs that use home visits by community workers?

Home visits by community workers (CHWs/TBAs) achieve about 2 X the coverage that ANC-only distribution schemes achieve

[return](#)

Global Guidance 200

For the prevention of PPH, women should be counseled that if the placenta delivers before taking the misoprostol, the misoprostol should not be taken.

True or false?

[return](#)



Answer, Global Guidance 200

For the prevention of PPH, women should be counseled that if the placenta delivers before taking the misoprostol, the misoprostol should not be taken.

True or false?

False

[return](#)

Global Guidance 400

In which year was misoprostol approved on the WHO *Model List of Essential Medicines* for prevention of PPH?

- A. 2007
- B. 2009
- C. 2011
- D. 2013
- E. Not yet approved by the WHO EML for prevention of PPH

[return](#)



Answer, Global Guidance 400

In which year was misoprostol approved on the WHO *Model List of Essential Medicines* for prevention of PPH?

A. 2007

B. 2009

C. 2011

D. 2013

E. Not yet approved by the WHO EML for prevention of PPH

[return](#)

Global Guidance 600

The 2012 WHO *Recommendations for the Prevention and Treatment of PPH* contain which of the following recommendations? (choose all that are correct)

- A. The use of uterotonics for the prevention of PPH during the third stage of labour is recommended for all births.
- B. Oxytocin (10 IU, IV/IM) is the recommended uterotonic drug for the prevention of PPH.
- C. In settings where oxytocin is unavailable, the use of other injectable uterotonics (if appropriate ergometrine/ methylergometrine or the fixed drug combination of oxytocin and ergometrine) or oral misoprostol (600 µg) is recommended.
- D. In settings where skilled birth attendants are not present and oxytocin is unavailable, the administration of misoprostol (600 µg PO) by community health care workers and lay health workers is recommended for the prevention of PPH.

[return](#)



Answer, Global Guidance 600

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[Additional Information](#)
[return](#)

Global Guidance 800

Regarding the advance distribution of misoprostol for self-administration by women immediately after a home birth: (choose all that are correct)

- A. The WHO says that there is insufficient evidence to recommend the antenatal distribution of misoprostol to pregnant women for self-administration for the prevention of PPH.
- B. The WHO notes that numerous countries have embarked on community-level programs for distribution of misoprostol. This should be done only in the context of research
- C. FIGO guidelines state that self administration by women following birth is safe and effective.
- D. ACOG makes no statement about the use of misoprostol following homebirth for PPH prevention.

[return](#)



Answer, Global Guidance 800

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- C. FIGO guidelines state that self administration by women following birth is safe and effective.
- D. ACOG makes no statement about the use of misoprostol following homebirth for PPH prevention.

[return](#)

Global Guidance 1000

How many countries in the world currently have misoprostol approved for an obstetrical or gynecologic indication?

Answer +/- 3 will be accepted.

[return](#)



Answer, Global Guidance 1000

How many countries in the world currently have misoprostol approved for an obstetrical or gynecologic indication?

Answer +/- 3 will be accepted.

Approximately 33

[return](#)

Side Effects and Risks 200

Uterine contractions were initially considered as a dangerous side effect of misoprostol.

True or false?

[return](#)



Answer, Side Effects and Risks 200

Uterine contractions were initially considered as a dangerous side effect of misoprostol.

True

[return](#)

Side Effects and Risks 400

The main side effects of misoprostol, when taken immediately after the delivery of the baby for the prevention of PPH, include:

- A. Pyrexia, shivering, diarrhea and postpartum hemorrhage
- B. Diarrhea, shivering, pyrexia and nausea
- C. Shivering, uterine rupture, fever and nausea
- D. Fever, shivering, uterine rupture, nausea and post partum hemorrhage

[return](#)



Answer, Side Effects and Risks 400

The main side effects of misoprostol, when taken immediately after the delivery of the baby for the prevention of PPH, include:

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- B. Diarrhea, shivering, pyrexia and nausea**
- C. Shivering, uterine rupture, fever and nausea
- D. Fever, shivering, uterine rupture, nausea and post partum hemorrhage

[return](#)

Side Effects and Risks 600

In 1998 the Federal Ministry of Health of Brazil banned the use of misoprostol in pregnant women:

- A. Due to an increase in teratogenesis
- B. In an effort to prevent illegal abortion
- C. Because it was resulting in a decrease in facility births
- D. Because it was being exclusively marketed to indigenous women for PPH prevention

[return](#)



Answer, Side Effects and Risks 600

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- B. In an effort to prevent illegal abortion
- C. Because it was resulting in a decrease in facility births
- D. Because it was being exclusively marketed to indigenous women for PPH prevention

[return](#)

Side Effects and Risks 800

In the global review of programs for PPH prevention at home birth using misoprostol, Smith et al. found that out of more than 12, 000 women who took misoprostol:

- A. 19 took the drug before delivery, of those 12 died
- B. 7 took the drug before delivery, of those none died
- C. 14 took the drug before delivery, of those 6 died
- D. 9 took the drug before delivery, of those 3 died

[return](#)



Answer, Side Effects and Risks 800

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- D. 9 took the drug before delivery, of those 3 died

[Additional Information](#)

[return](#)

Side Effects and Risks 1000

A CHW is in the home of a woman who is in her 8th month of pregnancy. She is counseling the woman about how to take the misoprostol, including the risks and side effects of misoprostol. What should she tell the woman?

[return](#)



Answer, Side Effects and Risks 1000

A CHW is in the home of a woman who is in her 8th month of pregnancy. She is counseling the woman about how to take the misoprostol, including the risks and side effects of misoprostol. What should she tell the woman?

3 Main messages:

The woman must **never take the drug before the delivery** of the baby. This can result in ruptured uterus and death.

The woman **may experience** the following **side effects**: nausea, vomiting, diarrhea, shivering and fever.

The drug is **not always completely effective**. If she still bleeds too much (more than two cloths) she should go to the nearest facility for treatment.

[return](#)

Uses in Obstetrics and Gynecology 200

Misoprostol cannot be used as part of Active Management of the Third Stage of Labor.

True or False?

[return](#)



Answer, Uses in Obstetrics and Gynecology 200

Misoprostol cannot be used as part of Active Management of the Third Stage of Labor.

False

[return](#)

Uses in Obstetrics and Gynecology 400

Misoprostol has known uses for all of the following obstetrical and gynecologic situations except:

- A. Induced abortion in the 1st trimester
- B. Incomplete abortion in the 1st trimester
- C. Missed abortion in the 1st trimester
- D. Cervical ripening in gynecology
- E. Management of 2nd trimester fetal death
- F. Induction of labor
- G. Augmentation of labor
- H. Prevention of PPH
- I. Treatment of PPH

[return](#)



Answer,

Uses in Obstetrics and Gynecology 400

Misoprostol has known uses for all of the following obstetrical and gynecologic situations except:

- A. Induced abortion in the 1st trimester
- B. Incomplete abortion in the 1st trimester
- C. Missed abortion in the 1st trimester
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- E. Management of 2nd trimester fetal death
- F. Induction of labor
- G. Augmentation of labor**
- H. Prevention of PPH
- I. Treatment of PPH

[return](#)

Uses in Obstetrics and Gynecology 600

When misoprostol is used for induction of labor...

1. What dose should be used?
2. What route?
3. What is the correct dosing interval?
4. How is the correct dose obtained? (2 correct options)

[return](#)



Answer,

Uses in Obstetrics and Gynecology 600

When misoprostol is used for induction of labor...

1. What dose should be used? **25ug of misoprostol**
2. What route? **Oral or vaginal**
3. What is the correct dosing interval?
If vaginal, every 6 hours;
If oral, every 2 hours
4. How is the correct dose obtained? (2 correct options)
Use a 25ug tablet (very hard to find) or dissolve a 200ug tablet in 200cc of water and administer 25cc of solution orally.

[Additional Information](#)

[return](#)

Uses in Obstetrics and Gynecology 800

Women who have had an incomplete abortion, and present with continued bleeding, and have uterine size of ≤ 12 weeks can be treated with 400ug of misoprostol sublingually, or 600ug of misoprostol orally.

How effective is this in completing uterine evacuation?

[return](#)



Answer,

Uses in Obstetrics and Gynecology 800

Women who have had an incomplete abortion, and present with continued bleeding, and have uterine size of ≤ 12 weeks can be treated with 400ug of misoprostol sublingually, or 600ug of misoprostol orally.

How effective is this in completing uterine evacuation?

91 – 99% effective

[Additional Information](#)

[return](#)

Uses in Obstetrics and Gynecology

1000

Describe the **pharmacologic** management of PPH from uterine atony in a woman who was given oxytocin 10 IU (IV or IM) for prevention of PPH.

[return](#)



Answer,

Uses in Obstetrics and Gynecology 1000

Describe the **pharmacologic** management of PPH from uterine atony in a woman who was given oxytocin 10 IU (IV or IM) for prevention of PPH.

FIGO: In a woman who has already received standard dose of oxytocin for PPH prevention, but has a hemorrhage, the provider can use either additional oxytocin (up to 40 units) IV or 800ug of sublingual misoprostol.

WHO: Intravenous oxytocin alone is the recommended uterotonic drug for the treatment of PPH.

If intravenous oxytocin is unavailable, or if the bleeding does not respond to oxytocin, the use of intravenous ergometrine, oxytocin-ergometrine fixed dose, or a prostaglandin drug (including sublingual misoprostol, 800 µg) is recommended.

There is no demonstrable benefit to the simultaneous use of both oxytocin and misoprostol in the management of PPH.

[return](#)

Pharmacology in PPH Prevention 200

The current global recommended dose of misoprostol for PPH prevention is:

- A. 200 mcg
- B. 400 mcg
- C. 600 mcg
- D. 800 mcg

[return](#)



Answer, Pharmacology in PPH Prevention 200

The current global recommended dose of misoprostol for PPH prevention is:

- A. 200 mcg
- B. 400 mcg
- C. 600 mcg**
- D. 800 mcg

[return](#)

Pharmacology in PPH Prevention 400

For the prevention of PPH which of the following are the **TWO** most preferred routes of administration? And why?

- A. Rectal
- B. Buccal
- C. Sublingual
- D. Oral
- E. Vaginal

[return](#)



Answer,

Pharmacology in PPH Prevention 400

For the prevention of PPH which of the following are the **TWO** most preferred routes of administration? And why?

- A. Rectal
- B. Buccal
- C. Sublingual**
- D. Oral**
- E. Vaginal

[Additional Information](#)

[return](#)

Pharmacology in PPH Prevention 600

The simultaneous administration of misoprostol plus oxytocin for prevention of PPH:

- A. Has no proven benefit
- B. Is more effective than oxytocin alone because they act on different receptors
- C. Is more effective than misoprostol alone because oxytocin should be given whenever it is available
- D. Is appropriate during cesarean section because of the increase risk of blood loss

[return](#)



Answer,

Pharmacology in PPH Prevention 600

The simultaneous administration of misoprostol plus oxytocin for prevention of PPH:

A. Has no proven benefit

B. Is more effective than oxytocin alone because they act on different receptors

C. Is more effective than misoprostol alone because oxytocin should be given whenever it is available

D. Is appropriate during cesarean section because of the increase risk of blood loss

[Additional Information](#)

[return](#)

Pharmacology in PPH Prevention 800

Misoprostol is which kind of prostaglandin?

- A. Prostaglandin E1
- B. Prostaglandin E2
- C. Prostaglandin F2 α
- D. Prostacyclin I2

[return](#)



Answer,

Pharmacology in PPH Prevention 800

Misoprostol is which kind of prostaglandin?

- A. Prostaglandin E1**
- B. Prostaglandin E2
- C. Prostaglandin F2 α
- D. Prostacyclin I2

[Additional information](#)

[return](#)

Pharmacology in PPH Prevention 1000

What is the time of onset of action of misoprostol given orally for the prevention of PPH?

[return](#)



Answer, Pharmacology in PPH Prevention 1000

What is the time of onset of action of misoprostol given orally for the prevention of PPH?

8 minutes

[Additional Information](#)

[return](#)

Pharmacokinetics of misoprostol: Routes

Misoprostol acts fast in all routes of administration

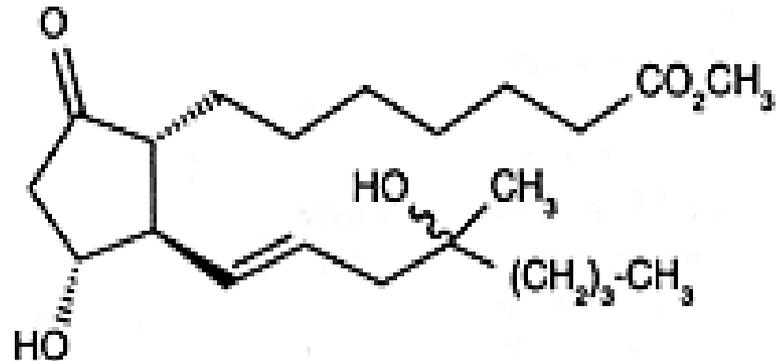
Route	Time to peak concentration	Duration of Action
Oral	30 minutes	2 h
Sublingual	30 minutes	3 h
Vaginal	75 minutes	4 h
Rectal	20-65 minutes	4 h

Source: Tang, IJGO 2007 (Misoprostol: Pharmacokinetic profiles, effects on the uterus and side effects

[return](#)

What is Misoprostol?

- Prostaglandin E₁ analogue
- Uterotonic
- Contracts the uterus, ripens the cervix

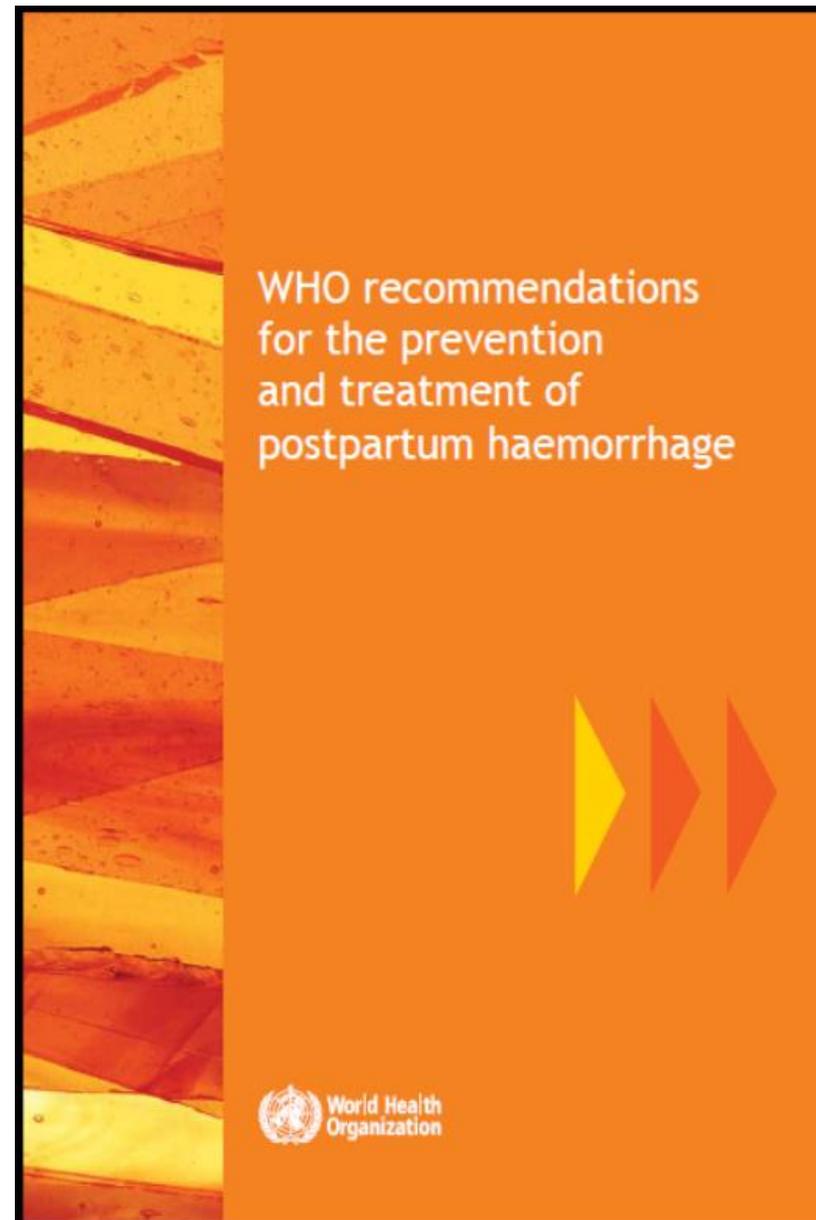


[return](#)

Uterotonic choice

- Oxytocin (10 IU, IV/IM) is the recommended uterotonic drug for the prevention of PPH.

(Strong recommendation, moderate-quality evidence)



[return](#)

Pharmacokinetics of misoprostol: Onset of action

Misoprostol acts fast in all routes of administration

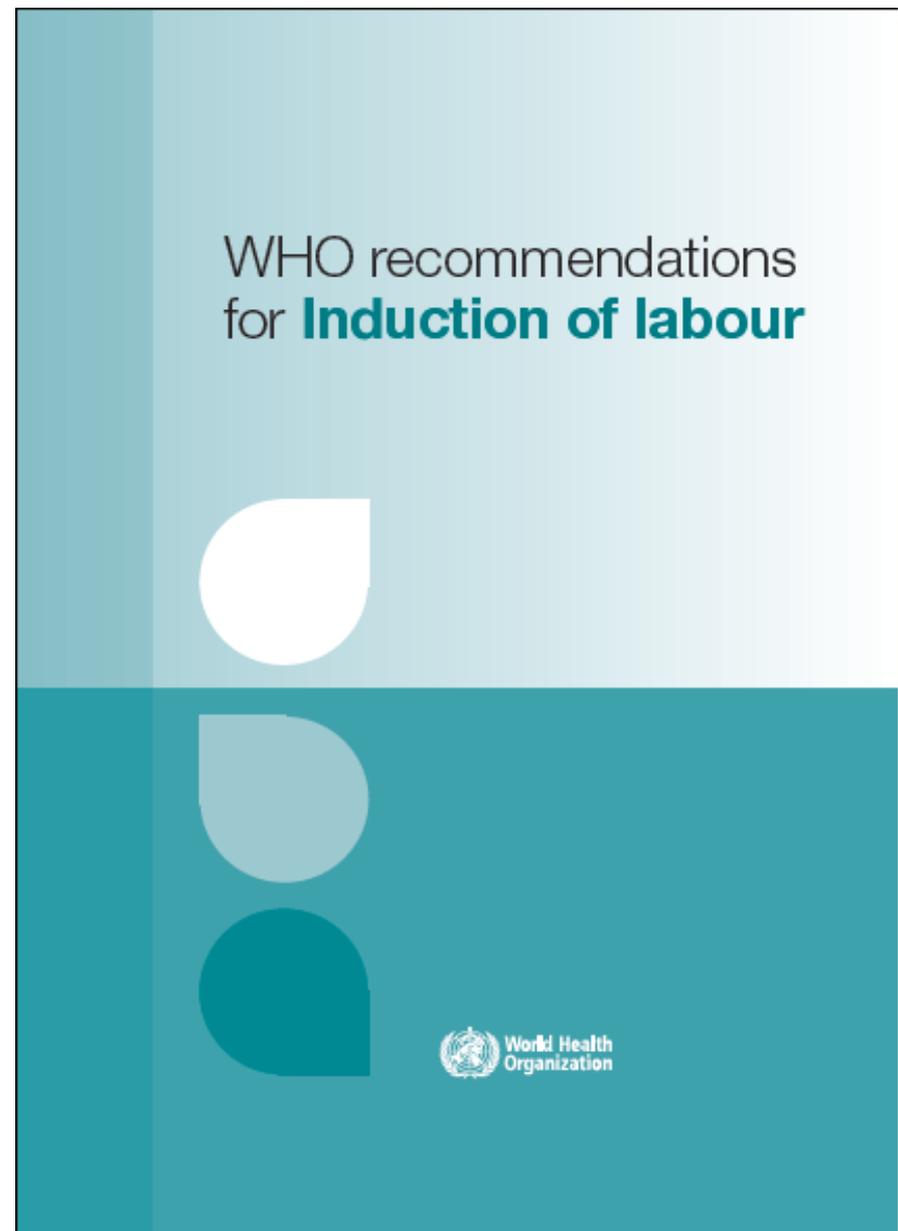
Route	Onset of action	Time to peak concentration	Duration of Action
Oral	8 minutes	30 minutes	2 h
Sublingual	11 minutes	30 minutes	3 h
Vaginal	20 minutes	75 minutes	4 h
Rectal	10 minutes	20-65 minutes	4 h

Source: Tang, IJGO 2007 (*Misoprostol: Pharmacokinetic profiles, effects on the uterus and side effects*

[return](#)

Misoprostol for Induction of Labor

- Oral misoprostol (25 µg, 2-hourly) is recommended for induction of labour.
- Low-dose vaginal misoprostol (25 µg, 6-hourly) is recommended for induction of labour



[return](#)

Misoprostol effectiveness for uterine evacuation in incomplete abortion

600 mcg oral misoprostol vs. MVA

Study (Location)	n	Efficacy
Dao et al. 2007 (Burkina Faso)	460	94.5% vs. 99.1%
Bique et al. 2007 (Mozambique)	100	91% vs. 100%
Shwekerela et al. 2007 (Tanzania)	300	99% vs. 100%
Taylor et al. 2010 (Ghana)	220	99% vs. 99.1%
Montesinos et al. 2011 (Ecuador)	203	94.3% vs. 100%

[return](#)

Results: *Mistimed Administration*

7 cases / 12, 615 women = rate of **0.06%**

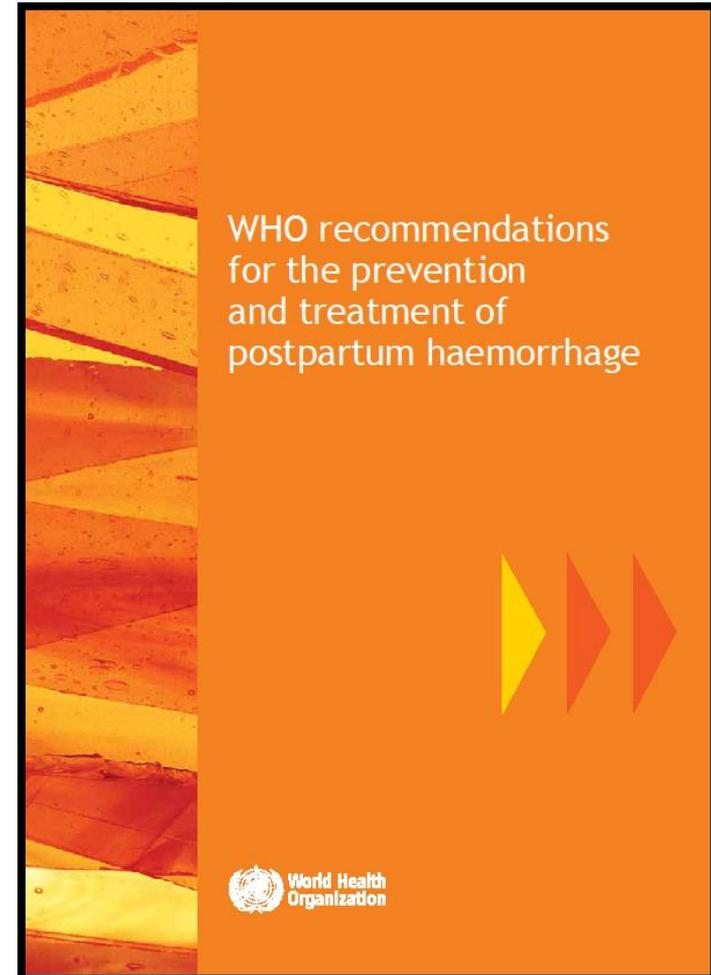
- Taking misoprostol before birth
- More cases reported when distributed at any ANC visit compared to home distribution
- More cases when distributed by health worker or ANC provider compared with distribution by any other distributing cadre.

[return](#)

WHO Recommendations for Prevention and Treatment of PPH (2012)

- *If a skilled attendant is not present, and oxytocin is not available (such as at unattended home birth), lay health workers should administer 600 mcg of oral misoprostol.*
- *There is insufficient evidence to recommend the antenatal distribution of misoprostol to pregnant women for self-administration for the prevention of PPH.*
 - The GDG acknowledged that a number of countries have embarked on community-level programmes of
 - misoprostol distribution and considered that this should be done in the context of research (where reliable
 - data on coverage, safety and health outcomes can be collected)

[return](#)



Results: *Distribution and Coverage Rates*

	Distribution Timing				Distributing Cadre			Administration Method		
	ANC Distribution		Home Visit (late pregnancy)	At home birth	CHW	TBA	Health worker	Self	TBA	SBA
	Any visit	Late visit								
Distribution Rate or Rate Range	22.5–49.1%	21.0–26.7%	54.5–96.6%	22.5–83.6%	54.5–96.6%	25.9–86.5%	21.0–49.1%	21.0–96.6%	25.9–86.5%	22.5%
Coverage Rate or Rate Range	16.8–65.9%	16.2–35.9%	55.7–93.8%	16.8–73.5%	87.9–93.8%	35.9–73.5%	16.2–65.9%	16.2–93.8%	35.9–73.5%	16.8%

Distribution of misoprostol by community workers (TBAs or CHWs) during home visits late in pregnancy achieved greatest distribution and coverage.

[return](#)

Distribution and Coverage Rates

- Distribution rates: 21.0% - 96.6%
 - % of women in target population who got misoprostol
- Coverage rates: 16.2% – 93.8%
 - % of women who delivered at home who used misoprostol

[return](#)

Thank you!

www.mchip.net

Follow us on:





Prevention of Post-partum Hemorrhage through use of Misoprostol in Nepal

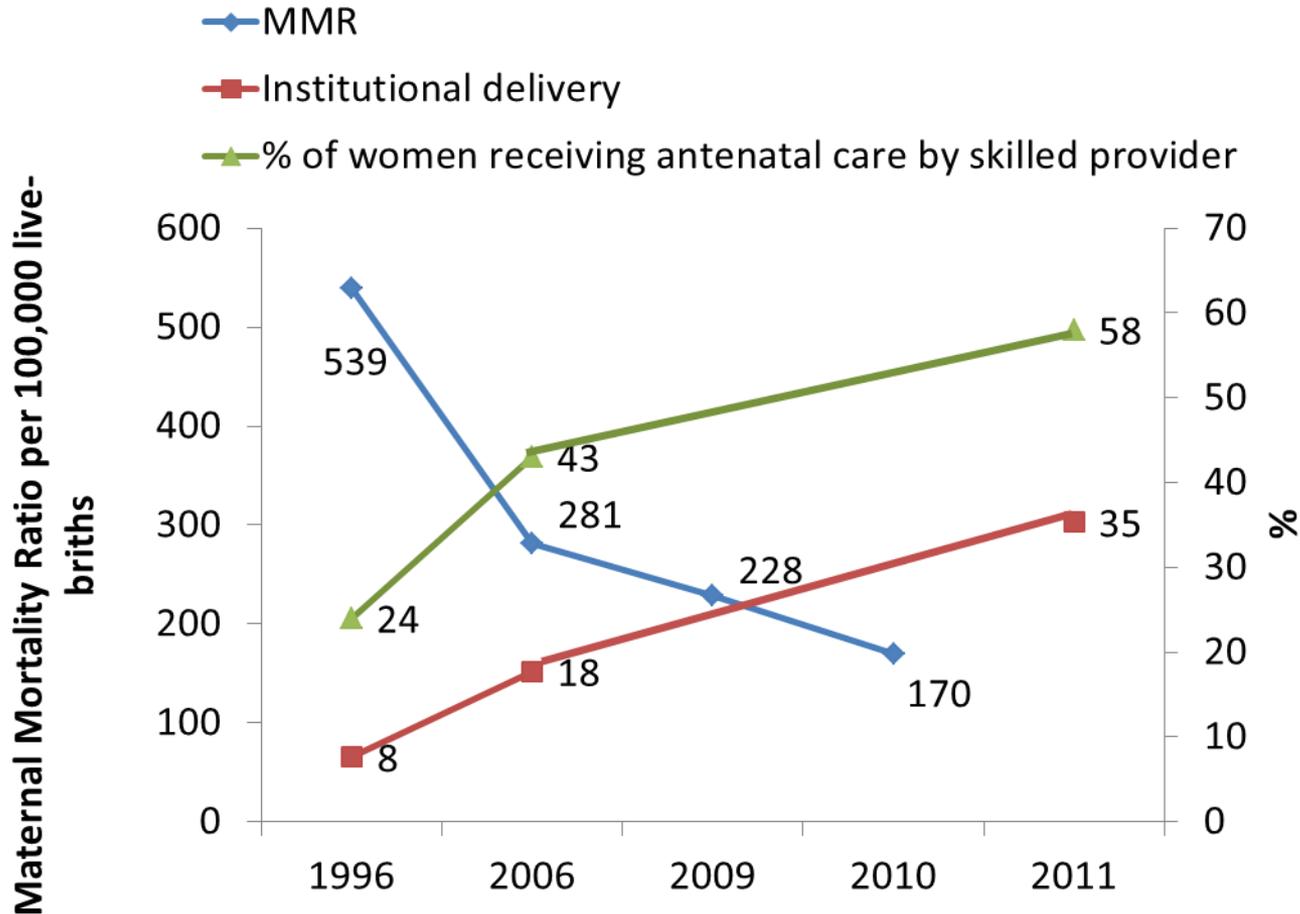
Om Khanal
Family Health Division, DoHS
Nepal

Background



- PPH one of the leading causes of maternal deaths
- Low uterotonic coverage (oxytocin or misoprostol)
- High home births & low institutional deliveries
- Low staff retention & high absenteeism in remote areas

Maternal health status



- ✓ Legalization of Abortion (2002)
- ✓ Safe Abortion Service (2004)
- ✓ Introduction of financial incentive (2006- MIS)
- ✓ SBA Policy (2006)
- ✓ CEONC (2006)
- ✓ Human resources provision (ANM, SN)
- ✓ Safe Blood Programme (2008)
- ✓ Aama (2008)
- ✓ Expansion of Birthing Centers, hospitals
- ✓ Focus on key interventions
- ✓ Overall socio-economic development
- ✓ Policy and political commitment
- ✓ Maternal Death Review

Current Strategy of Government of Nepal for Preventing PPH

Prevention of PPH

Active Management of Third Stage of Labour (AMTSL)

Use of Misoprostol at homebirth

Only Health Workers can do AMTSL

Feasible in community setting



Preliminary work for piloting Misoprostol in Nepal

Policy considerations

Jan 2004 - Nepal
GoN committed to
pilot following
Bangkok
workshop

Apr 2004 - Discussion
with professional
organizations, Safe
Motherhood Sub-
Committee

Sept 2004-
Formation of
Technical
Advisory
Committee

Feb 2005-
NHRC approval
for pilot

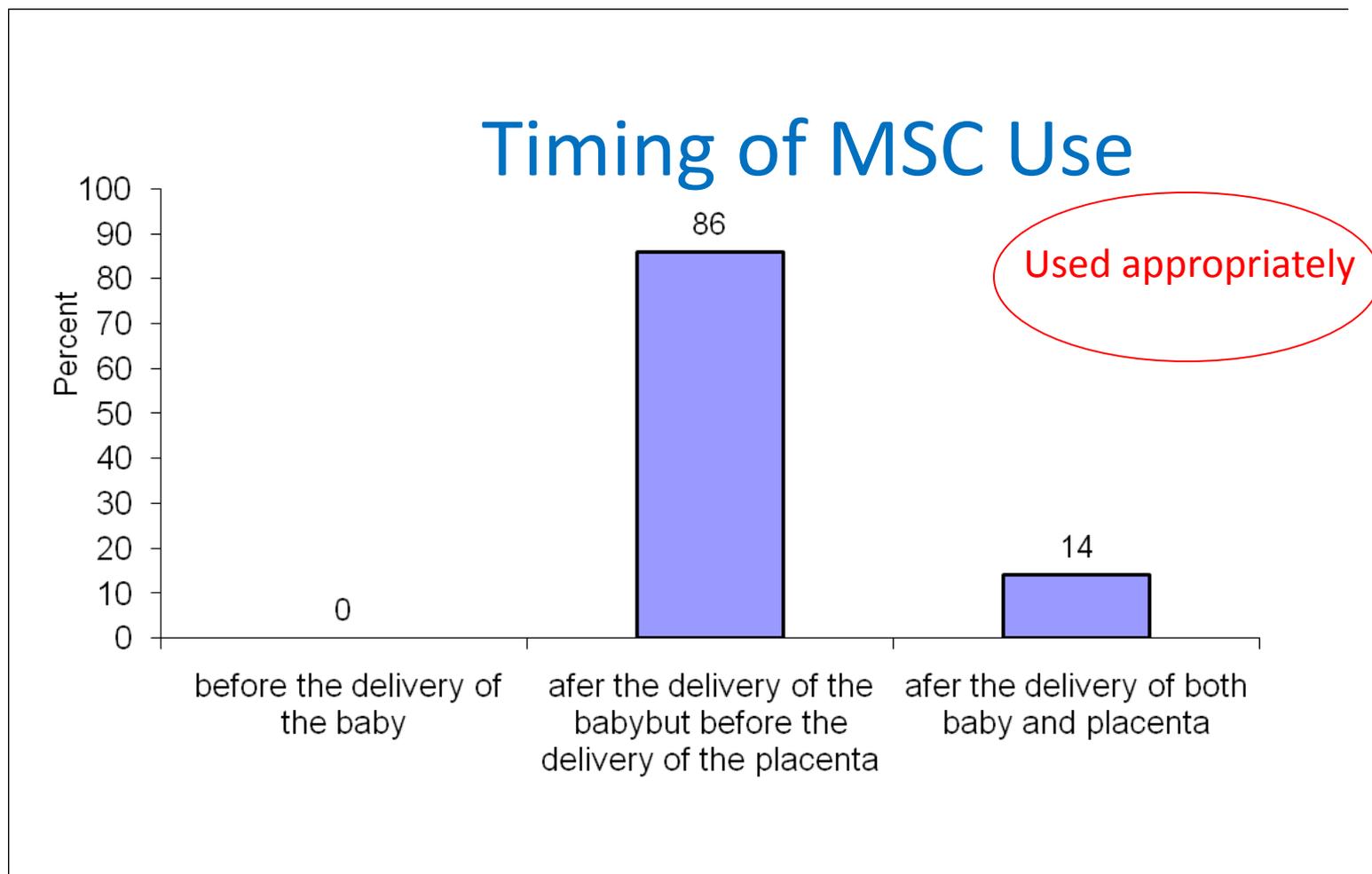
Introduction and pilot

Professional experience
and hospital data
suggesting high risk for
PPH

Background of PPH prevention through use of Misoprostol programme (Misoprostol programme)

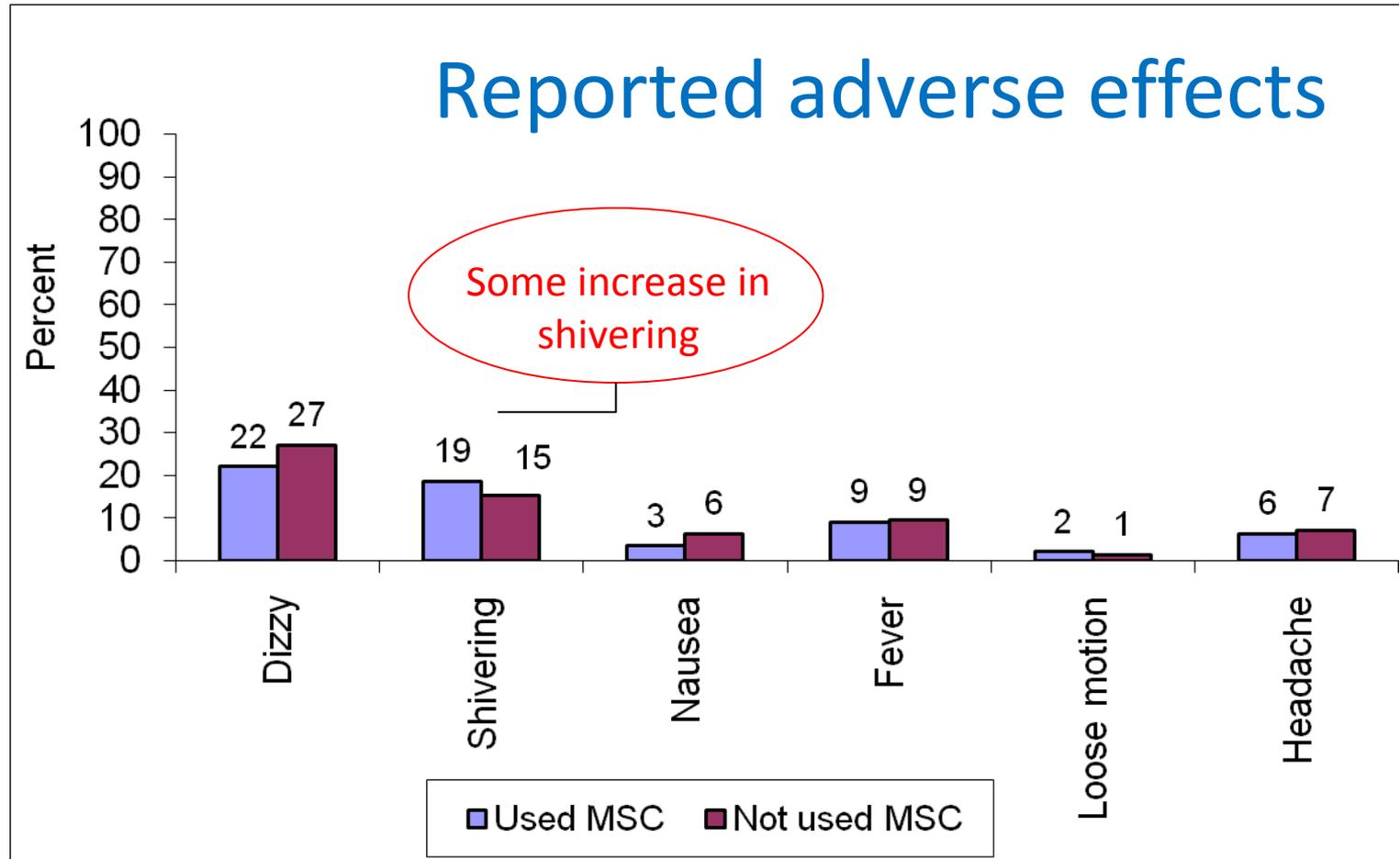
- Initiated in 2005 as pilot programme
- Piloted in Banke district (southern plain) with high caseload of PPH
- Evaluation was conducted at the end of piloting phase

Results from follow-up survey

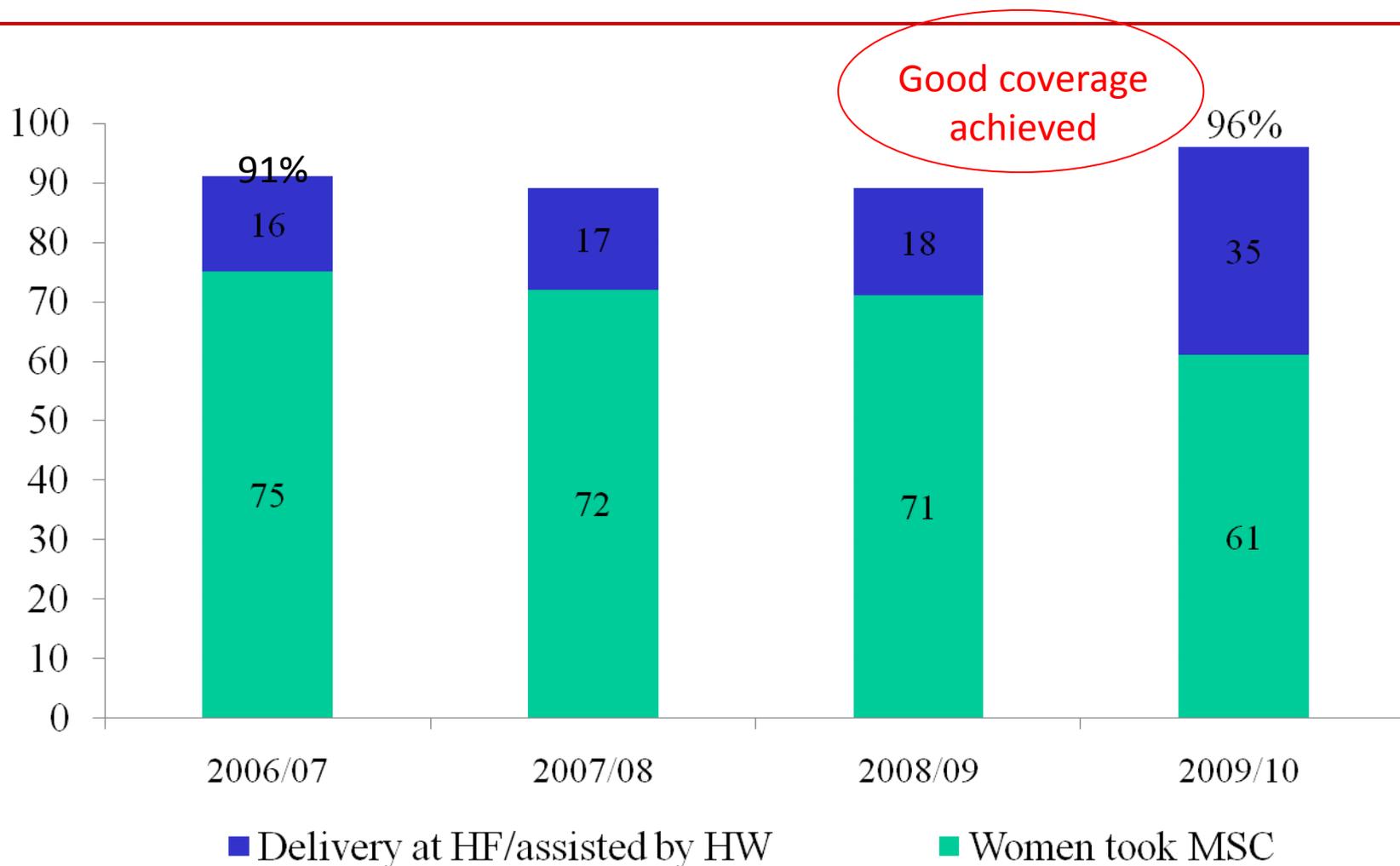


(Data source: NFHP follow-up survey, 2007)

Results from follow-up survey

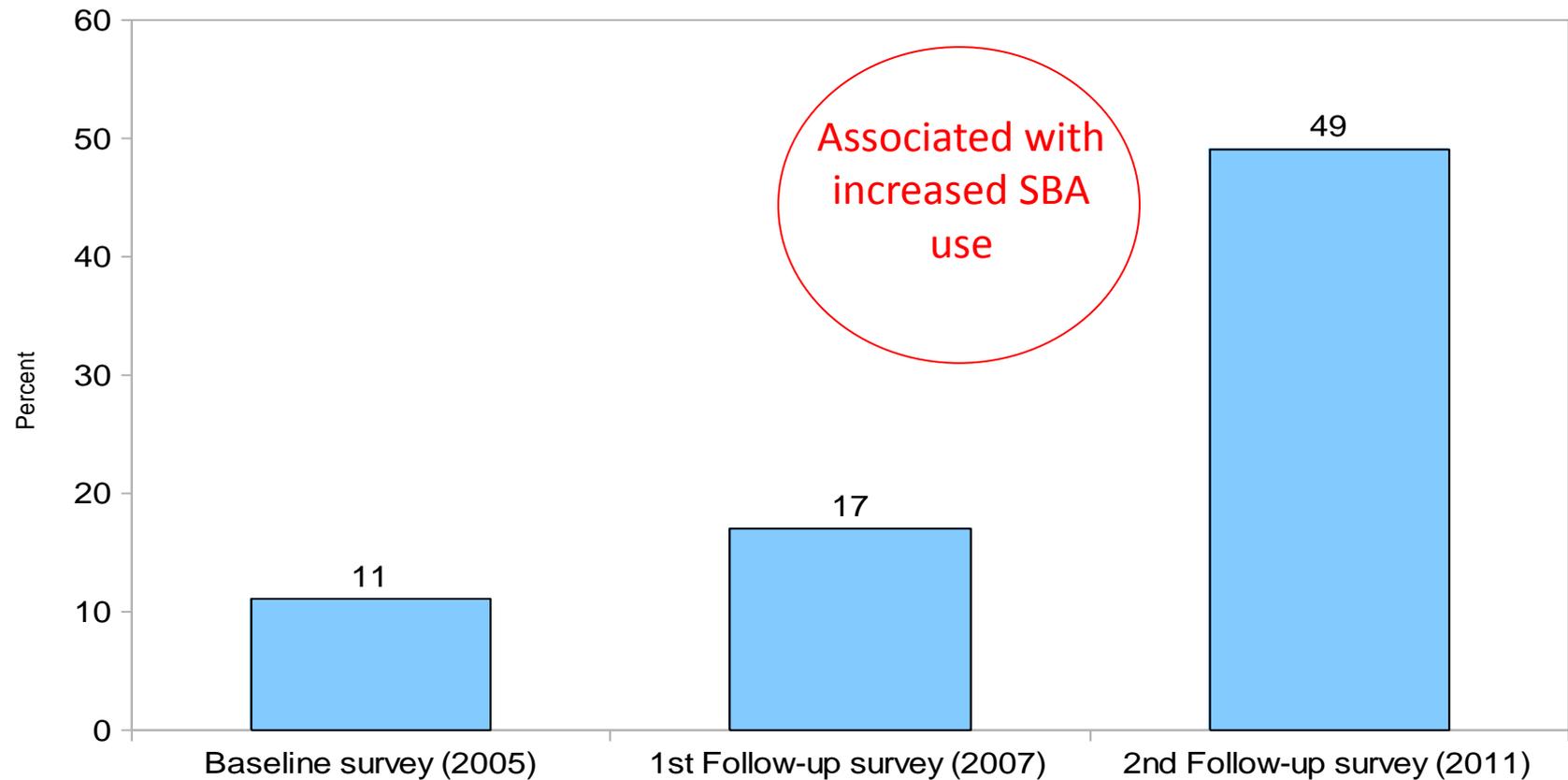


Results from follow-up survey



(Assumes oxytocin use)

Results from follow-up survey



Conclusion: Pilot Success in Banke

- Significant increase of uterotonic coverage
- High coverage in government system with mobilization of FCHVs
- Adverse effects were not a significant problem
- Misoprostol can and should be implemented with efforts to increase Skilled Birth Attendants use
- High degree of correct use, efficacy and safety
- Suggestive to scale-up in other districts



Increase the ANC visit, Institutional delivery and PNC visit.

Scale up from pilot

Policy considerations

Mar 2010-

Nepal country team committed for national level expansion of MSC (Reconvening BKK conference)

April/May 2010-

Sharing and advocacy at the national level

June 2010-

MOHP approved for national level expansion

July 2010-

Developed implementation guidelines

Expansion to national level

Programme has been expanded to

30 districts

10 Districts are expanding this year

Misoprostol has been listed as essential drug

Programme will be gradually expanded to 75 districts

Integration of the programme through Birth Preparedness Package

“समुदायमा आधारित मातृ तथा नवशिशु स्वास्थ्य सेवा सुदृढीकरण”



नेपाल सरकार
स्वास्थ्य तथा जनसंख्या मन्त्रालय
स्वास्थ्य सेवा विभाग
परिवार स्वास्थ्य महाशाखा, टेकु

Component of BPP

1. Care during delivery
2. Birth Preparedness (Preparation of essential items for delivery, such as clean delivery kit)
3. Post partum care
4. Complication readiness (arranging access to funds, means for emergency transportation and medical care and prior identification of blood donors)
5. New born care
6. Danger signs
- 7. Misoprostol (Matri Suraksha Chakki)**
8. Family Planning

Community service delivery system



Health workers/
Health facilities



FCHV



Woman & newborn

- FCHVs and HWs work closely for promotion of ANC, Institutional delivery and PNC
- At 8th month, FCHVs distributes Misoprostol.
- During PNC home visits confirms use and retrieves if unused

What FCHV do

- **On first visit during pregnancy**
 - Counsel using Jeevan surakshya flip chart.
 - Provide jeevan surakshya card to pregnant mother.
- **On 8th month of pregnancy**
 - Counsel using jeevan Surkshya flip chart.
 - Provide Misoprostol after counselling
- **On Post partum visit**
 - In case of institutional delivery- take back mesoprostol
 - In case of Home delivery - ensure use of mesoprostol



FCHV identify pregnant mother and Counsel her and her family member using flip chart



FCHV Provides health education to mothers group on mothers group meeting

"समुदायमा आधारित मानु तथा नवशिशु स्वास्थ्य सेवा मुद्राङ्कण"

मातृ तथा नवशिशु स्याहार

महिलाको नाम:
डेगाना:

बच्चा जन्मने अनुमानित महिना

वै जे अ सा भा आ का म पी मा फा वै

गर्भावस्थामा गर्नुपर्ने आवश्यक तयारीहरू

 स्वास्थ्य सस्थामा जाँच गर्नु पर्ने महिना	 जुकाको औषधी खाने	 टि. टि. खोप लगाउने	<p>महिना</p> <table border="1"> <tr> <td>चौधौ</td> <td>पाँचौ</td> <td>छैटौ</td> <td>सातौ</td> <td>आठौ</td> <td>नवौ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>गर्भावस्थामा आईरन चककी खाने</p>			चौधौ	पाँचौ	छैटौ	सातौ	आठौ	नवौ						
चौधौ	पाँचौ	छैटौ	सातौ	आठौ	नवौ												

 गर्भावस्थामा पोषितो खानेकुरा खाने	 मुख, हात, नङ्ग, गुप्ताङ्ग तथा शरीर सफा राख्ने	 रक्सी चुरोट नखाने	 आराम गर्ने र गडौं भारी नबोक्ने
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 पैसाको व्यवस्था रू.	 स्वास्थ्यकर्मीको पहिचान नाम:	 स्वास्थ्य सस्थामा बच्चा जन्माउने तयारी नाम:	 यातायातको साधनको तयारी सम्यक:	 मुत्केरी सामग्री तयार राख्ने
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जन्म विवरण

स्थान:

 बच्चा जन्मेको मिति: साल महिना गते	 समय:	 स्वास्थ्य सस्थामा	 स्वास्थ्यकर्मीको सहयोगमा घरैमा	 घरैमा	 मातृ सुरक्षा चककी खाएको
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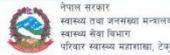
नवशिशुलाई जन्मने वित्तिकै गरिने अत्यावश्यक स्याहार

 शिशुलाई नरम, सफा र सुख्खा कपडाले पुछ्ने	 आमाको छातीमा टाँसेर राख्ने	 शिशु जन्मेको १ घण्टा भित्रै आमाको विगीती दूध खुवाउने	 कबच बाहेक नाभिमा केही पनि नलगाई सुख्खा र सफा राख्ने	 शिशु जन्मेको २२ घण्टापछि मात्र नुहाईदिने
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सुत्केरी स्याहार

 २४ घण्टा भित्र आमा र शिशुलाई जचाउने	 आईरन चककी खाने	 भिटामिन ए क्याप्सुल खाने	 शिशुलाई स्तनपान गराईराख्ने	 शिशुलाई खोप लगाउने	 परिवार नियोजनको साधन अपनाउने
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"प्रसूती गराउन स्वास्थ्य संस्थाभै जाओ"



खतराका लक्षणहरू

आमा र शिशुलाई तलका कुनैपनि खतराका लक्षणहरू देखिएमा तुरुन्त स्वास्थ्य संस्था लैजानुपर्छ

गर्भावस्थामा देखा पर्ने सक्ने खतराका लक्षण

 टाउको साँढे दुबेमा	 अर्खा तिरमिराएर धमिलो देख्ने भएमा वा हात तथा मुख सुनिएमा	 कडासित तल्लो पेट दुबेमा	 हात बुट्टा अर्रो भई काँप छुटेमा वा मुख परेमा	 योनीबाट अलिकति पनि रगत बगेमा
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बच्चा जन्माउने बेलामा देखा पर्ने सक्ने खतराका लक्षणहरू

 ८ घण्टा भन्दा लामो सुत्केरी व्यथा लागेमा	 पहिना हात, खुट्टा वा नाल निस्केंमा	 हात बुट्टा अर्रो भई काँप छुटेमा वा मुख परेमा	 बच्चा जन्माउनु अघि अथवा बच्चा जन्मिसकेपछि पनि धेरै रगत बगेमा
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सुत्केरी अवस्थामा देखा पर्ने सक्ने खतराका लक्षणहरू

 ज्वरो आएमा	 योनीबाट गन्नाउने पानी बगेमा वा तल्लो पेट (पाटेघर) दुबेमा	 धेरै रगत बगेमा	 टाउको साँढे दुबेमा	 हातबुट्टा अर्रो भई मुख परेमा
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नवशिशुमा देखिन सक्ने खतरा (संक्रमण)का लक्षणहरू

 आमाको दूध राधरी चुस्न नसकेमा	 सुस्त वा बेहोस / कम चलाई भएमा	 छिटो छिटो सास फेरेमा	 कडा कोखा हानेमा
 ज्वरो आएमा	 शिताङ्ग भएमा	 छालामा फोकाहरू आएमा	 नाइटो पाकेमा



FCHV provides Jeevan Surakshya Card to pregnant mother after counseling her

Misoprostol Messages incorporated in Jeevan Surakshya Flip Chart.



Matri Suraksha Chakki (Misoprostol)

When to take misoprostol



Side effect and its management

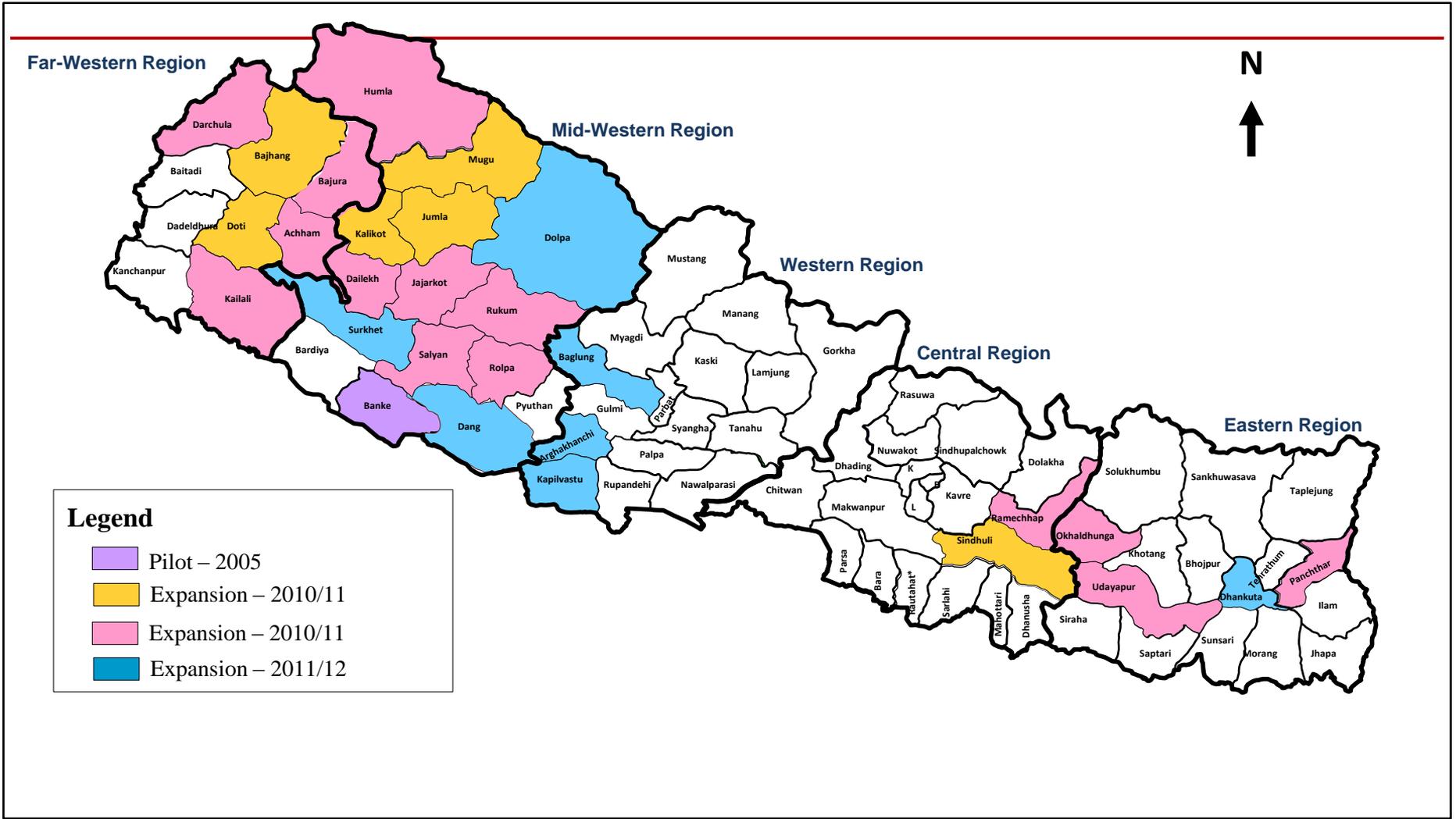


Warning: Not to take misoprostol before delivery of baby



What to do if PPH continuous

Misoprostol implemented districts



Support of EDPs/INGOs

In 2011/12 several external development partner (EDPs) such as NFHP II/USAID, UNICEF, UNFPA UMN, RHDP/SDC, Care Nepal and Plan Nepal

Supported this initiative

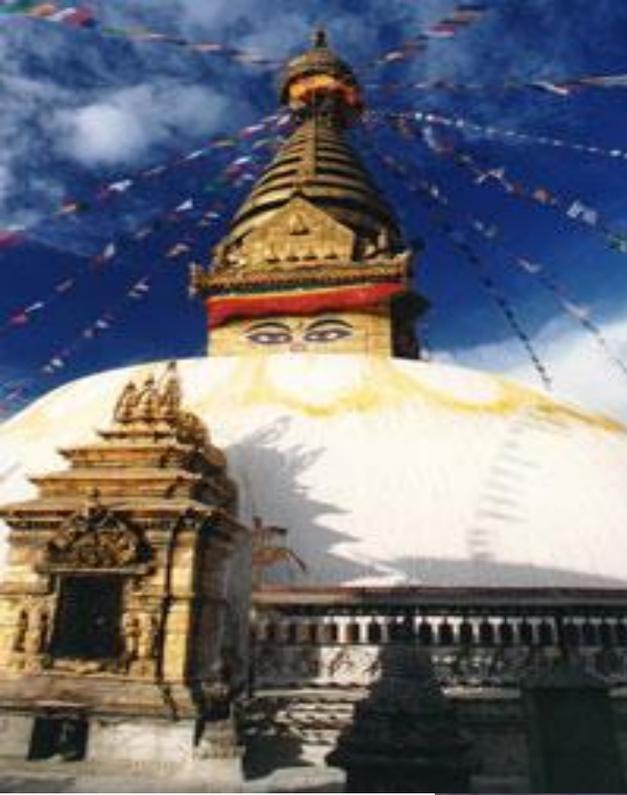


Challenges/Problems



- Distribution of Misoprostol, ensuring availability, and transportation upto remote areas.
 - Collection of reports from grassroots level.
 - Program expansion/coverage only in partner-supported districts limiting the expansion in some priority districts
 - Ensuring the quality of training to FCHVs
 - Ensuring the use of Misoprostol only in PPH
 - Misoprostol distribution from social marketing following recommended steps
-

THANK YOU





USAID
FROM THE AMERICAN PEOPLE



Maternal and Child Health
Integrated Program

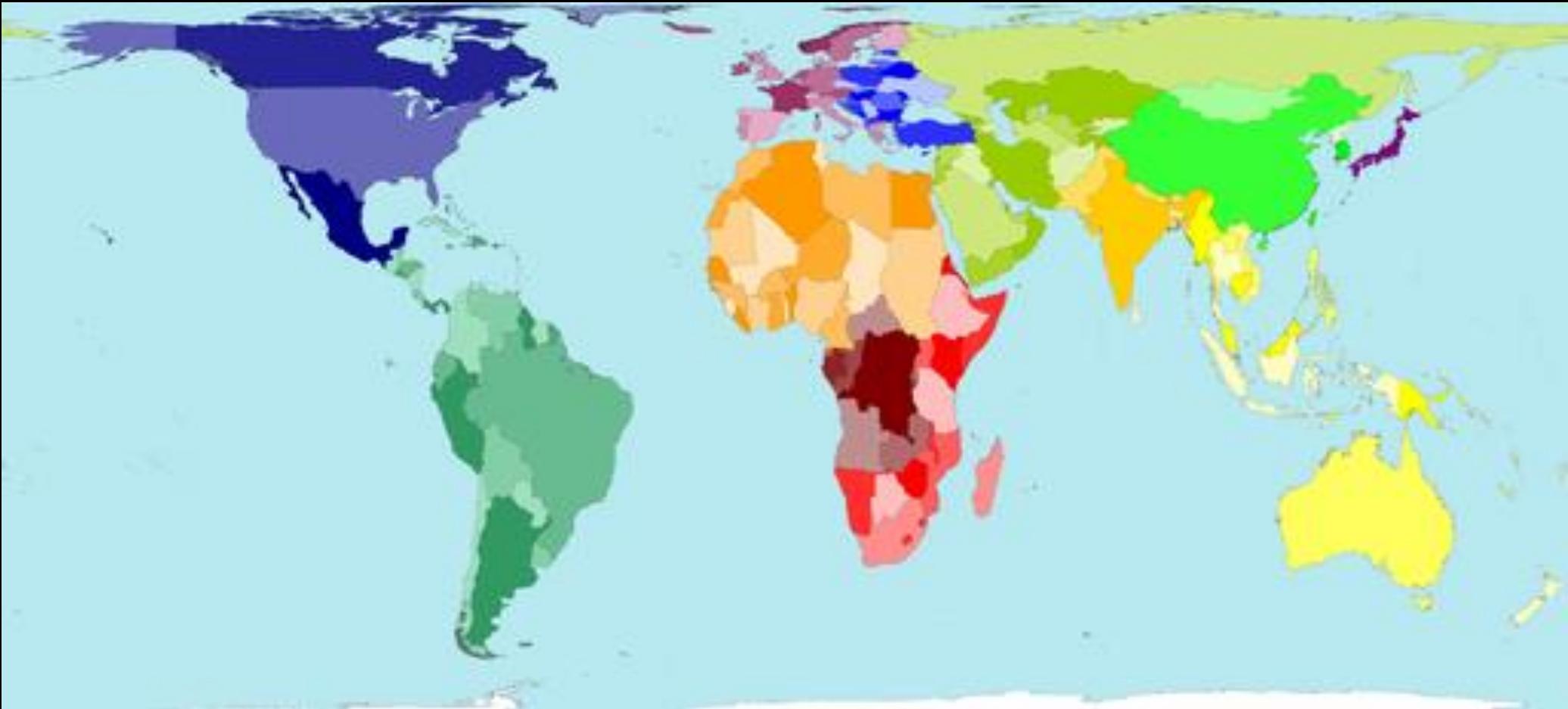
Postpartum Hemorrhage: Prevention & Management

The Context for Action

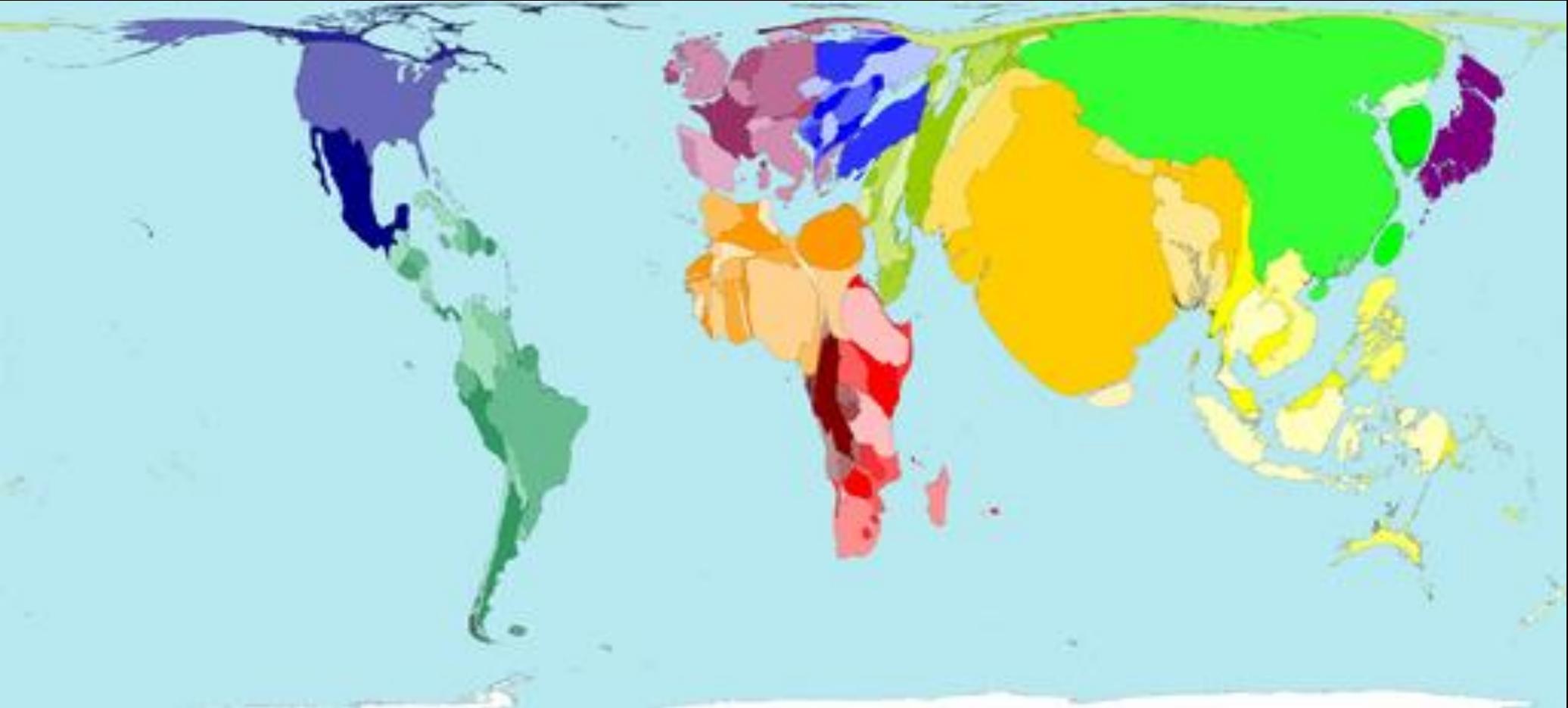
December 2013



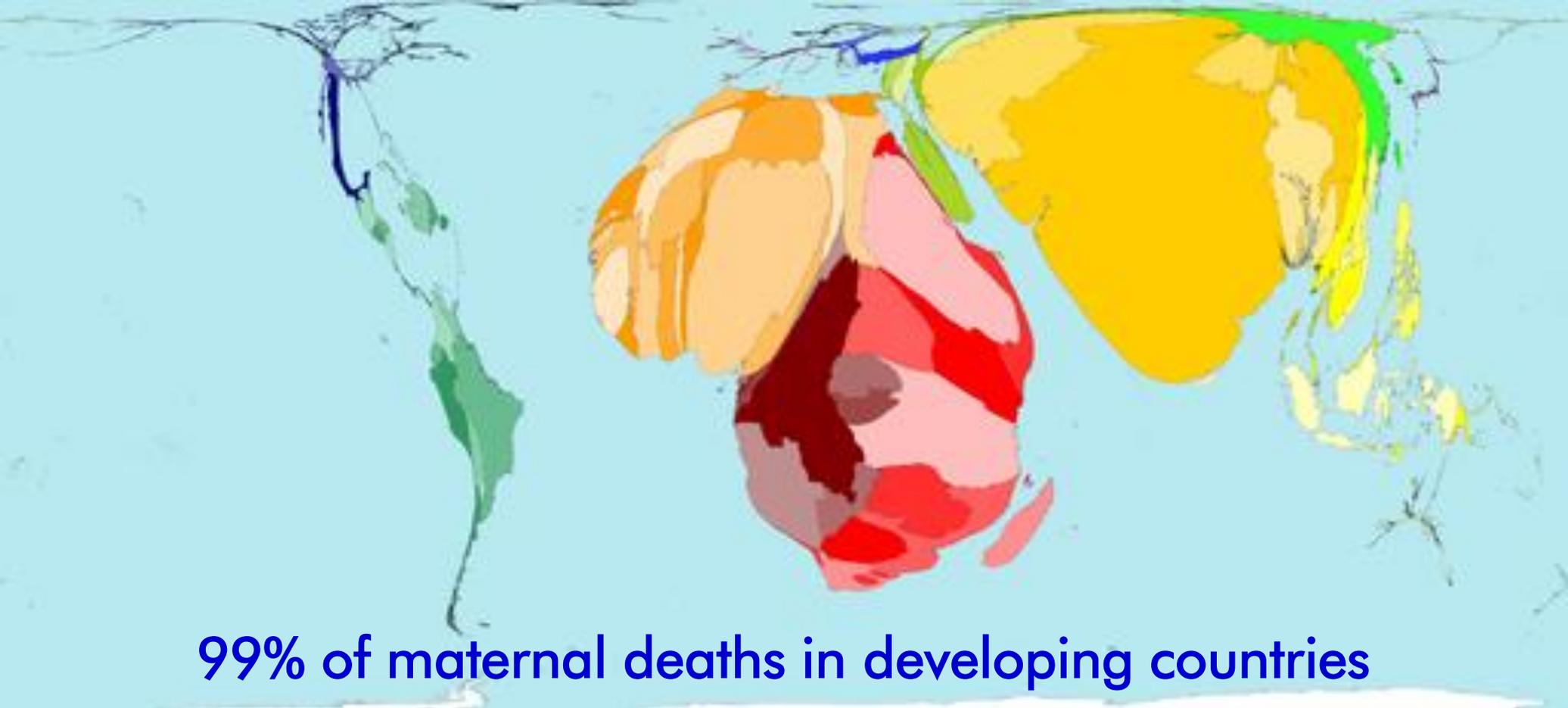
World Political Map



World Map in Proportion to Population



World Map in Proportion to MMR



99% of maternal deaths in developing countries

Maternal mortality is the global health indicator with largest disparity between developed and developing countries

Causes of Maternal Death

- Hemorrhage
- Eclampsia
- Sepsis
- Abortion
- Obstructed labor
- HIV

- 75% of maternal death due to 5 main causes

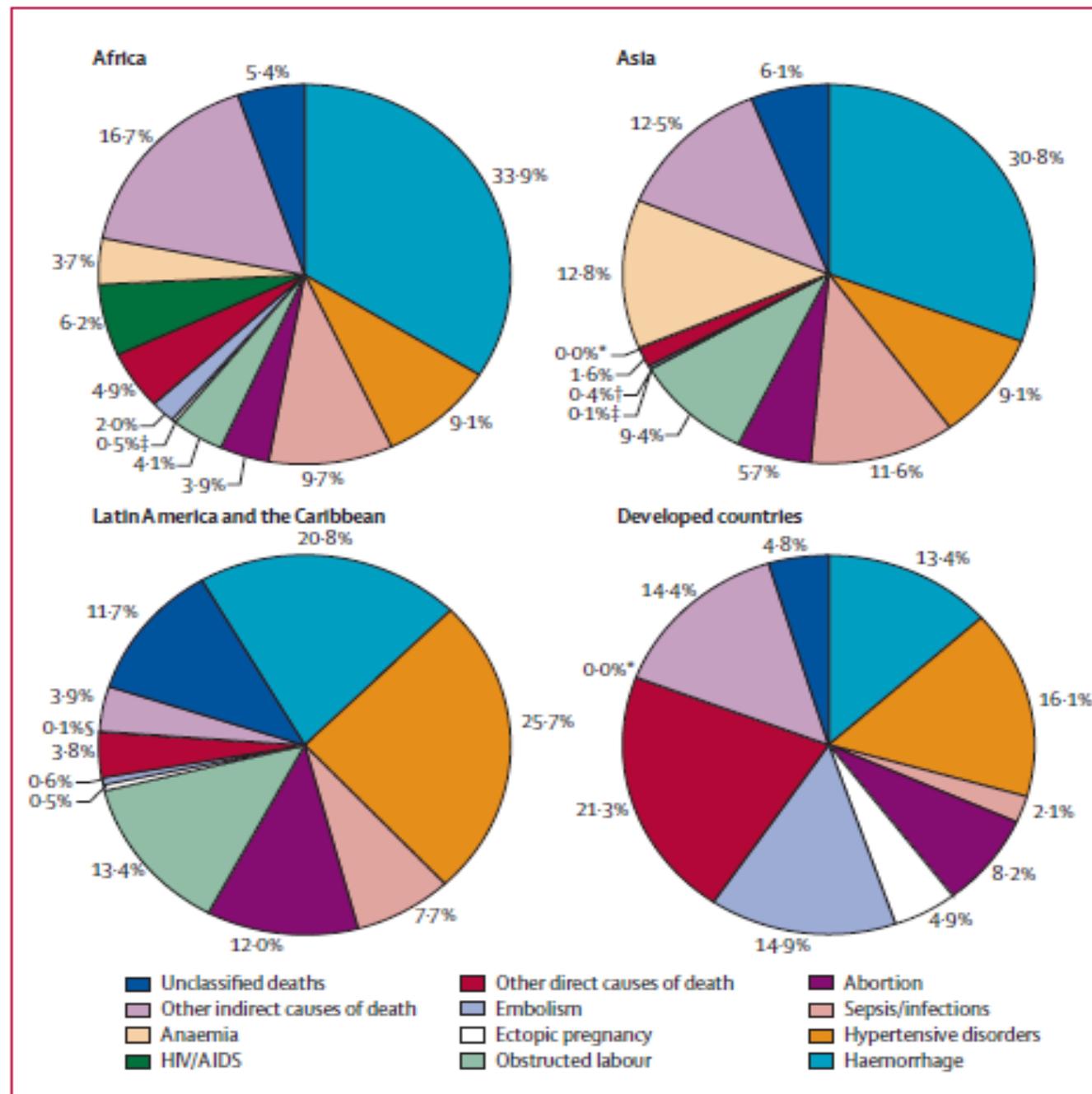


Figure 3: Geographical variation in distribution of causes of maternal deaths
 *Represents HIV/AIDS. †Represents embolism. ‡Represents ectopic pregnancy. §Represents anaemia.

Comprehensive PPH Reduction Approach

PROMOTION OF COMPREHENSIVE PACKAGE OF INTERVENTIONS TO PREVENT AND MANAGE PPH

**EDUCATION: Birth planning/complication readiness;
Promotion of ANC; encouragement of facility birth with SBA**

Facility Birth:

- Correct management of labor and birth, including partograph
- Routine administration of uterotonic immediately after birth (oxytocin preferred, if not, misoprostol)
- Uterotonic availability and quality
- Postpartum vigilance for PPH
- Proper management of PPH

Transport:

- Initial dose of uterotonic
- Use of Non-pneumatic Anti Shock Garment

Home Birth:

- Education about PPH detection
- Education about use of misoprostol
- Advanced distribution of misoprostol for self administration after birth
- Education about what to do for continued bleeding

PPH Prevention & Management

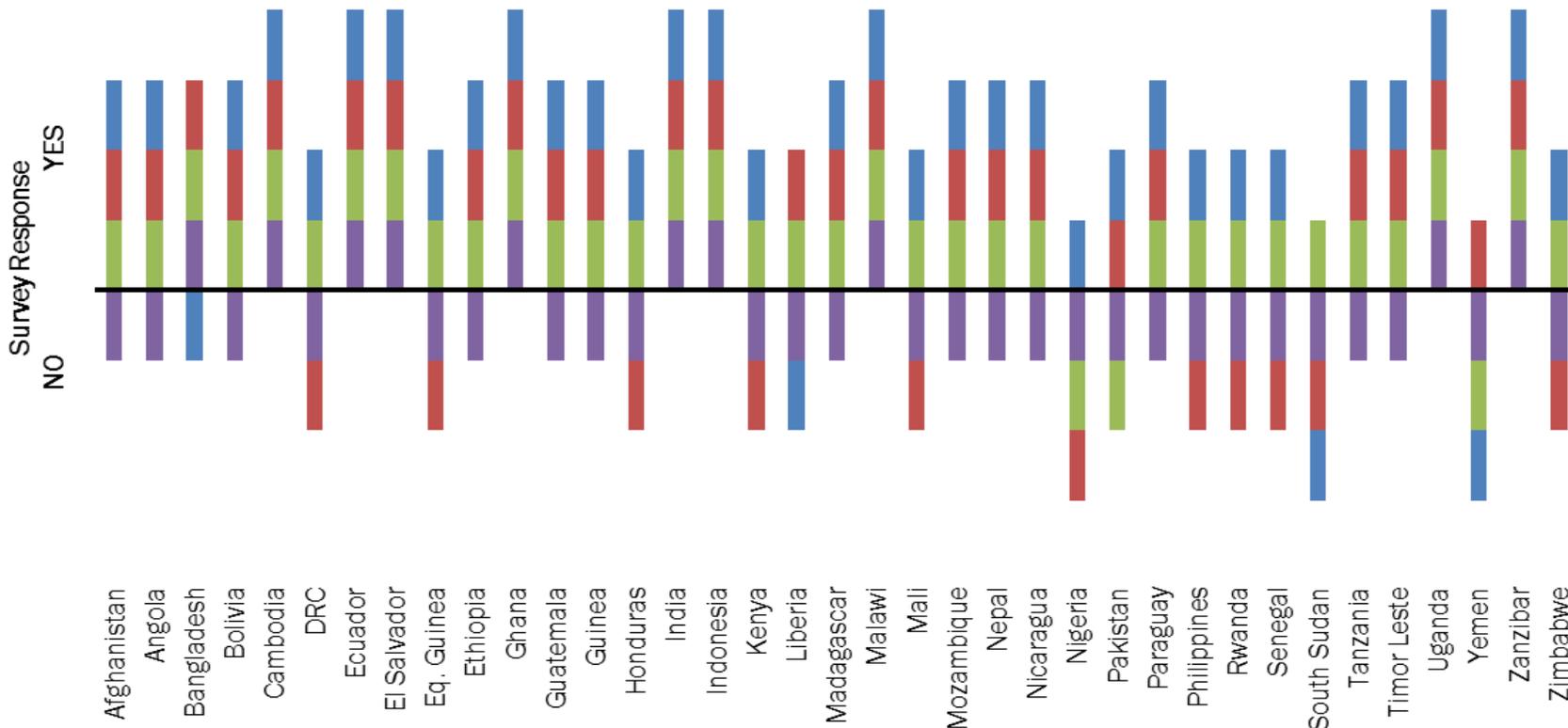
	PPH PREVENTION	PPH MANAGEMENT
WITHOUT AN SBA	<ul style="list-style-type: none"> Community awareness—BCC/IEC Birth preparedness/complication readiness (BP/CR) Promotion of skilled attendance at birth Family planning and birth spacing Prevention, detection and treatment of anemia Advanced distribution of misoprostol for self-administration 	<ul style="list-style-type: none"> Complication readiness Community emergency planning Transport planning Referral strategies Use of misoprostol to treat PPH
WITH AN SBA	<ul style="list-style-type: none"> Community awareness—BCC/IEC Antenatal care (including BP/CR) Prevention, 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 3rd stage of labor (AMTSL) Routine inspection of placenta for completeness Routine inspection of perineum/vagina for lacerations Routine immediate postpartum monitoring Vigilant monitoring during “4th stage” of labor 	<ul style="list-style-type: none"> Active triage of emergency cases Rapid assessment and diagnosis Emergency protocols for PPH management Basic emergency obstetric and newborn care (EmONC) Intravenous fluid resuscitation Manual removal of placenta, removal of placental fragments, suturing genital lacerations Parenteral uterotonic drugs and antibiotics Comprehensive EmONC Blood bank/blood transfusion Operating theater/surgery

Theme 1A: Availability of Uterotonics

Survey responses from 37 countries: Drug availability - uterotonics

Survey Questions

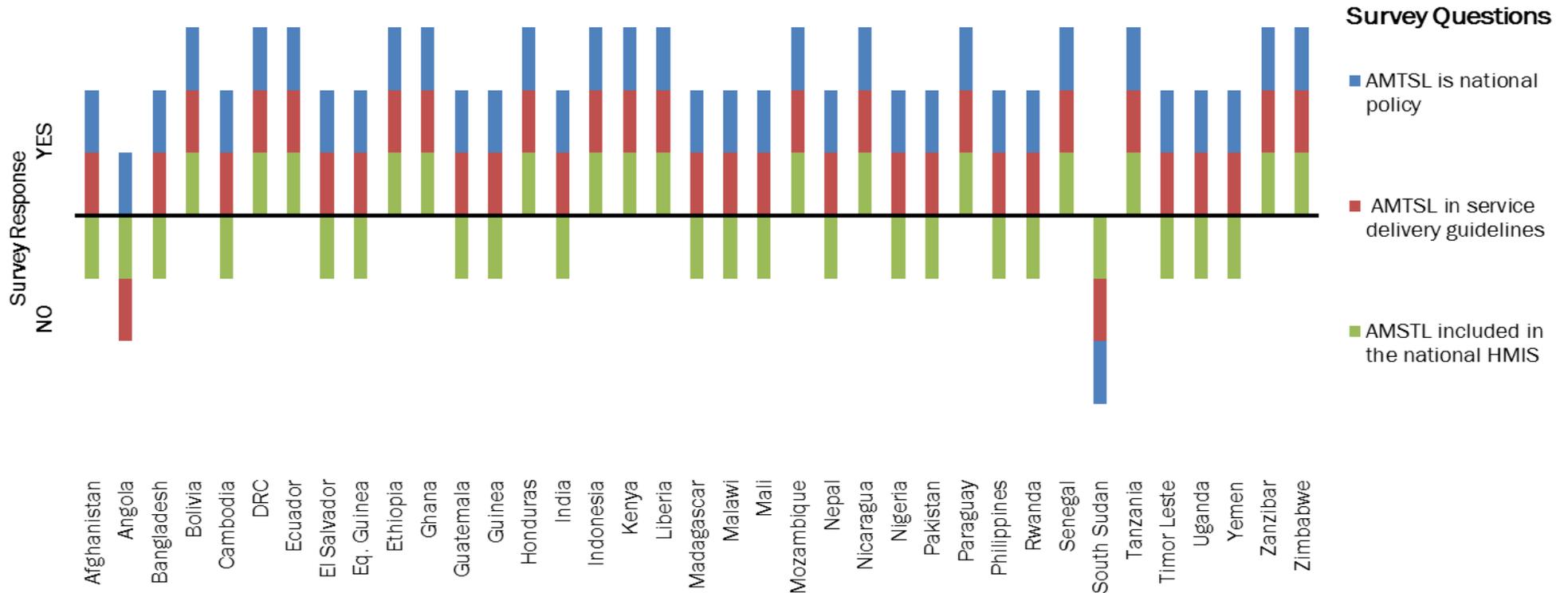
- Oxytocin regularly available in facilities
- Oxytocin free of charge to patients at public facilities
- Oxytocin currently available at the MOH medical store
- Misoprostol regularly available in facilities



USAID-supported countries surveyed January to March 2012

Theme 3: AMTSL

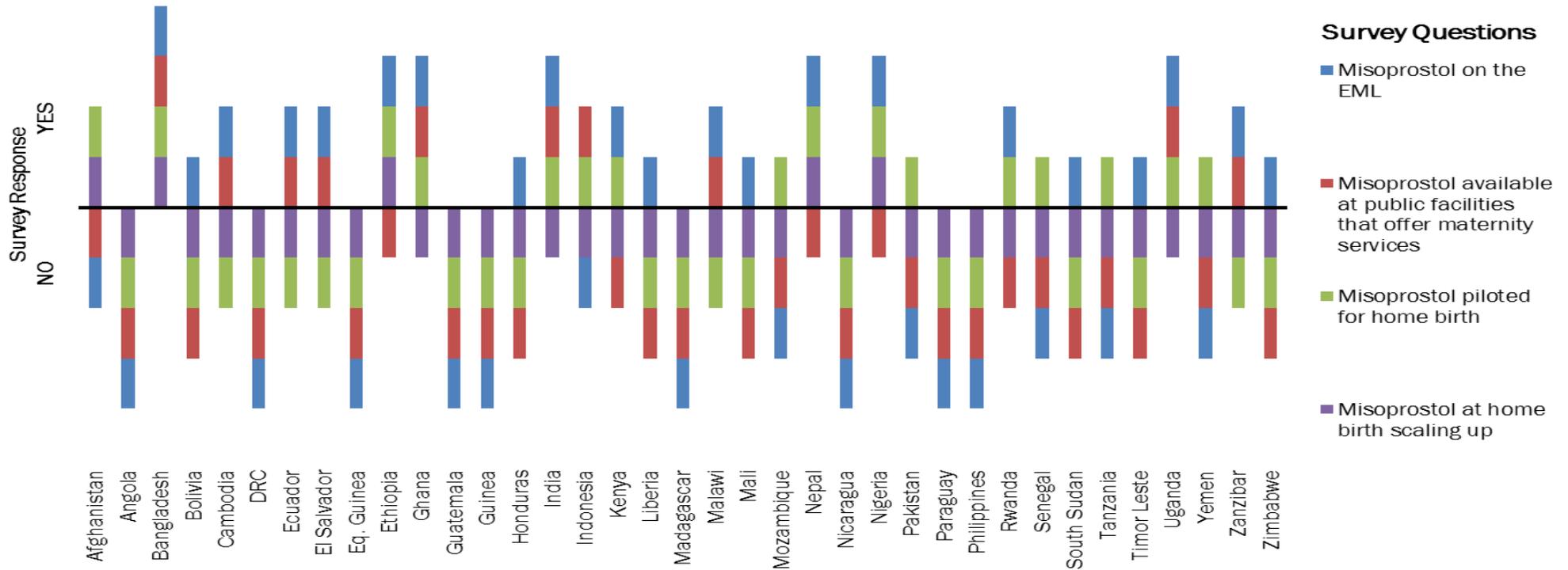
Survey responses from 37 countries: AMTSL



USAID-supported countries surveyed January to March 2012

Theme 4: Misoprostol

Survey responses from 37 countries: Misoprostol



USAID-supported countries surveyed January to March 2012

Active Management of the Third Stage of Labor (AMTSL)



1. Administration of a uterotonic agent within one minute after the baby is born (oxytocin is the uterotonic of choice);
2. Controlled cord traction while supporting and stabilizing the uterus by applying counter traction;
3. Uterine massage after delivery of the placenta.

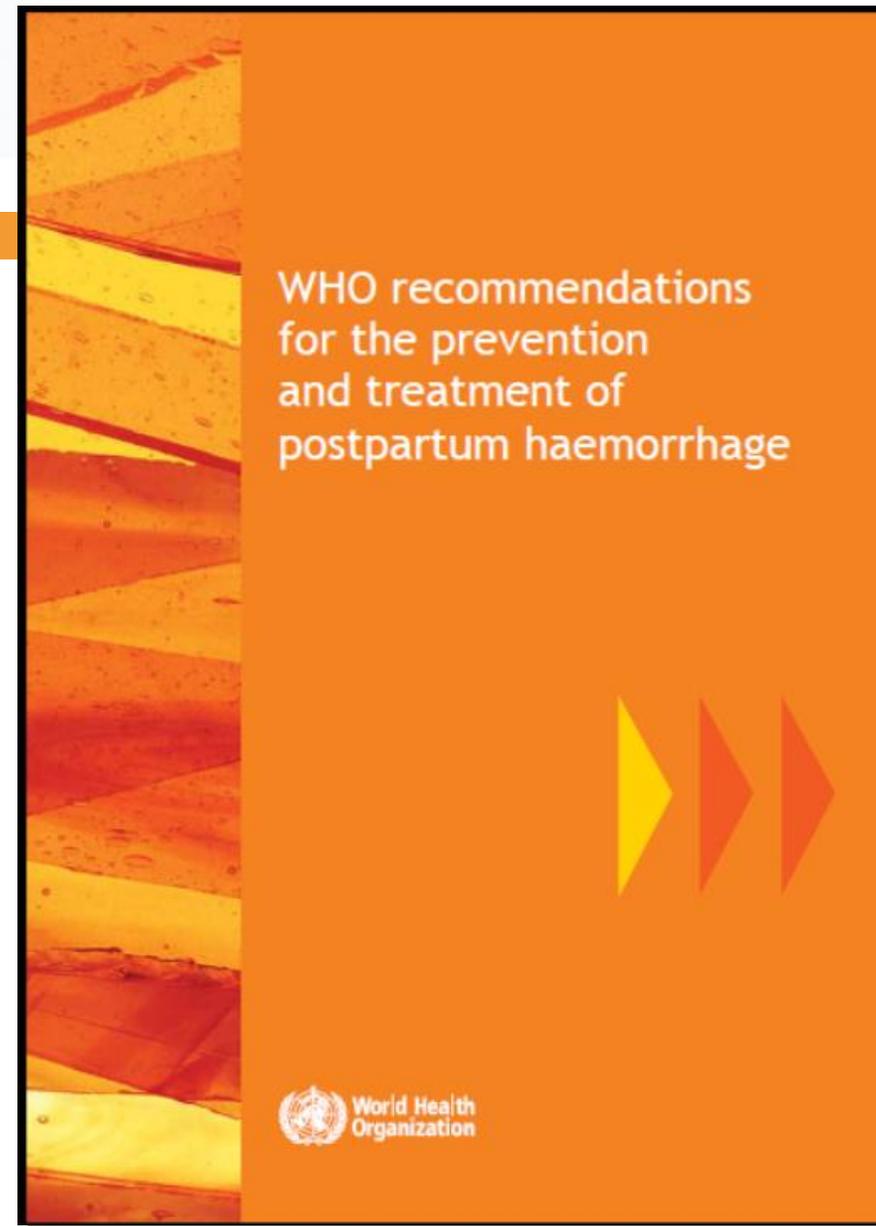
Active Management of the Third Stage of Labor (AMTSL) – new approach



1. Administration of a **uterotonic** agent within one minute after the baby is born (oxytocin is the uterotonic of choice);
2. **Delayed cord clamping** of 1 – 3 minutes while starting ENC
 - +/- Controlled cord traction
3. **Postpartum vigilance** to ensure uterine tone and no bleeding
 - +/- Uterine massage after delivery of the placenta.

New WHO Guidelines September 2012

- Main changes:
 - Focus on uterotonic in AMTSL
 - Promote delayed cord clamping
 - Misoprostol can be administered by community-level health worker
 - Advanced distribution of misoprostol for self administration – in context of research or strong M&E



Focus on Uterotonic: UN Commodities Commission

- Maternal Health:
 - Oxytocin, MgSO₄ and misoprostol
- Quality of medicines
 - Manufacturing and storage
- Appropriate use & appropriate demand
- Market shaping



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Active Management of the Third Stage of Labor (AMTSL) – **Main messages**

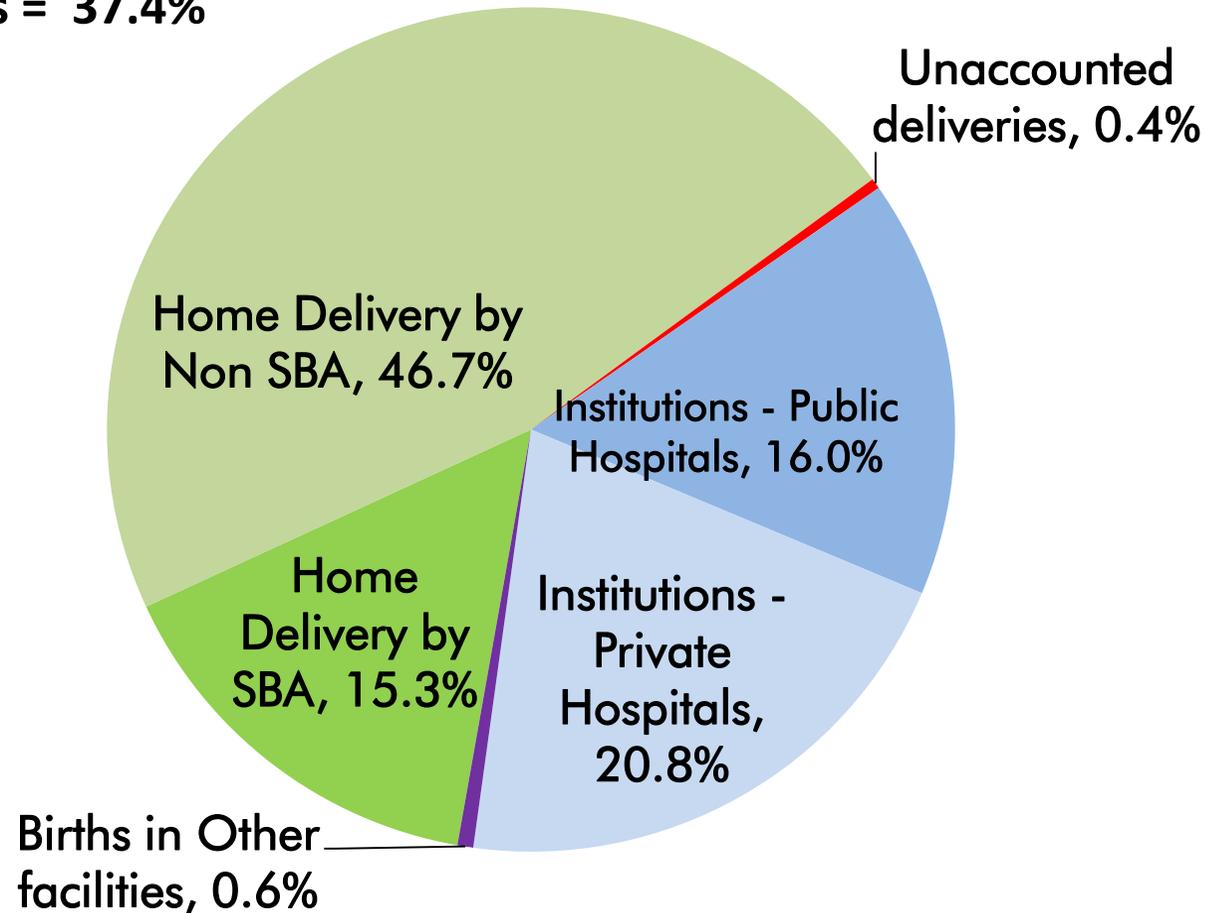
1. **Every woman should be given a uterotonic agent**, preferably oxytocin, within one minute after the baby is born
2. **Quality and supply** of oxytocin must be given priority
3. **Postpartum vigilance must be carried out for all women following delivery** to control any persistent bleeding and to prevent unrecognized postpartum hemorrhage.



STEP 2: LOCATION OF BIRTHS JHARKHAND (AHS, 2010 - 2011)

Home deliveries = 62.0%

Institutional deliveries = 37.4%



STEP 3: ESTIMATED COVERAGE ESTIMATE FOR UUTSL IN JHARKHAND (WITHOUT DRUG QUALITY ADJUSTMENT)

	% Births	Effective % UUTSL	Contribution to state covg.
HOME BIRTH – Attended by SBA	15.3%	85%	13.0%
HOME BIRTH – NOT Attended by SBA	46.7%	0%	0%
PRIVATE FACILITIES	20.8%	90%	18.7%
PUBLIC FACILITIES – HOSPITALS AND HEALTH CENTERS	15.8%	75%	11.8%
PUBLIC FACILITIES – Births by non-skilled personnel	0.2 % (1% of 16%)	0%	0%
COVERAGE ESTIMATE – UTEROTONIC USE IN 3RD STAGE			43.5%

* Numbers in the table with appreciable uncertainty

The expert panel believes this number is probably quite close to the true value; given the level of precision of the estimate, it is reported to the nearest whole number.

Access to Health Services

Formal Health System

Community Health System

Private Health System

Commercial Health System

Prevention when possible

Advanced distribution of
misoprostol
for self administration
by the woman/family
at home
in the case of home birth



Post Partum Haemorrhage (PPH) Prevention in India: Challenges and Solutions

Dr. Manisha Malhotra
Deputy Commissioner (DC-MH)
MOHFW, GoI, New Delhi



Government of India

NATIONAL RURAL HEALTH MISSION
Ministry of Health & Family Welfare
Govt. of India





History of Tajmahal !!!

Presentation Outline

- Situation analysis of maternal mortality in India
- PPH facts and figures
- PPH management and program implementation steps
- Challenges in Indian context
- Proposed solutions

Maternal Health Scenario

Global

- 180–200 million pregnancies per year
- 287000 maternal deaths (MMEIG - 2010)
- 1 maternal death = 30 maternal morbidities

Hogan et al., 2010

India

- 26 -30 million pregnancies per year
- 212 maternal deaths per lakh live births (SRS 2007-09)
- About 56000 maternal deaths per year (up to 19 % of global burden)

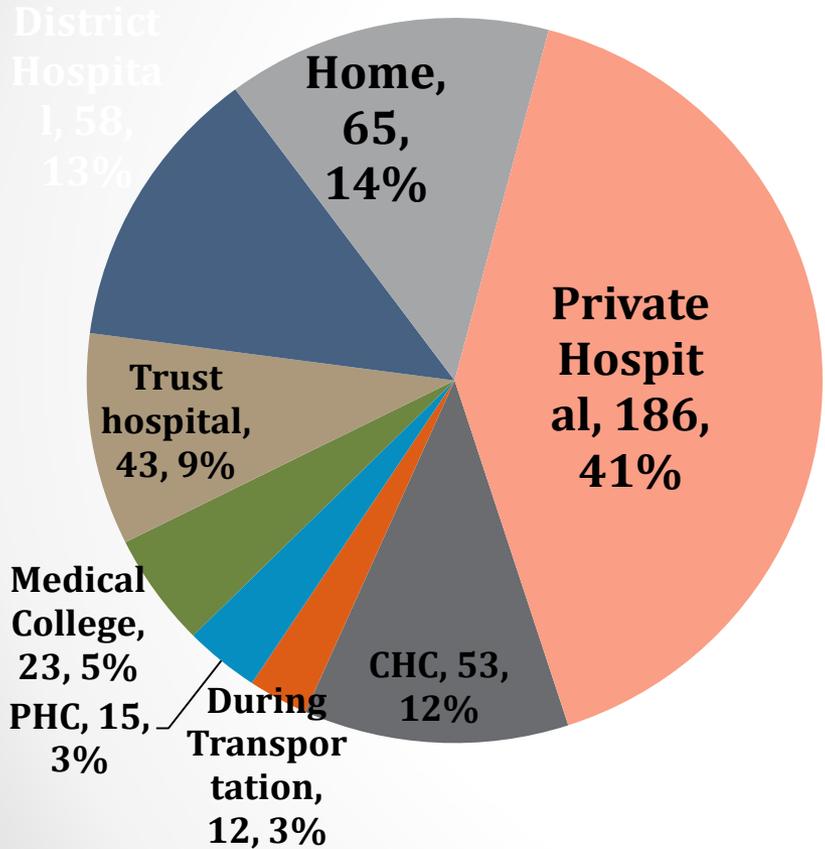
Estimate from Census 2011 figures

At the country level, two countries account for one third of global maternal deaths: India at 19% (56 000) of all global maternal deaths, followed by Nigeria at 14% (40 000)

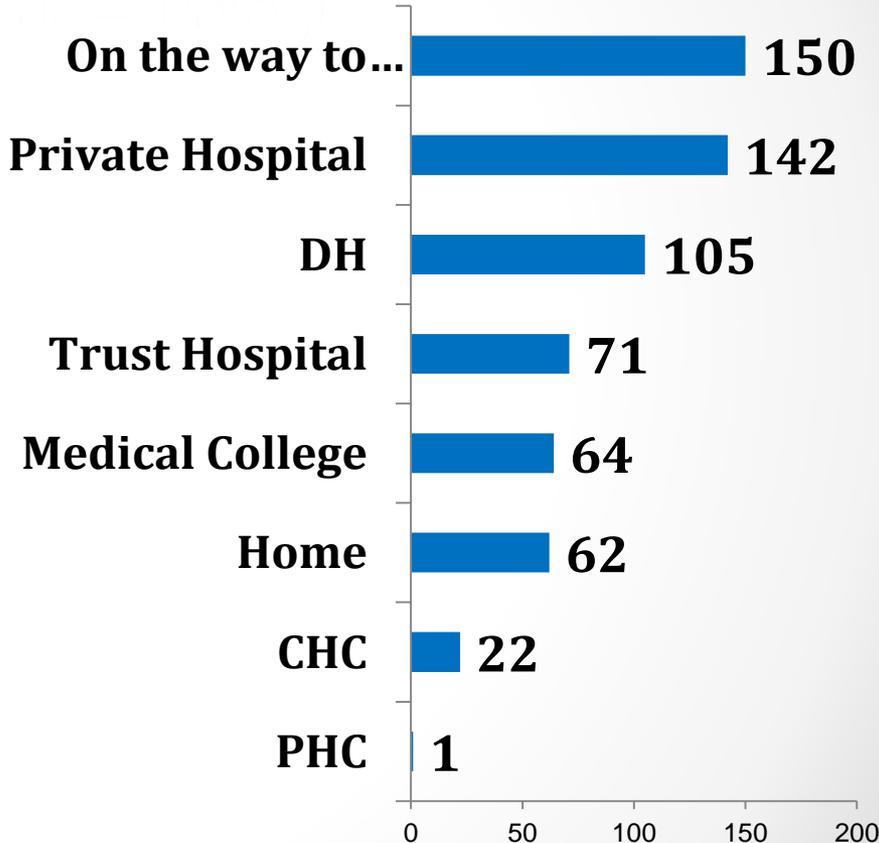
Place of delivery and place of death of deceased

(n=455)

Place of Delivery



Place of Death

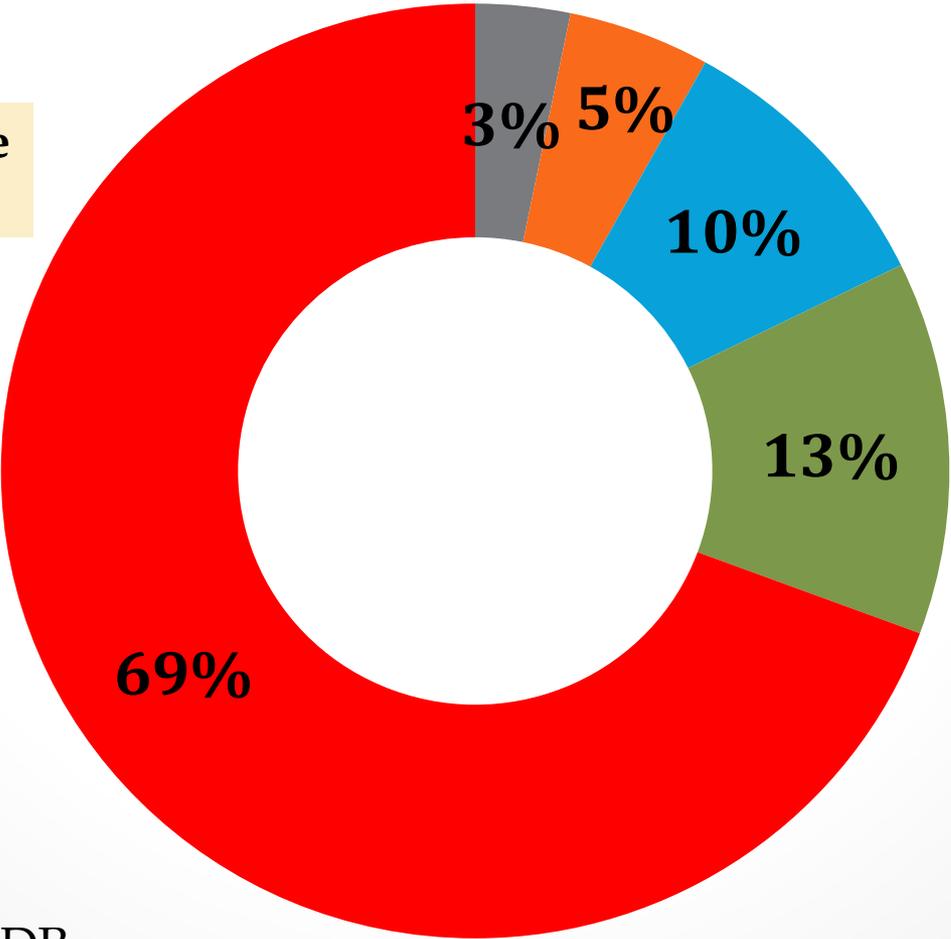


Source: Gujarat MDR

Who conducted home delivery in home deaths (n=62)

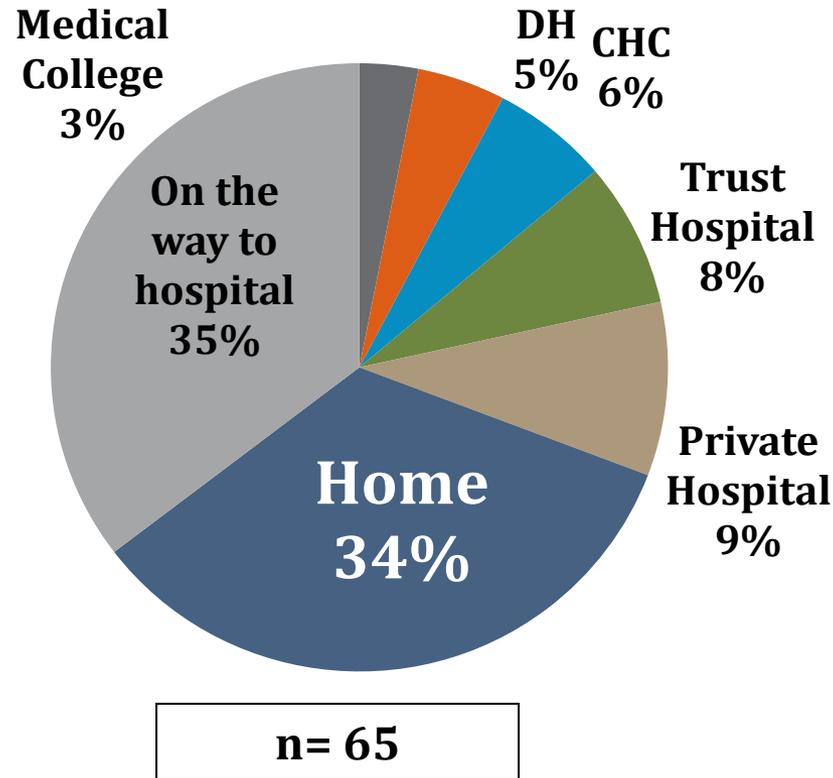
■ FHW/FHS ■ Doctor ■ Others ■ Relative ■ Dai

SBA not available
at home delivery



Source: Gujarat MDR

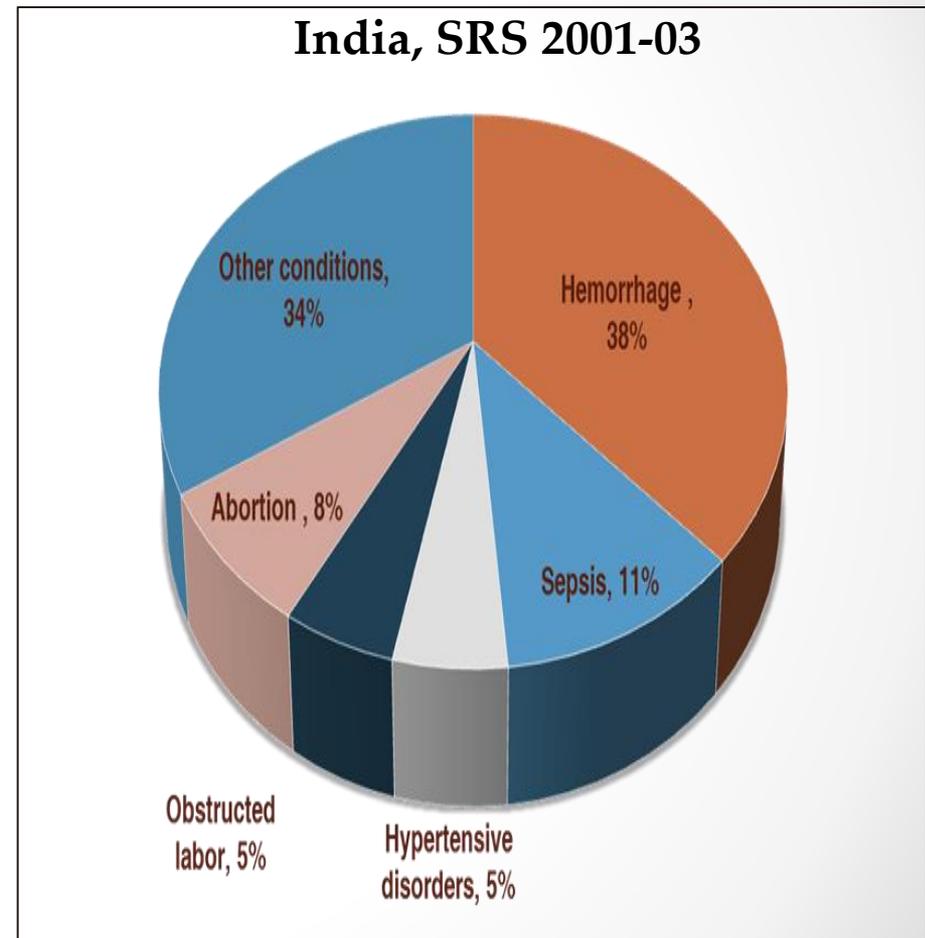
Place of death in home delivery cases



Among maternal deaths who had home delivery 34% died at home and 35% died en route.

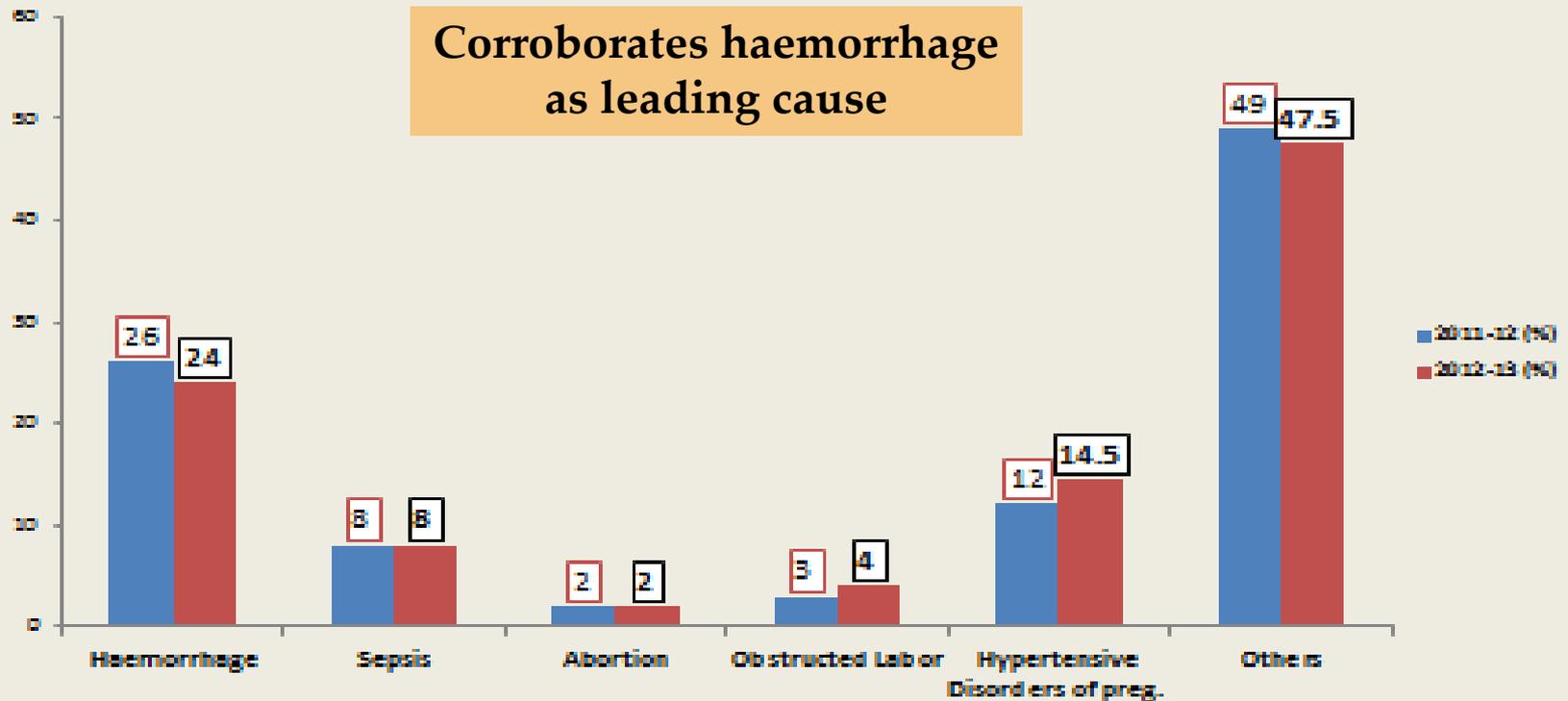
Leading cause of Maternal Mortality

- Hemorrhage is a leading cause of maternal deaths
 - 35% of global maternal deaths
 - Estimated 132,000 maternal deaths
- 14 million women in developing countries experience PPH—26 women every minute, affects 2% of women who give birth
- More than 20000 women die annually from PPH In India



MDR analysis

(Source: Monthly MDR Reports)



PPH Prevention and Management Steps

Pre-labor

- Birth preparedness
- Identification, monitoring and timely referral of high risk pregnancies esp. anemia, grand multipara, multiple pregnancies , GDM
- Supportive practices
 - Hb. Estimation
 - No Routine induction

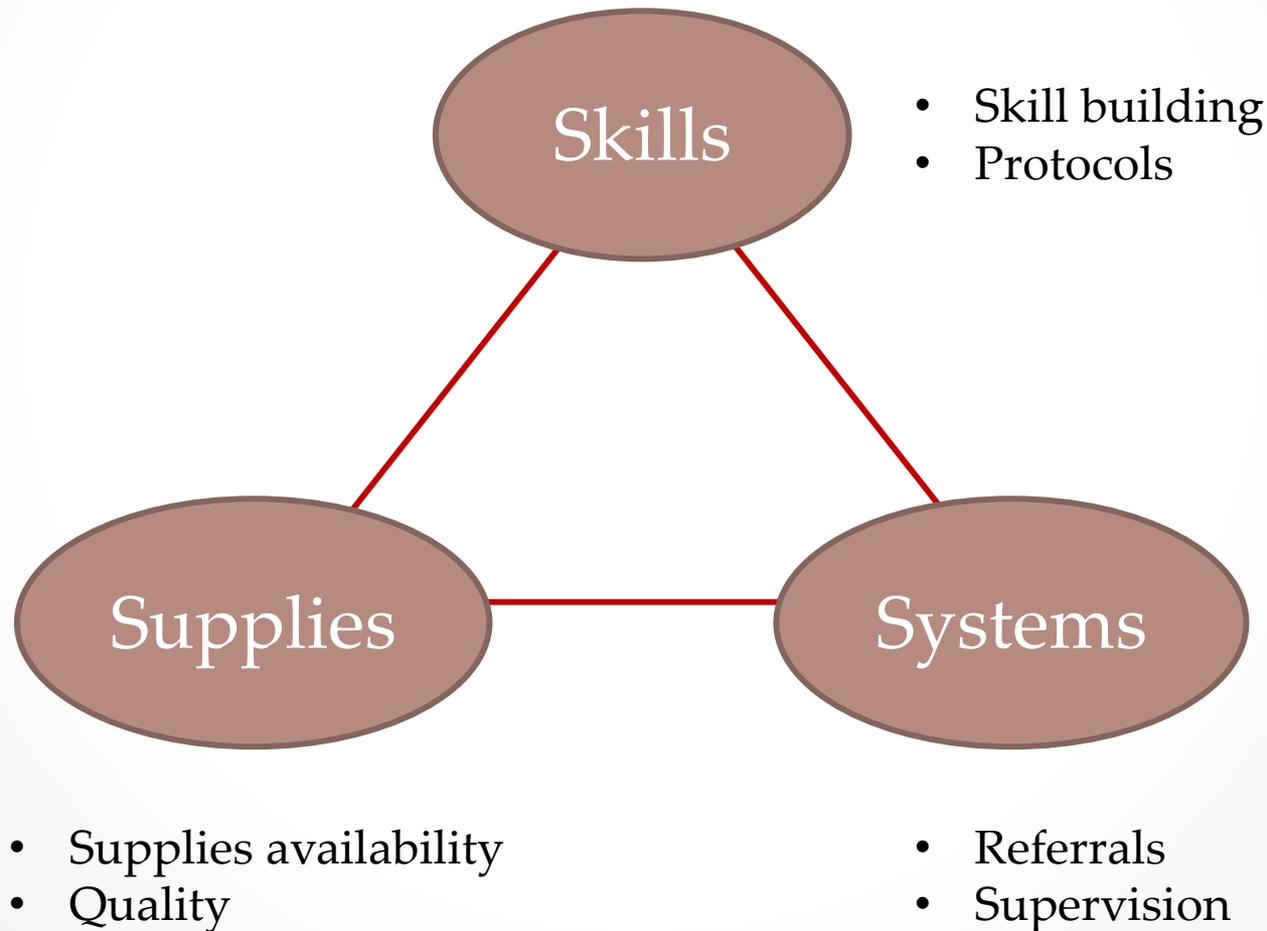
Labor

- Intensive monitoring in second and third stages
- Avoid aggressive unnecessary augmentation of labor with oxytocin
- Active management of third stage of labor (Uterotonics)
- Prompt management of PPH
- Referral if needed

Postpartum

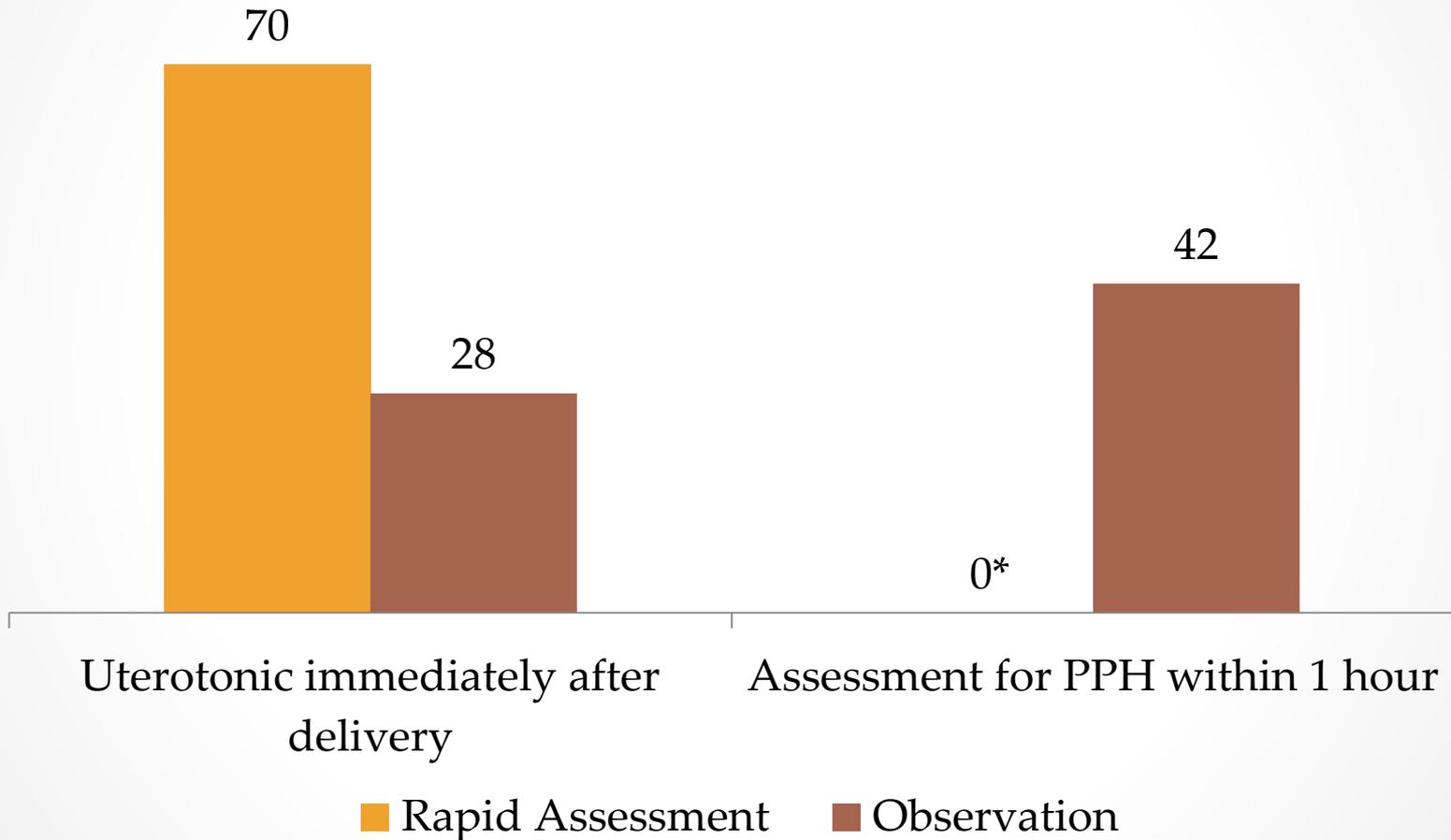
- Monitoring of PP period in hospital: Discharge after 48 hrs.
- Prompt management of PPH
- Referral if needed

PPH Program Implementation: Components



Program Implementation: Status

Practices



Source: Jhpiego's rapid assessment of 200 health facilities and observational study in 12 facilities (unpublished)

* Not measured in rapid assessment of facilities

Providers' Perspectives on Uterotonic Use

Uttar Pradesh

- Injectable uterotonic use for the purposes of labour augmentation widespread in both clinical and community settings.
- Use of uterotonics for postpartum haemorrhage prevention and treatment relatively limited

Karnataka

- Augmenting labor is the most common use of uterotonics
- Both health providers and chemists appeared to have incomplete and inconsistent knowledge about uterotonics, including appropriate dosage, required monitoring, and storage requirements.

Source:

1. Deepak NN, Mirzabagi E, Koski A, Tripathi V. Knowledge, Attitudes, and Practices Related to Uterotonic Drugs during Childbirth in Karnataka, India: A Qualitative Research Study. PLoS ONE. 2013 Apr 29;8(4):e62801.
2. Mirzabagi E, Deepak NN, Koski A, Tripathi V. Uterotonic use during childbirth in Uttar Pradesh: accounts from community members and health providers. Midwifery. 2013 Aug;29(8):902–10.

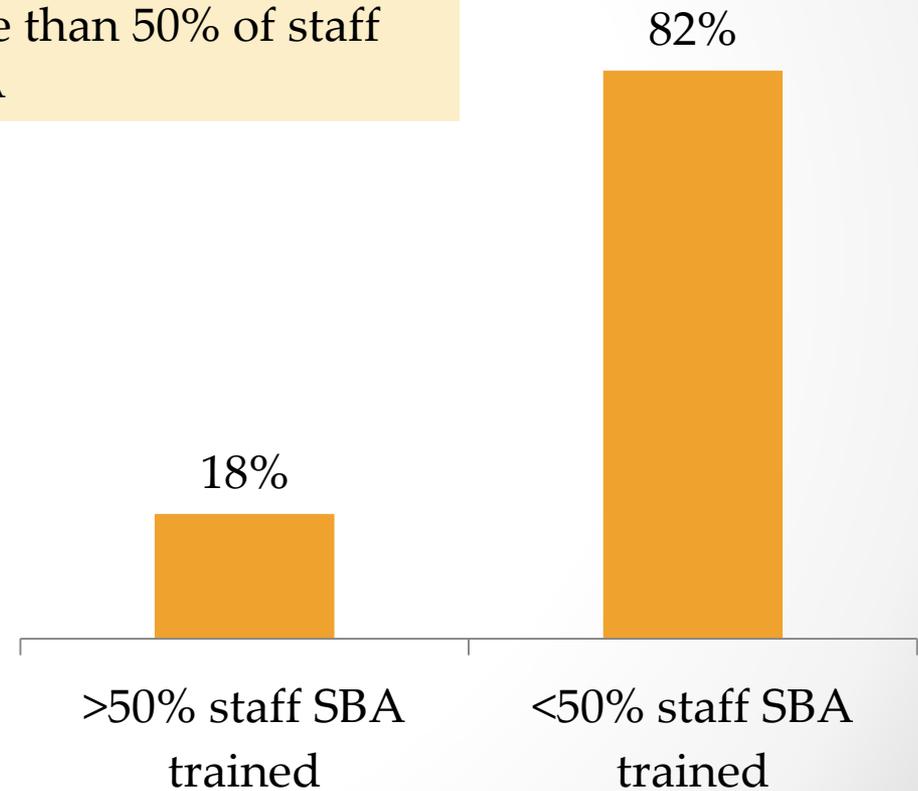
Resource availability

A real example

N= 200

Proportion of health facilities with more than 50% of staff posted in the labor room trained in SBA

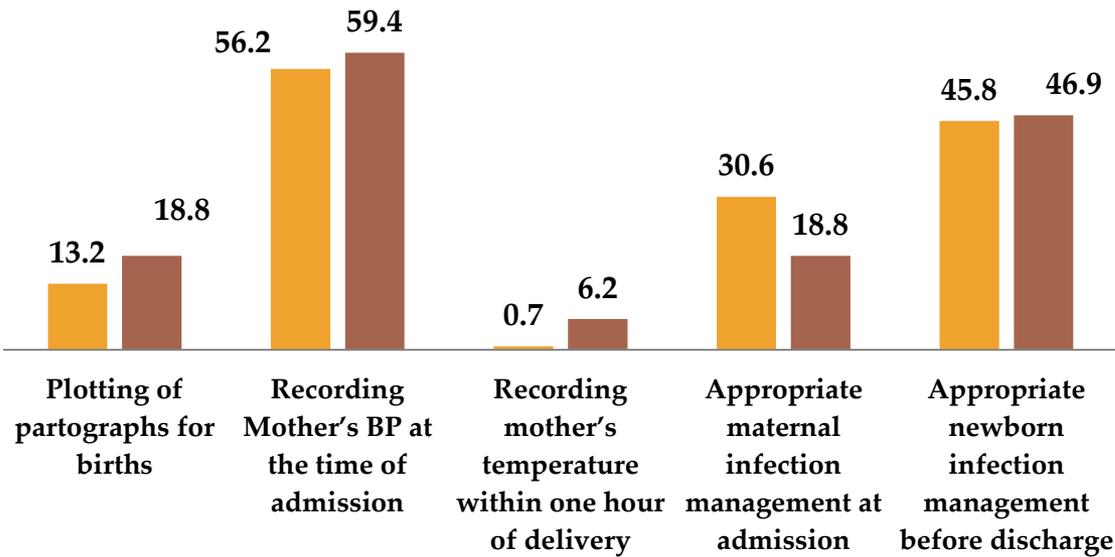
- Inadequate numbers trained in SBA
- Trained workers irrationally deployed



Resource availability

■ <50% SBA trained ■ >50 % SBA trained

n= 200



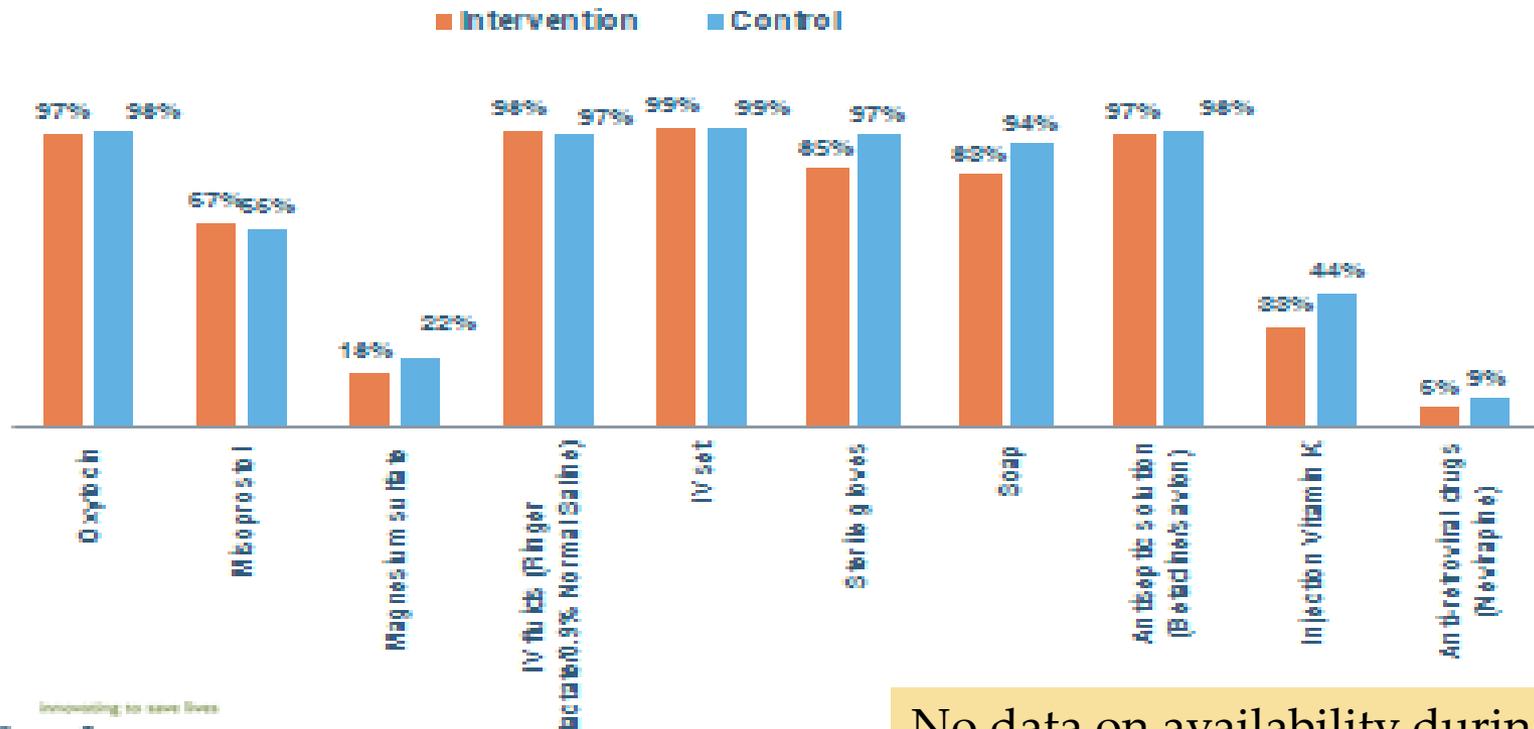
Proportion of facilities with adherence to key clinical practices

- Quality of trainings not good enough
- Trained providers are not enabled to translate learning into practice
- Lack of motivation

Resource Availability

Drug/Supplies in the Labour Room

[utilization for the month of Aug.2012] (N=101 for Intervention & N =99 for Control)

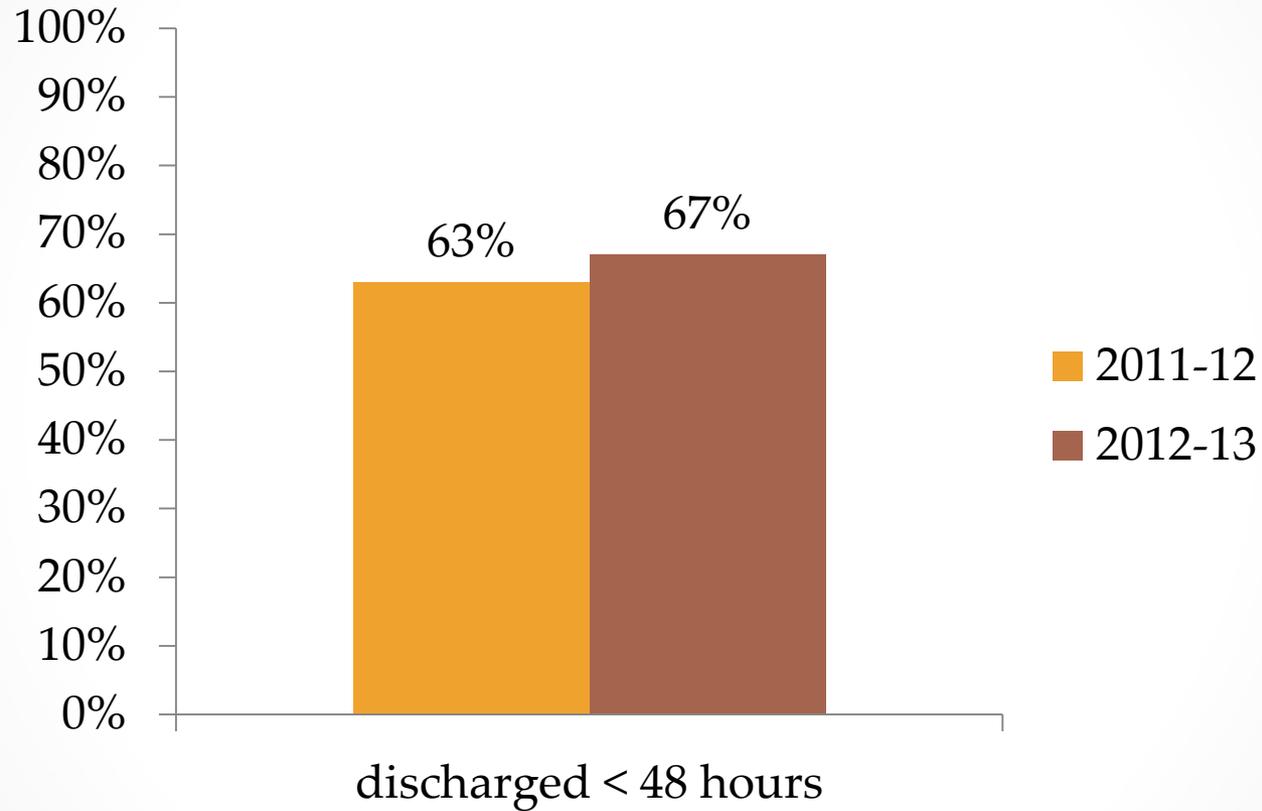


No data on availability during home births

Key Findings: Uterotonic Drug Quality

- Accessibility of uterotonic drugs
 - ✓ A problem in Karnataka - likely due to lack of availability
 - ✓ Not a problem in UP
- Uterotonics potency is an issue in all 4 districts
- More serious for methylergometrine, and particularly in Karnataka (nearly 100% do not meet API specification)
- **Oxytocin:**
 - **Best case:** Gorakhpur w/ 1 in 5 oxytocin ampoules out of specification
 - **Worst case:** Agra w/ 1 in 2 oxytocin ampoules out of specification
- **HOWEVER:** < 10% of all samples tested were \leq 50% API

Facility Stay



What about Home Births?

HMIS:

- Total homebirths in India: 34,00,000
- Total homebirths attended by non SBA: 23,00,000
- Till recently, **only SBAs** were allowed to administer misoprostol during home deliveries
- In **67%** of home births, delivery was conducted by non SBA

Are we doing enough to prevent mortality from PPH in home births?

Summary of Challenges

Practices (PPH Prevention and Management)

- Augmentation of labor without indication
- Poor intrapartum care (poor use of AMTSL techniques including uterotonics)
- Poor monitoring of fourth stage of labour (women shifted to ward 15-30 minutes after delivery)
- Poor understanding of management techniques

Summary of Challenges

Resources

- Facility for blood transfusion, management of retained placenta etc.
- Quality of uterotonic storage at facilities
- Uterotonics availability for home births

System

- Poor coverage of home births by SBAs
- Poor monitoring of quality of services, resource availability and storage
- Using uterotonics for home births
- Issues with referral mechanisms including availability of patient transport ambulances
- Facility stay less than 48 hours

Proposed Solutions



Strategic skill building

Skills Labs

- Structured strengthening of targeted competencies of all in-service workers

Pre-service nursing education

- Establishment of nodal centres
- Strengthening of GNM and ANM schools
- Competency based certification

Skill assessment

- Phase-wise assessment of skills of in-service workers

Onsite training

- Low dose high frequency
- Adaptive to requirements of facilities
- Initiated for FP services; to be extended to all areas

PPH prevention and management to be integrated into all skill building models

Strengthening of Supervision & Prioritization of Resources

- Oxytocin and misoprostol in Essential Drug List

- Focus on availability and use during integrated supportive supervision visits

- Addressing gaps related to PPH preventions based on MDR findings



**Operational Guidelines
&
Reference Manual**

**Prevention of Postpartum Haemorrhage
through Community Based Distribution
of Misoprostol**

November 2013

Maternal Health Division
Ministry of Health and Family Welfare
Government of India



Operational Guidelines for Prevention of Postpartum Hemorrhage through Community Based Distribution of Misoprostol

Rationale

- PPH - largest contributor to MMR
- Persistent home deliveries in many districts/pockets .. women of marginalised and underserved sub-populations (*50 lakh women still deliver at home*)
- Complications common esp. PPH
- Oral Misoprostol recommended for prevention of PPH where Inj. Oxytocin unavailable
- Miso administration - no special skills, no refrigeration; easy to store and use
- Global evidence supports distribution by CHWs

Haemorrhage (PPH) : >20,000 out of 56,000 maternal deaths in one year

Rationale

The Evidence and Research

WHO Guidelines

WHO recommendations
Optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting



OPTIMIZE MNH



World Health Organization

Integrative Review

Smith et al. *BMC Pregnancy and Childbirth* 2013, **13**:44
<http://www.biomedcentral.com/1471-2393/13/44>



RESEARCH ARTICLE

Open Access

Misoprostol for postpartum hemorrhage prevention at home birth: an integrative review of global implementation experience to date

Jeffrey Michael Smith^{1††}, Rehana Gubin^{2†}, Martine M Holston^{3†}, Judith Fullerton⁴ and Ndola Prata^{5†}

Abstract

Background: Hemorrhage continues to be a leading cause of maternal death in developing countries. The 2012 World Health Organization guidelines for the prevention and management of postpartum hemorrhage (PPH) recommend oral administration of misoprostol by community health workers (CHWs). However, there are several outstanding questions about distribution of misoprostol for PPH prevention at home births.

Methods: We conducted an integrative review of published research studies and evaluation reports from programs that distributed misoprostol at the community level for prevention of PPH at home births. We reviewed methods and cadres involved in education of end-users, drug administration, distribution, and coverage, correct and incorrect usage, and serious adverse events.

Results: Eighteen programs were identified; only seven reported all data of interest. Programs utilized a range of strategies and timings for distributing misoprostol. Distribution rates were higher when misoprostol was distributed at a home visit during late pregnancy (54.5-96.9%) or at birth (22.5-83.6%), compared to antenatal care (ANC) distribution at any ANC visit (22.5-49.1%) or late ANC visit (21.0-26.7%). Coverage rates were highest when CHWs and traditional birth attendants distributed misoprostol and lower when health workers/ANC providers distributed the medication. The highest distribution and coverage rates were achieved by programs that allowed self-administration. Seven women took misoprostol prior to delivery out of more than 12,000 women who were followed-up. Facility birth rates increased in the three programs for which this information was available. Fifty-one (51) maternal deaths were reported among 86,732 women taking misoprostol: 24 were attributed to perceived PPH; none were directly attributed to use of misoprostol. Even if all deaths were attributable to PPH, the equivalent ratio (59 maternal deaths/100,000 live births) is substantially lower than the reported maternal mortality ratio in any of these countries.

Conclusions: Community-based programs for prevention of PPH at home birth using misoprostol can achieve high distribution and use of the medication, using diverse program strategies. Coverage was greatest when misoprostol was distributed by community health agents at home visits. Programs appear to be safe, with an extremely low rate of ante- or intrapartum administration of the medication.

Keywords: Community-based distribution mechanisms, Misoprostol, Coverage, Safety, Serious adverse events, Home birth, Postpartum hemorrhage

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Effectiveness, Feasibility and Safety of Community based advance distribution of Misoprostol

Key policy decision

Recommendations of Core Group of Experts

- ***Community based advance distribution of Misoprostol by ANMs and ASHAs to pregnant women likely to deliver at home***

Objective : Bring this life saving commodity to the doorstep of those pregnant women ...

- Not likely to access a health facility for delivery
- ANM not likely to attend the delivery

Special Scenarios

- Intended Inst. Del. , but deliver at home
- Deliver in transit



Conditionalities for Community Based Distribution of Misoprostol

Criteria for selection of areas-*(pre-identified/pre-notified by state)*

Steps for identification of pregnant women

Responsibility for advance distribution

Process of distribution

Adverse events



5 X 5 matrix for High Impact RMNCH+A Interventions



when Implemented with High Coverage and High Quality

R eproductive Health	M aternal Health	N ewborn Health	C hild Health	A dolescent Health
<ul style="list-style-type: none"> Focus on spacing methods, particularly PPIUCD at high case load facilities Focus on interval IUCD at all facilities including subcentres on fixed days Home delivery of Contraceptives (HDC) and Ensuring Spacing at Birth (ESB) through ASHAs Ensuring access to Pregnancy Testing Kits (PTK- "Nischay Kits") and strengthening comprehensive abortion care services. Maintaining quality sterilization services. 	<ul style="list-style-type: none"> Use MCTS to ensure early registration of pregnancy and full ANC Detect high risk pregnancies and line list including severely anemic mothers and ensure appropriate management. Equip Delivery points with highly trained HR and ensure equitable access to EmOC services through FRUs; Add MCH wings as per need Review maternal, infant and child deaths for corrective actions Identify villages with low institutional delivery & distribute Misoprostol to select women during pregnancy; incentivize ANMs for domiciliary deliveries 	<ul style="list-style-type: none"> Early initiation and exclusive breastfeeding Home based newborn care through ASHA Essential Newborn Care and resuscitation services at all delivery points Special Newborn Care Units with highly trained human resource and other infra structure Community level use of Gentamycin by ANM 	<ul style="list-style-type: none"> Complementary feeding, IFA supplementation and focus on nutrition Diarrhoea management at community level using ORS and Zinc Management of pneumonia Full immunization coverage Rashtriya Bal Swasthya Karyakram (RBSK): screening of children for 4Ds' (birth defects, development delays, deficiencies and disease) and its management 	<ul style="list-style-type: none"> Address teenage pregnancy and increase contraceptive prevalence in adolescents Introduce Community based services through peer educators Strengthen ARSH clinics Roll out National Iron Plus Initiative including weekly IFA supplementation Promote Menstrual Hygiene

Health Systems Strengthening

- Case load based deployment of HR at all levels
- Ambulances, drugs, diagnostics, reproductive health commodities
- Health Education, Demand Promotion & Behavior change communication
- Supportive supervision and use of data for monitoring and review, including scorecards based on HMIS
- Public grievances redressal mechanism; client satisfaction and patient safety through all round quality assurance

Cross cutting Interventions

- Bring down out of pocket expenses by ensuring JSSK, RBSK and other free entitlements
- ANMs & Nurses to provide specialized and quality care to pregnant women and children
- Address social determinants of health through convergence
- Focus on un-served and underserved villages, urban slums and blocks
- Introduce difficult area and performance based incentives



5 X 5 matrix for High Impact RMNCH+A Intervention



List of Minimum Essential Commodities

R eproductive Health	M aternal Health	N ewborn Health	C hild Health	A dolescent Health
<ul style="list-style-type: none"> • FP commodities: Tubal Rings, IUCD 380-A, IUCD 375 • Oral Contraceptive Pills (OCPs) / (Mala-N), Condoms •Emergency Contraceptive Pills(ECP) -(Levonorgestrel 1.5mg) •Pregnancy Testing Kits (PTKs) - Nischay •Tablet Mifepristone (Only at facilities conducting Safe Abortion Services) 	<ul style="list-style-type: none"> • Injection Oxytocin • Tablet Misoprostol • Injection Magnesium Sulphate 	<ul style="list-style-type: none"> •Injection Vitamin K •Mucous extractor •Vaccines - BCG, Oral Polio Vaccine (OPV), Hep B 	<ul style="list-style-type: none"> • Oral Rehydration Salt (ORS) • Zinc Sulphate Dispersible Tablets • Syrup Salbutamol & Salbutamol nebulising solution • Vaccines - DPT, Measles JE (19 States), Pentavalent vaccine (in 8 States) • Syrup Vitamin A 	<ul style="list-style-type: none"> •Tablet Albendazole •Tablet Dicyclomine

Cross cutting Commodities as per level of facility

- Iron & Folic Acid (IFA) Tablet, IFA small tablet, IFA syrup
- Syrup /tablets : Paracetamol, Trimethoprim & Sulphamethoxazole, Chloroquin and Inj. Dexamethasone
- Antibiotics : Cap /Inj. Ampicillin, Metronidazole, Amoxycillin; Inj. Gentamicin, Inj. Ceftriaxone;
- Clinical /Digital Thermometer; Weighing machine; BP apparatus; Stop Watch; Cold box; Vaccine carrier; Oxygen; Bag & mask
- Testing equipments for Haemoglobin, urine and blood sugar

Thank You!



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Prevention of Postpartum Hemorrhage (PPH) at Homebirth in Afghanistan



Dr Sadia Fayeq,
Reproductive Health Director
MoPH, Afghanistan

Outline of the Presentation



- Background
- Results of the interventions
- Advocacy
- Current Status
- Way forward
- Challenges

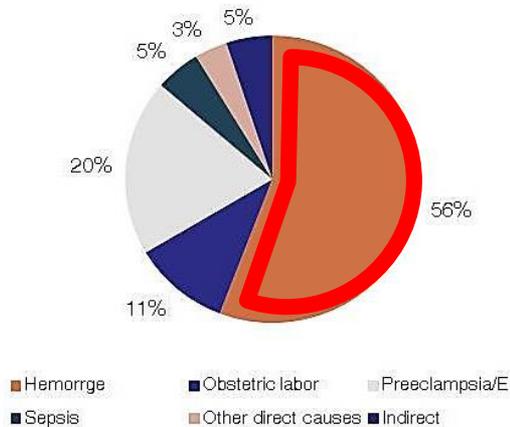




Background

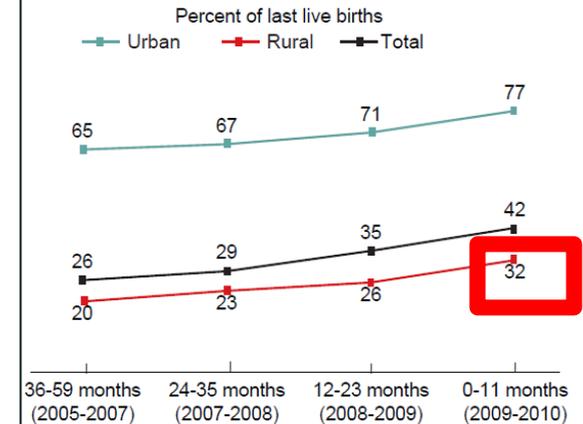
High Maternal Mortality Ratio
327 (100,000 live births)

Causes of Maternal Mortality



Prevention of PPH at homebirths will substantially contribute to reduction of maternal mortality

Figure 10. Trends in Delivery Care from a Medically Skilled Provider by Urban-Rural Residence, Afghanistan 2010



Date Source: AMS, 2010

Background #2



Prevention of PPH at homebirth in Afghanistan

- Piloted in 6 districts in 2006
 - To demonstrate the safety, acceptability, feasibility, and program effectiveness (SAFE) of community-based distribution of misoprostol by Community Health Workers (CHWs)
- Expanded in 20 districts in 2008
 - To demonstrate that quality of the initiative can be maintained during scale up
 - To monitor adverse events as the service delivery is expanded

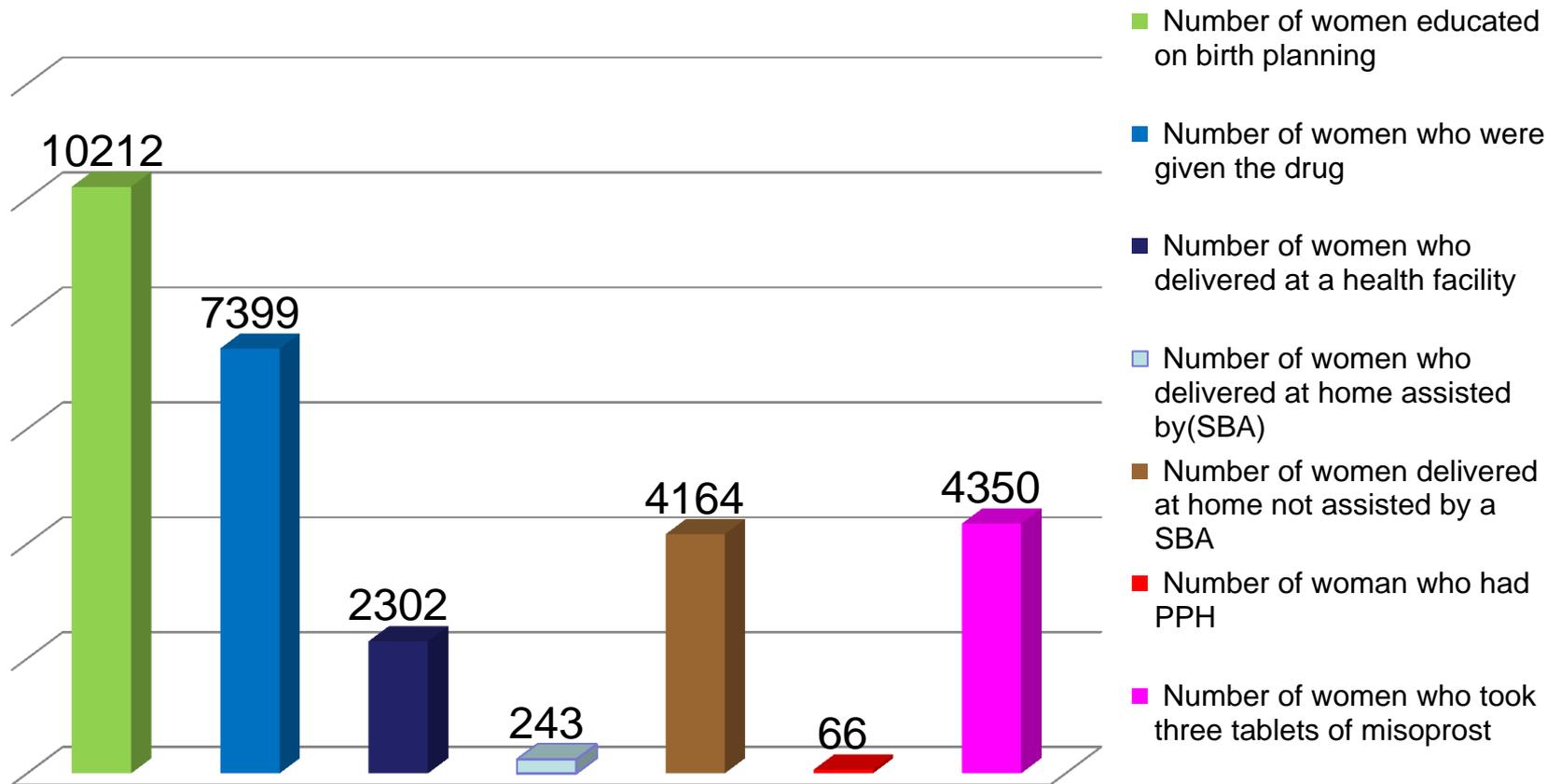
Prevention of PPH Pilot Project Results



Pregnant women received misoprostol from CHWs	1421
Took misoprostol <i>before</i> baby was born	0 (0%)
Took misoprostol <i>after</i> baby was born and before placenta was born	1361 (95.8%)
Took misoprostol <i>after</i> baby and placenta were born	60 (4.2%)
Recommend the drug to friends	92%
Will buy misoprostol in future	88%

Uterotonic drugs	Control (1148)	Intervention (2039)
Used only misoprostol	0	67%
Used only injection	25.7%	26.5%
Used any uterotonic	25.7%	96.2 %
Did not use any uterotonic	74.3%	3.8%

Prevention of PPH Expansion Results



Advocacy for Integration into the Health System



- Regional and National consensus building workshops held in 2013
 - Recommended to:
 - Include misoprostol in the essential drug list
 - Obtain approval from Technical Advisory Group (TAG) and the MoPH Executive Board
 - Issue an amendment to integrate the intervention in the Basic Package Health Services (BPHS) contracts
 - Integrate community based PPH prevention in the future revisions of BPHS

Current Status



- Essential Drug List committee included misoprostol in the “especial drug list” to be nationally distributed for PPH program
- Donors expressed their willingness to invest in the integration
- The PPH integration proposal is prepared to submit to TAG

Way Forward



- Obtain approval from MoPH TAG and Executive Committee
- Instruct BPHS implementers to start the PPH initiative under the auspice of Reproductive Health and Community Based Health Care departments
- Integrate PPH initiative in the maternal health promotion package
- Train health providers and managers
- Include appropriate indicators in HMIS and M&E

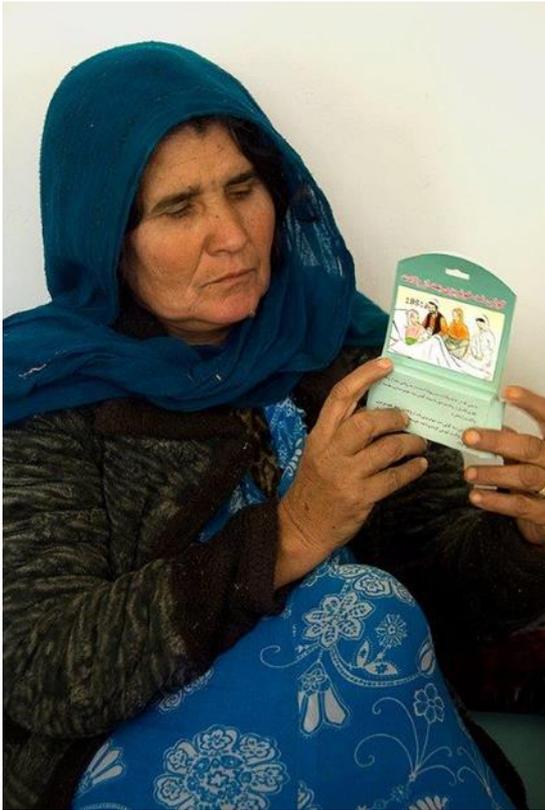
Universal coverage with AMTSL and SBA services should remain the primary mandate of MoPH

Challenges



- Lack of CHWs in extremely remote area
- Overburden of CHWs (as volunteer workers)
- Geographical and security barriers
- Availability of funds for training, misoprostol and human resource





Thank You

Workshop Goal

To provide implementing agencies with the knowledge and tools needed for successful expansion of PPH prevention programs which incorporate the advance distribution of misoprostol for self-administration.

Workshop Objectives

At the end of this workshop, participants will be able to describe:

- The evidence base for PPH program design
- The three phases of program expansion and the scope of activities to include in a comprehensive work plan
- Training approaches and content for facility and community based health workers
- The necessary training, BCC/IEC, supportive supervision and M&E program materials, how to access examples and considerations when standardizing nationally
- The basics of commodity procurement and distribution for misoprostol
- The recommended core M&E indicators



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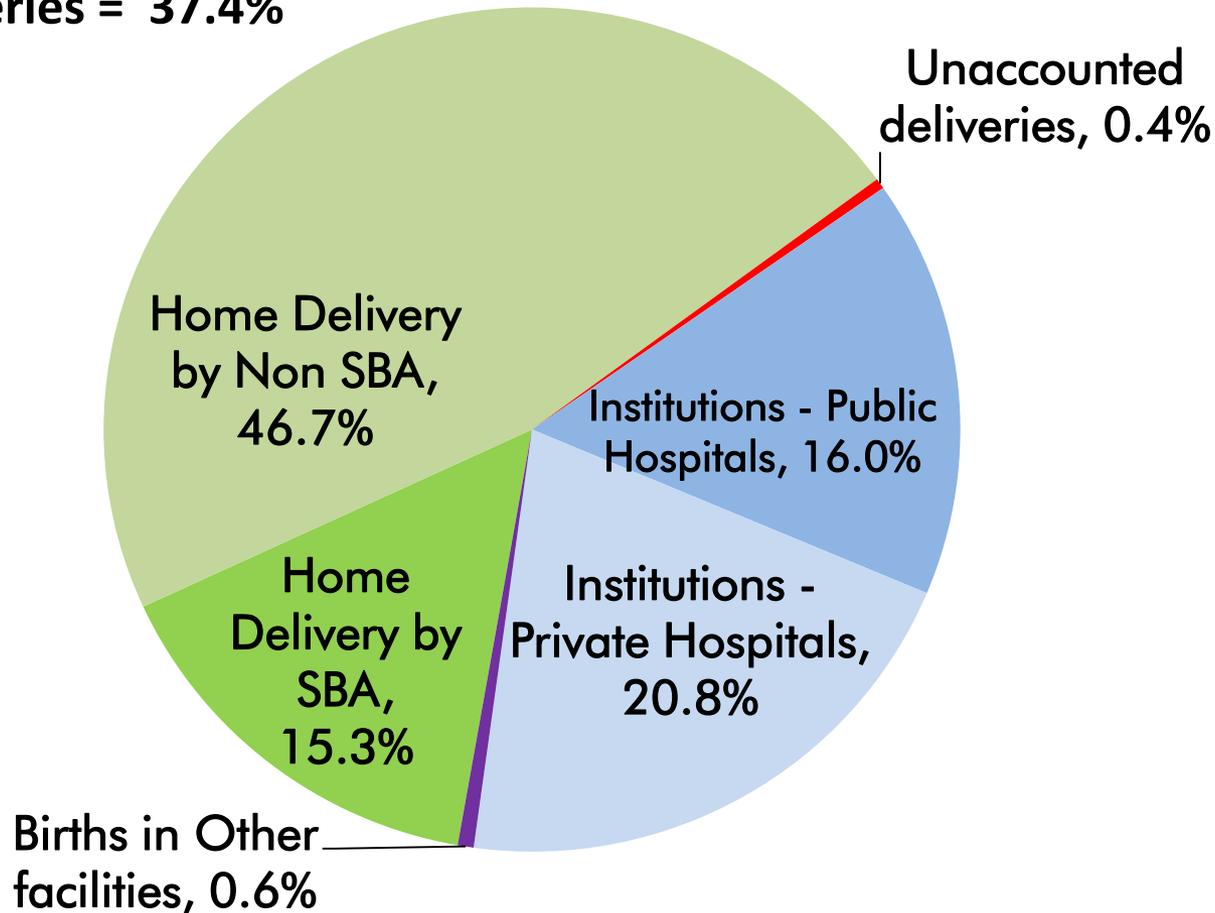


The Context for Programmatic Approaches for PPH Prevention

STEP 2: LOCATION OF BIRTHS JHARKHAND (AHS, 2010 - 2011)

Home deliveries = 62.0%

Institutional deliveries = 37.4%



Causes of Maternal Death

- Hemorrhage
- Eclampsia
- Sepsis
- Abortion
- Obstructed labor
- HIV
- 75% of maternal death due to 5 main causes

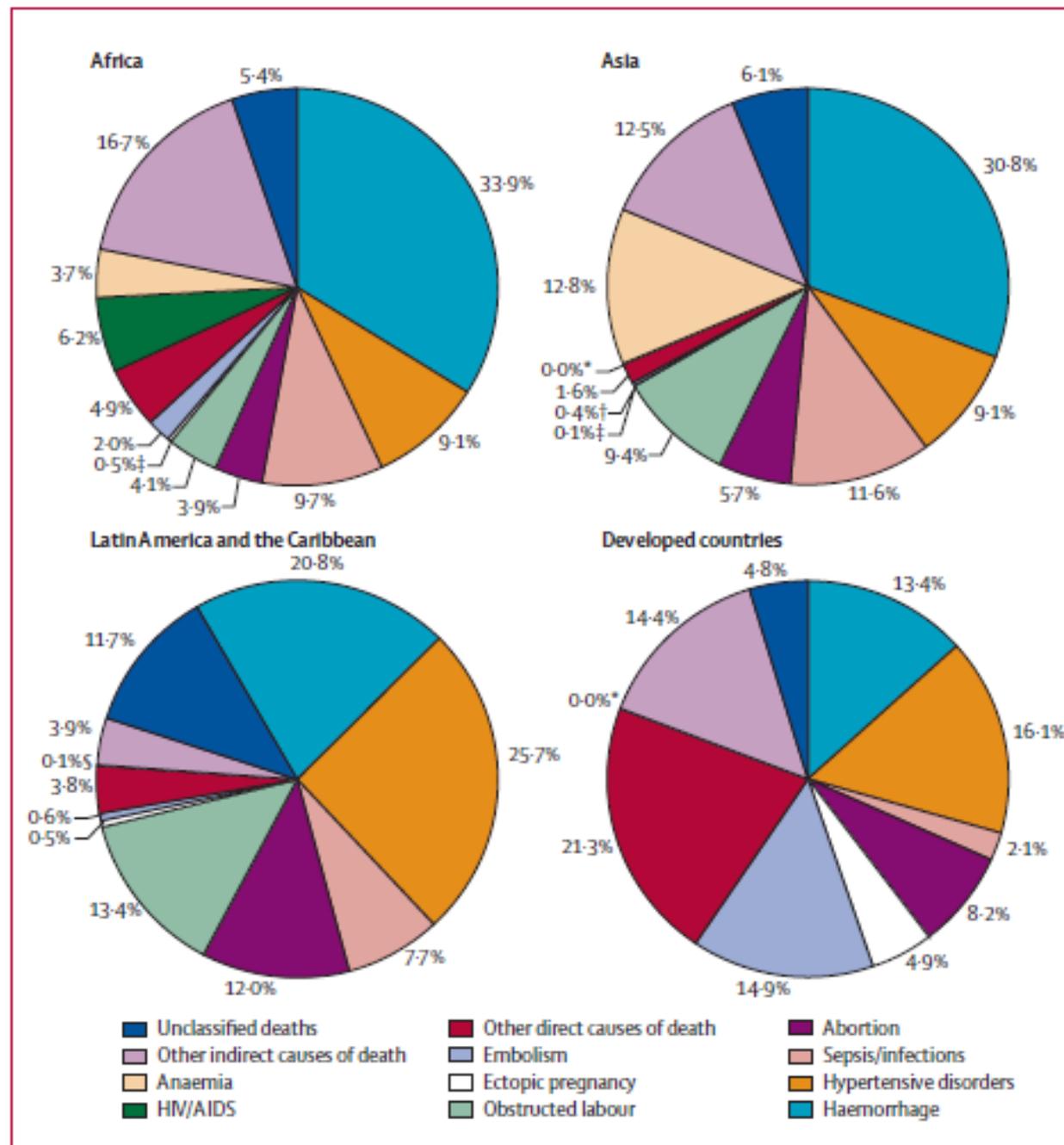


Figure 3: Geographical variation in distribution of causes of maternal deaths
 *Represents HIV/AIDS. †Represents embolism. ‡Represents ectopic pregnancy. §Represents anaemia.

Access to Health Services

Formal Health System

Community Health System

Private Health System

Commercial Health System

Access to Health Services

**Formal Health
System**

**Community
Health System**

Comprehensive PPH Reduction Approach

PROMOTION OF COMPREHENSIVE PACKAGE OF INTERVENTIONS TO PREVENT AND MANAGE PPH

**EDUCATION: Birth planning/complication readiness;
Promotion of ANC; encouragement of facility birth with
SBA**

Facility Birth:

- Correct management of labor and birth, including partograph
- Routine administration of uterotonic immediately after birth (oxytocin preferred, if not, misoprostol)
- Uterotonic availability and quality
- Postpartum vigilance for PPH
- Proper management of PPH

SBA

Transport:

- Initial dose of uterotonic
- Use of Non-pneumatic Anti Shock Garment

Home Birth:

- Education about PPH detection
- Education about use of misoprostol
- Advanced distribution of misoprostol for self administration after birth
- Education about what to do for continued bleeding

Summary of Phase II: Preparation and planning for scale-up or expansion

Preparation and planning for scale-up or expansion

1. Review roles and responsibilities
 - Select areas
 - Determine the programmatic focus under the country's comprehensive PPH prevention strategy



Preparation and planning for scale-up or expansion

2. Collect materials from previous implementation in country. Standardize as appropriate:
 - Advocacy materials
 - Training materials including job aids (for ANC providers, SBAs and CHWs)
 - BCC/IEC materials, including drug packaging and instructional inserts
 - Supportive supervision tools
 - M&E tools (See MCHIP's list of recommended core indicators and corresponding database to aid in M&E development)

Preparation and planning for scale-up or expansion

3. In conjunction with partners, standardize:

- Quality assurance methods
 - Regular supportive supervision
 - Maternal death and “near miss” case reviews
 - Drug quality and availability
- M&E methods

Preparation and planning for scale-up or expansion

4. Design a training cascade for both community- and facility-based trainings
5. Secure a drug supply and ensure branding reflects the program goals
6. Understand the procurement and distribution system – coordinate!

Preparation and planning for scale-up or expansion

7. Introduce province or district officials to program
8. Select local health system counterparts at the province, district and township levels
9. Determine which existing cadres of CHWs will be mobilized for PPH prevention activities.

Preparation and planning for scale-up or expansion

10. Orient the community to the planned program expansion;
12. Mapping: System(s) to identify and register pregnant women
 - no woman is left out
 - no missed opportunities to reach eligible women.

Preparation and planning for scale-up or expansion

13. Ensure local procurement and distribution system of misoprostol will support program activities

14. Budget and funding



Phase 3: Program Expansion

1. Train facility-based ANC providers and SBAs on:
 - program overview
 - PPH prevention for a facility-based birth
 - PPH management for women who've taken misoprostol at home prior to coming to the facility
 - PPH management

Phase 3: Program Expansion

2. Train CHWs in how to:

- identify pregnant women;
- record the home visits;
- distribute the pills;
- followup a postpartum woman and newborn;
- monitor for and report any adverse incidents;
- record outcomes for the birth and history of misoprostol use.

Phase 3: Program Expansion

3. Ensure branding and packaging of drug
4. Conduct census of pregnant women in the program area
5. Print all the BCC/IEC materials, counseling materials, identification forms and registration forms

Phase 3: Program Expansion

6. Begin to provide information and counseling to the women in the catchment area
7. Distribute the drug to women in catchment area
8. Conduct postpartum visits for women who have received the drug and have delivered

Phase 3: Program Expansion

- 9. Conduct supportive supervision activities
- 10. Supervise all M&E activities
- 11. Recognize/reward high performers and program champions



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Maternal and Child Health
Integrated Program



IMPLEMENTING COMPREHENSIVE PPH PROGRAM

TRAINING CONSIDERATIONS

Outline

- Training considerations for skilled birth attendants and community health workers



Human resources for health

Figure 1: The WHO health systems building blocks



- Producing health workers that are competent, responsive and productive is a crucial precursor for improving health

Comprehensive PPH Reduction Approach

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SBA

Transport:

- Initial dose of uterotonic
- Use of Non-pneumatic Anti Shock Garment
- Use uterine balloon tamponade

Home Birth:

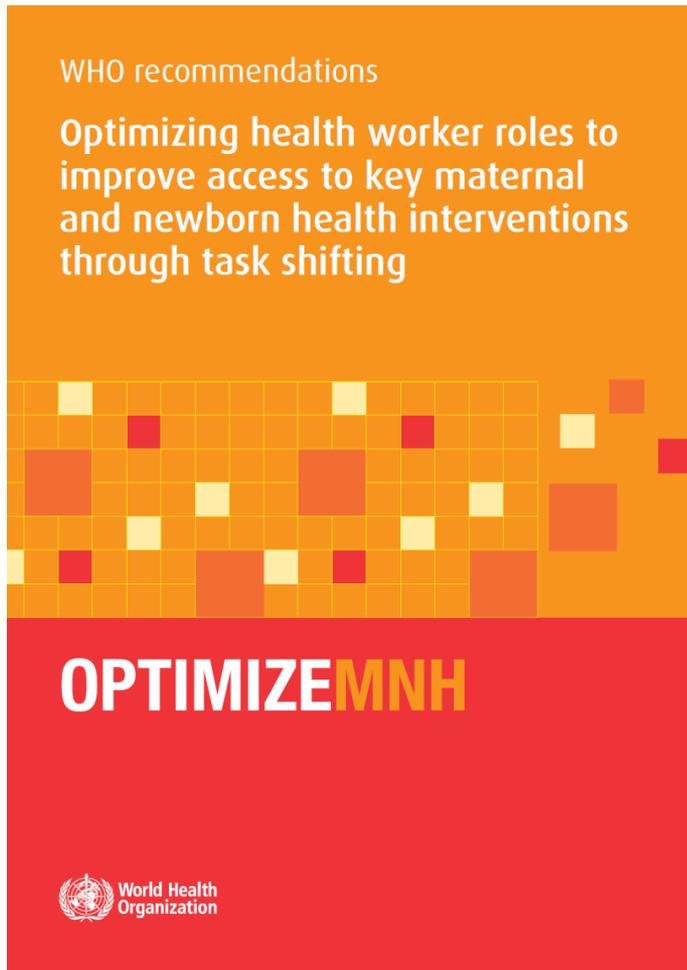
- Education about PPH detection
- Education about use of misoprostol
- Advanced distribution of misoprostol for self administration after birth
- Education about what to do for continued bleeding

Who are SBA and what can they do?

- 'Ensuring that every woman and her newborn have access to quality midwifery services demands that we take bold steps' *Ban Ki Moon 2011*
- Fully skilled competent midwives
- Scope of practice is agreed and implemented and should include all 7 signal functions of Basic Emergency Obstetric & Newborn Care:
 - Administration uterotonics
 - Manual removal of placenta



Optimizing health worker roles (WHO 2012)



- A more rational distribution of tasks and responsibilities is seen as a promising strategy for increasing access and cost effectiveness
- Aim to bring services closer to the community and household level to expand accessibility

Instructional Design Model

- Analyze
- Design
- Develop
- Implement
- Evaluate



Instructional Design

- Different layers of analysis – e.g. take literacy levels into account as well as social cultural context
- Select participatory methods that engage adult learners and build off their existing knowledge and experience — such as group discussions, role plays, exercises, demonstrations and games
- Use the same materials in the trainings that will be used on-site – IEC materials, job aids etc
- Trainings should be competency-based

Competencies at the core

- Competency-based training of health care providers builds knowledge, skills and attitudes and stresses learning by doing



Learning must be...

Relevant

Learning relates *directly* to the objectives.

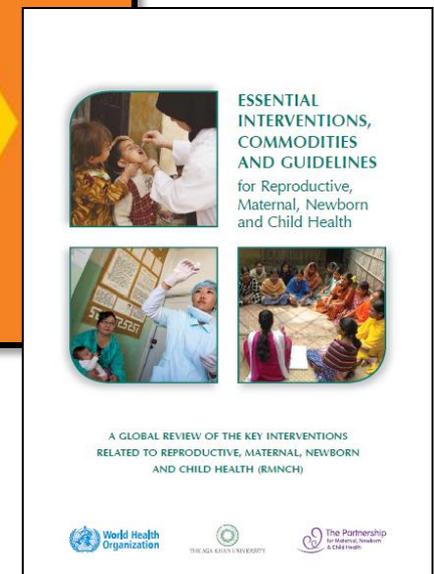
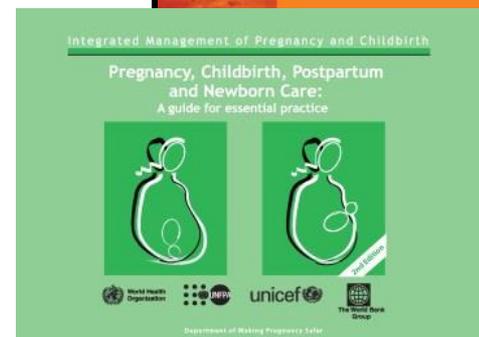
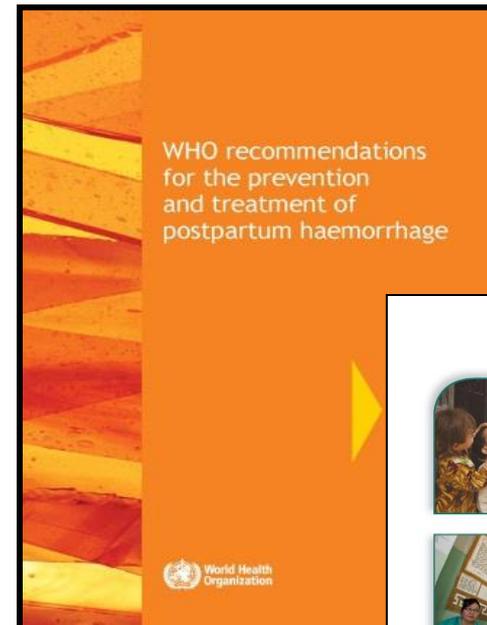
+

Purposeful

Learning involves 'mental processing' and practice with feedback.

Standardization: Evidence to practice

- Varied learning resources
- Clinical protocols
- IEC /BCC materials
- Job aids
- Supervision tools – e.g. Clinical standards, checklists



Key Content for SBA Trainings: 1

1. Active Management
Third Stage Labour with
administration of
oxytocin or misoprostol
2. Integrated with
immediate newborn
care, infection
prevention and respectful
maternity care



Key Content for SBA Trainings: 2

Management of PPH for any birth (facility or home)

E.g. Bimanual compression of the uterus



Key Content for SBA Training: 2 cont.

- Steps in developing a competency
- Use Checklist e.g. **Manual Removal of Placenta**
 1. Skill demonstration
 2. Skill practice on model until competent with coaching and feedback
 3. Skill practice on patient



Key Content for SBA Trainings: 3

- Data collection for M&E at the facility level, with practice using forms and registers
- Supportive supervision of CHWs



EmONC Signal Functions (2009)

Basic EmONC	Comprehensive EmONC
1) Administer parenteral antibiotics	<i>Perform EmOC Signal functions 1–7, plus:</i>
2) Administer uterotonic drugs (e.g. parenteral oxytocin, misoprostol)	8) Perform surgery (e.g., cesarean delivery)
3) Administer parenteral anticonvulsants (e.g. magnesium sulfate)	9) Perform blood transfusion
4) Perform manual removal of placenta	10) Provision of emergency obstetric anaesthesia
5) Perform removal of retained products (e.g., MVA)	
6) Perform assisted vaginal delivery (e.g., vacuum extraction)	
7) Perform neonatal resuscitation (e.g., w/ bag and mask)	

Other training considerations for SBA?

- What about ANC?
- Are SBA already counselling on birth preparedness and complication readiness
- Who will the trainers be and where will you do the training?



Comprehensive PPH Reduction Approach

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- Education about what to do for continued bleeding

Training community health workers

- Causes and prevention of PPH
- Appropriate use of misoprostol to prevent PPH
- Counseling techniques to transmit attitudes, knowledge and skills needed to use misoprostol with pregnant women and their families
- Community mapping and enrollment of pregnant women
- Particulars of acquiring, distributing, and tracking the drug specific to their role
- Data collection for M&E, with practice using forms and registers



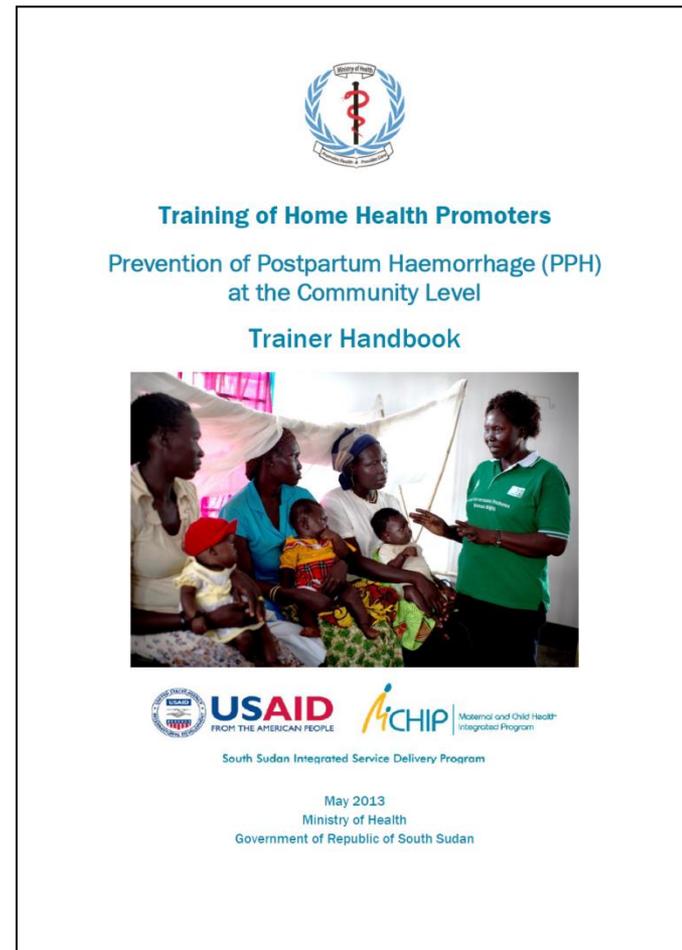
Post training follow up



- To support transfer of new skills and behaviour change
- Ensure all health care providers trained work within a supportive and enabling environment

Resources

- Available materials are listed in **toolkit**, and samples in various languages are posted on the PPH Prevention and Management Toolkit online (<http://www.k4health.org/toolkits/postpartumhemorrhage>)



Summary

- Competencies – focus on skill development and practice to ensure confidence
- Less is more – keep training as simple as possible
- Post training follow up and supportive supervision helps





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Landscape Analysis

National Landscape Analysis

1. ID Key agencies involved in previous and/or current implementation
2. ID current nat'l PPH prevention strategies and policies and evaluate adherence to global evidence base
3. Review the history of implementation and results to date
4. Identify existing assets and remaining needs
5. Compare your capacity with scope of needs and ID where partnerships may be needed

Local Landscape Analysis

6. Hold stakeholder consultations.
7. Evaluate the local health system and clinical practices
8. Carry out formative research to ID any significant cultural differences from prior implementation sites
9. Examine components of any site selection criteria

From the factory to the hands of women

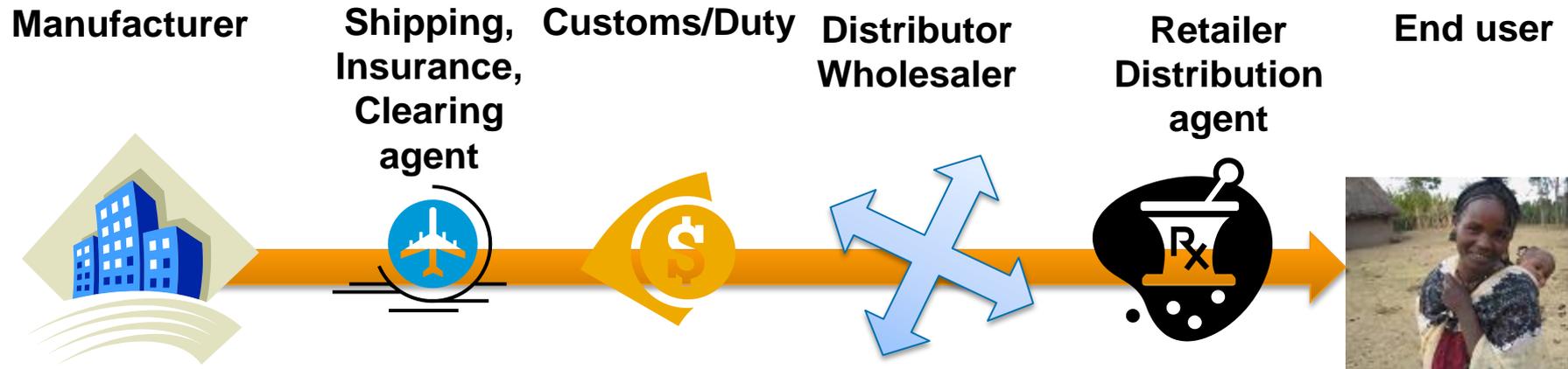
Basics of misoprostol procurement, packaging, distribution and tracking

Ndola Prata, MD, MSc
Medical Director

PPH Program Implementation
New Delhi, India
December 11-13, 2013

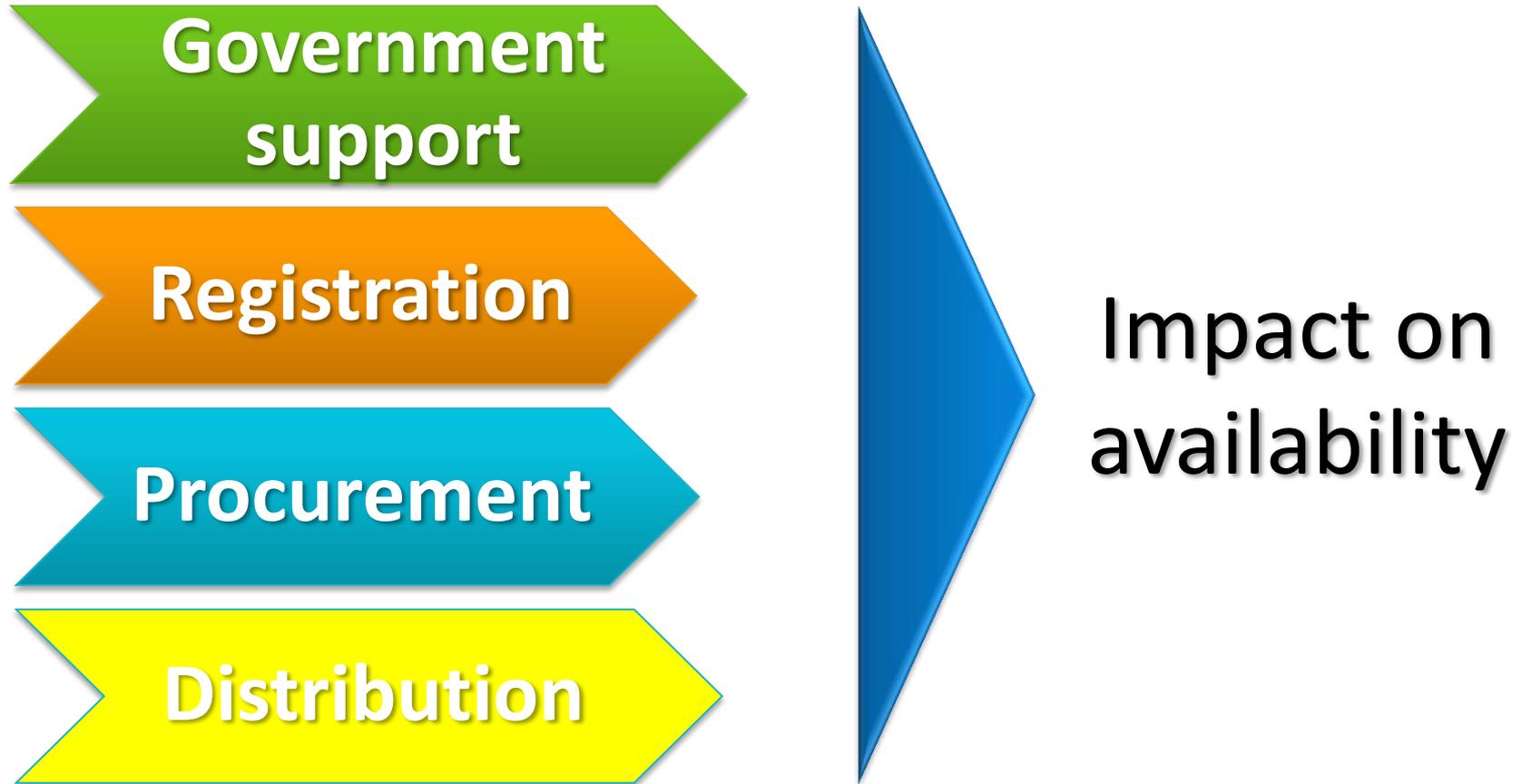


From the factory to the hands of women



Tracking: Quality and Quantity

Factors impacting availability of misoprostol for programs



Government support

- Registration for PPH
- Use in public health programs
- New drug in the health system

Challenges/ Opportunities:

- Sensitivities and limited knowledge
- Understanding the need for its use in home births
- Country-specific evidence of use might be required

Registration

- Approval to market for PPH management
- Confers legitimacy on the drug's use
- First step for “institutionalization”

Registration

Products

Brand manufacturer



“Branded”

Commercial distributor 

Contract manufacturer



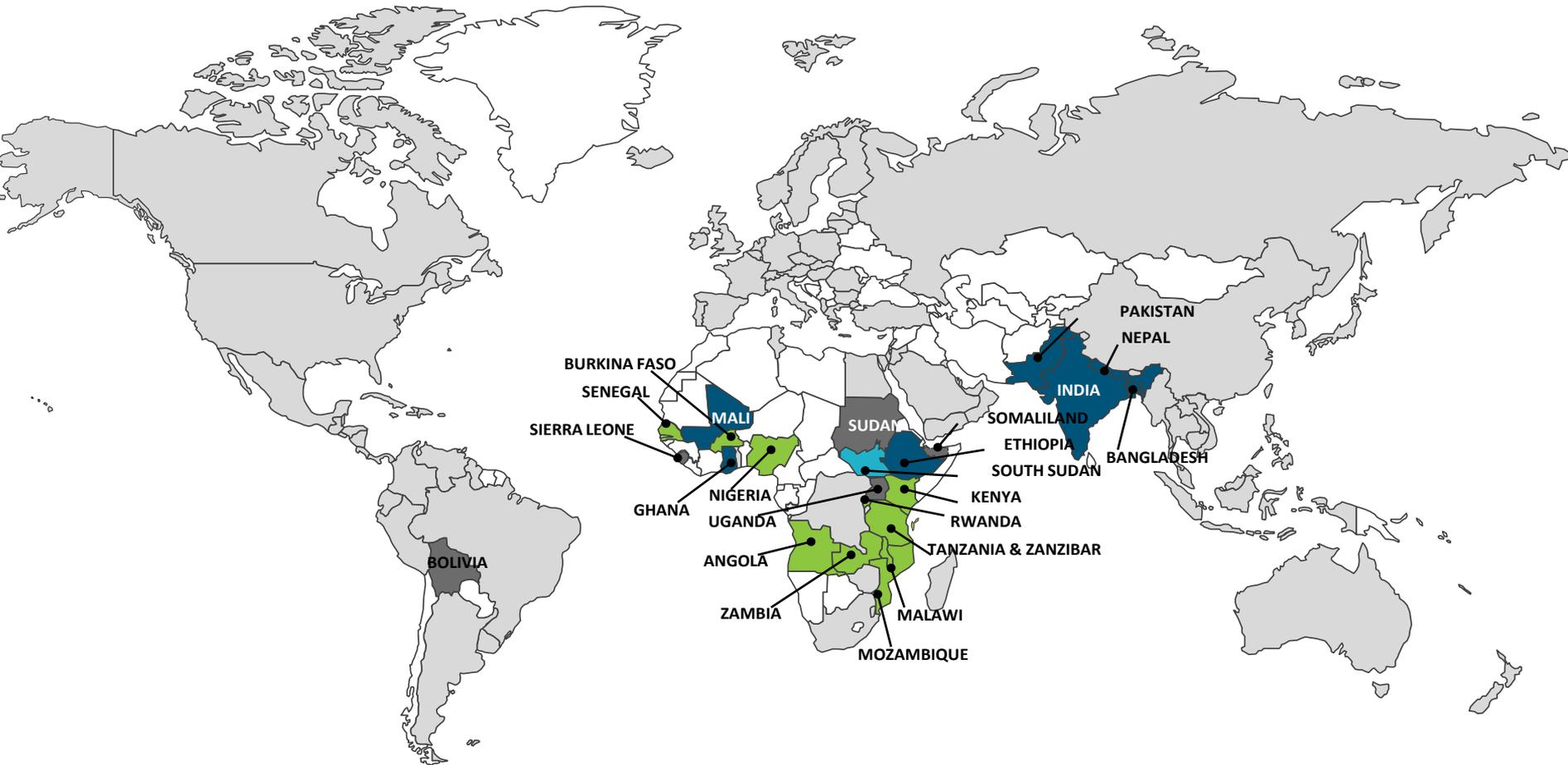
“Over-branded”

Social marketer 

Challenges/ Opportunities:

- Presentation/ packaging required for public health program (see binder pg. 23-26)
- Misoprostol distributor covers the country

Global Misoprostol Registration by Indication



This registration map is prepared by Venture Strategies Innovations (VSI) and reflects the organization's most current knowledge of regulatory approvals of misoprostol globally.

For further information visit www.vsinnovations.org, or to share updated misoprostol registration information with VSI, contact comm@vsinnovations.org.



- Registered for postpartum hemorrhage (PPH) & treatment of incomplete abortion*
- Registered for PPH and another obstetric indication*
- Registered for PPH*
- Registered for an obstetric indication, not PPH*
- Registered for gastric ulcers only
- Registration unknown

*Misoprostol may or may not be registered for gastric ulcers

Procurement

- Governments
- International Organizations
- UNFPA
- NGO's including social marketers
- Private commercial distributors

Challenges/ Opportunities:

- Governments lacks funding
- Misoprostol not in the country's EDL
- Low prioritization for this new intervention
- Understanding of drug procurement and forecasting

Distribution

- Central Medical Stores
- NGO's including social marketers
- Private commercial distributors

Challenges/ Opportunities:

- Understand supply chain
- Order forms include misoprostol

Procurement

Public Sector

Central
Medical
Stores

Private Commercial

Delta
Mediland
Medswana

Private
UNICEF
UNFPA
USAID

Facilities / Outlets

Public Health Facilities

3rd

National referral
hospitals

2nd

District hospitals

1st

Health posts, clinics,
mobile stops

Private Health Facilities

Private hospitals, mining
hospitals
Clinics
Pharmacies

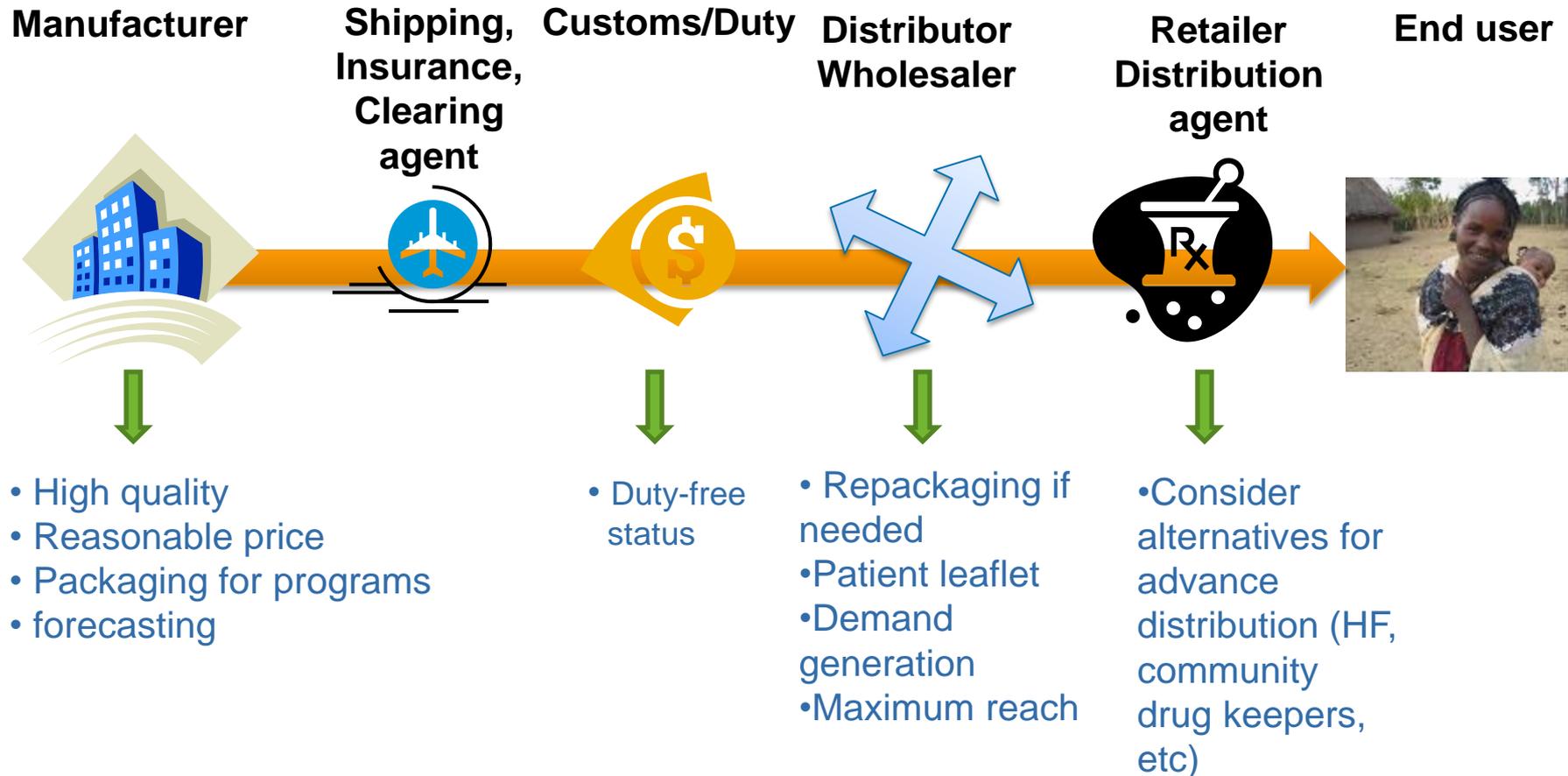
Community Outreach

**Community
Health
Workers**

End User

Manufacturers

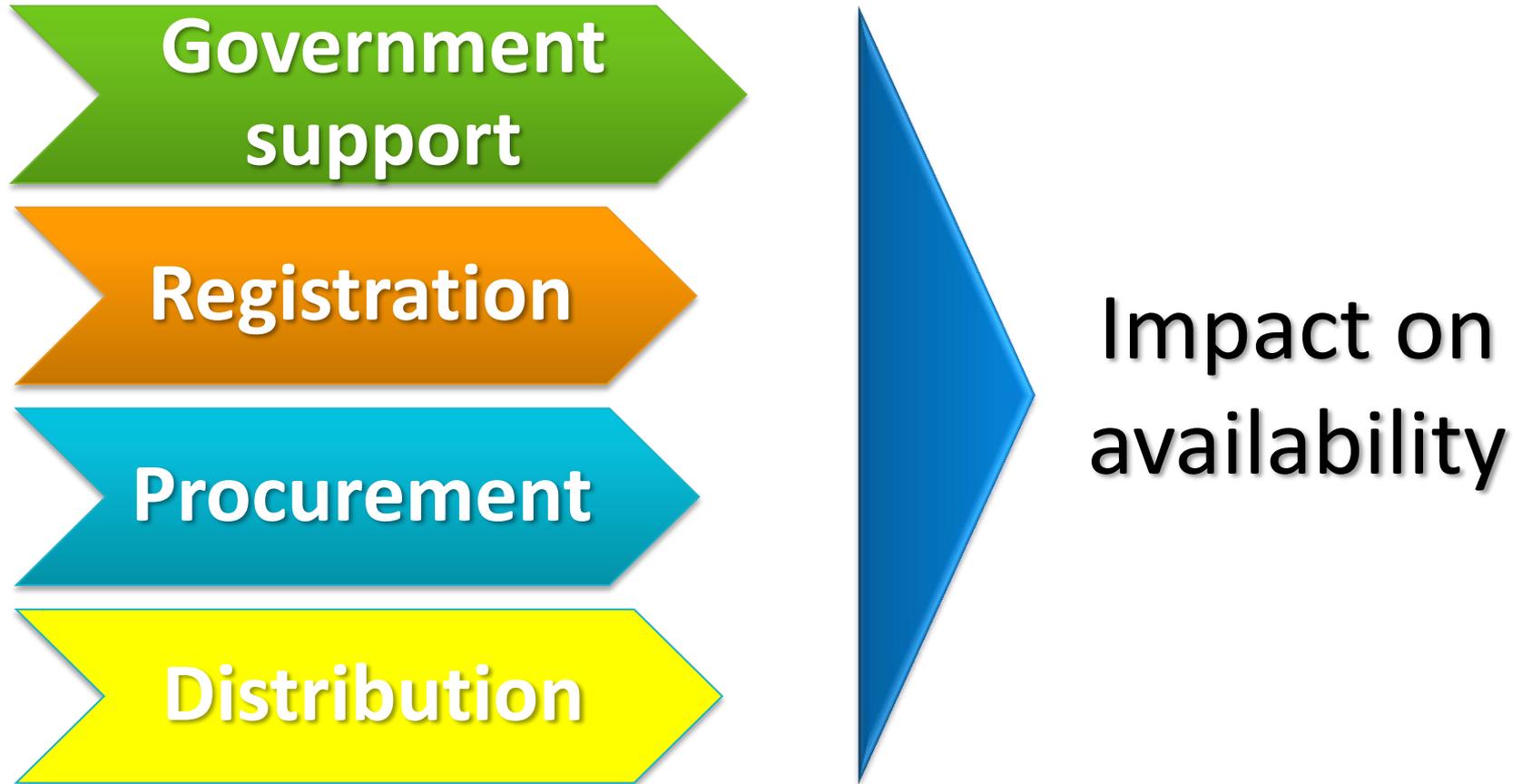
From the factory to the hands of women



Best practices

- Understand which steps you control and which you don't
 - budget time accordingly; identify partners for collaboration
- Have a plan B
 - If product not registered request permit to import
- Align realistic start date of program with procurement
- Appropriate forecasting to assist procurement
- Decide on patient leaflets
 - important in advance distribution

Factors impacting availability of misoprostol for programs



Thank you

www.vsinnovations.org

Dashboard

Period

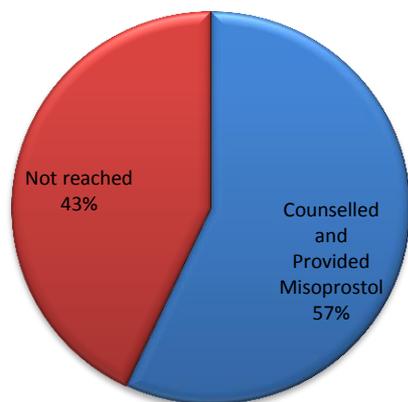
Jan – June, 2013

Program Information	
Expected Pregnant women	900
ANC coverage	30%
No. of CHW Trained	142
No. of ANC providers Trained	44

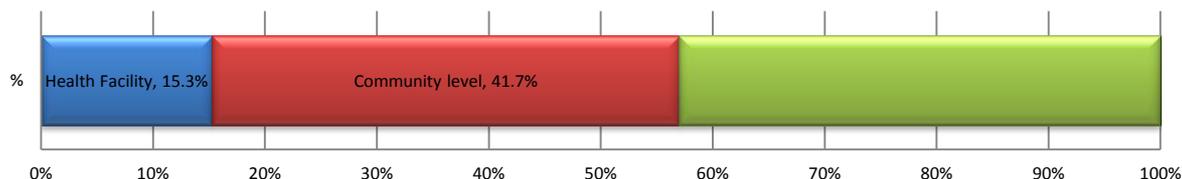
Deliveries	
Health Facility	300
Home	580

Stock-outs	
Oxytocin at Health Facility	2
Misoprostol at CHW level	0

Women Counsellled and Provided Misoprostol by Place of Counselling (Estimated Pregnant Women)



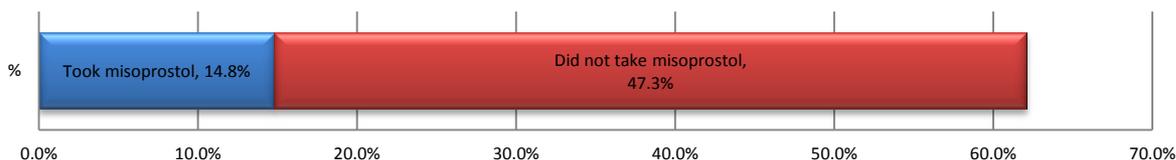
Place of Counselling & Distribution of Misoprostol



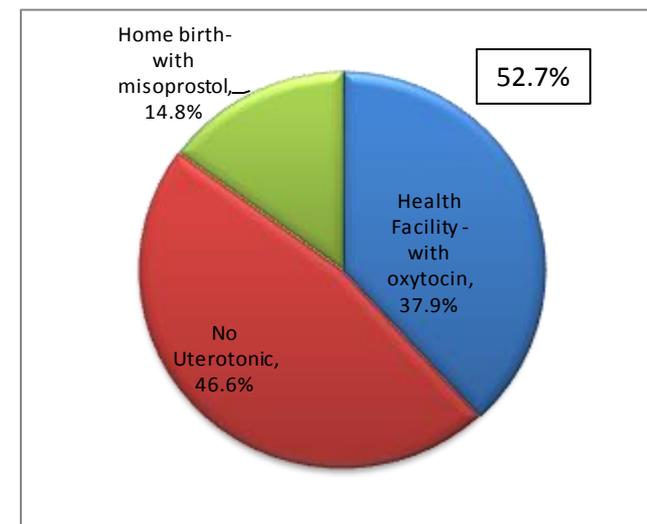
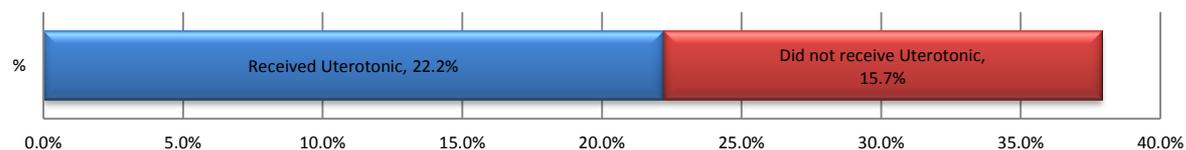
Uterotonic Coverage

Uterotonic Coverage by Place of Birth

Home Deliveries that took Misoprostol



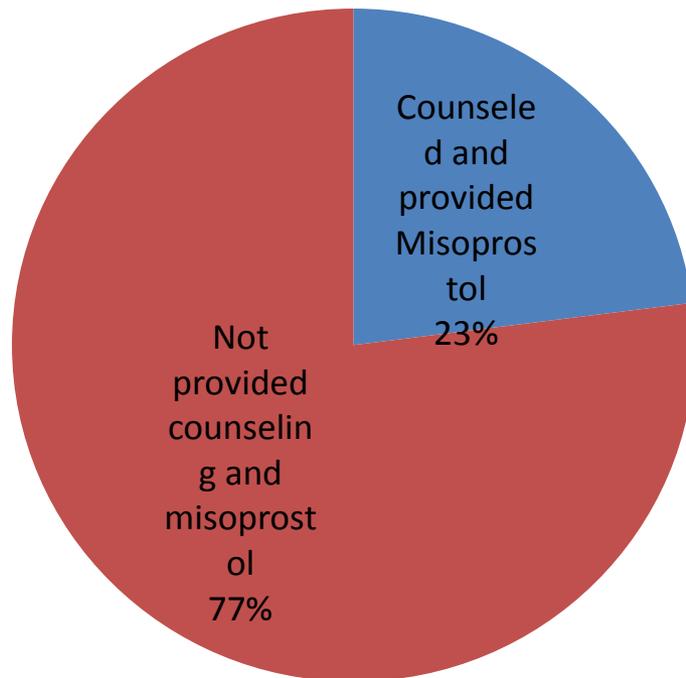
Deliveries at Health Facility who received a Uterotonic



Women Counselling and Provided Misoprostol by Place of Counselling (Estimated Pregnant Women)

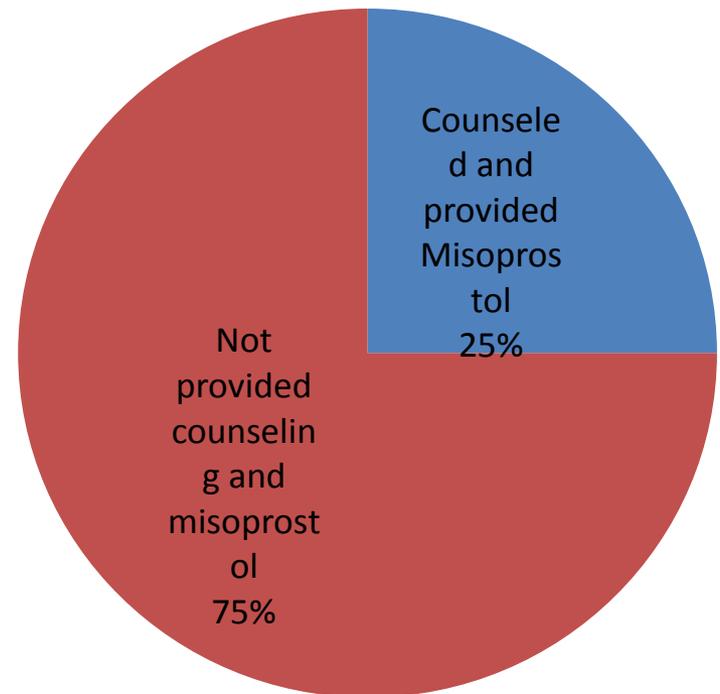
First 3 months of intervention

Estimated Pregnant women



First 6 months of intervention

Estimated Pregnant women



Ask some Questions

- What is our target?
- Are we on track?
- Have we trained enough CHWs and HWs?
- Do we have enough stock of Misoprostol?
- Are there geographical challenges?

- CHWs in Area Y are not actively identifying pregnant women
- Due to rainy season it has been difficult to gather reports from Area Y

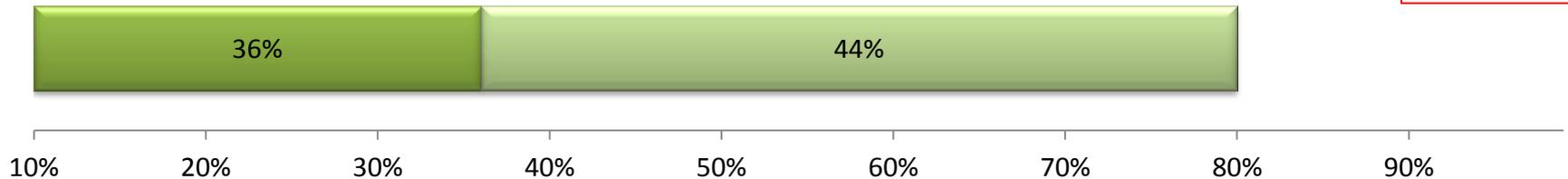
Women Counselling and Provided Misoprostol by Place of Counselling (Estimated Pregnant Women)

Area X

Place of Counseling and Distribution of Misoprostol

■ Health Facility ■ Community Level

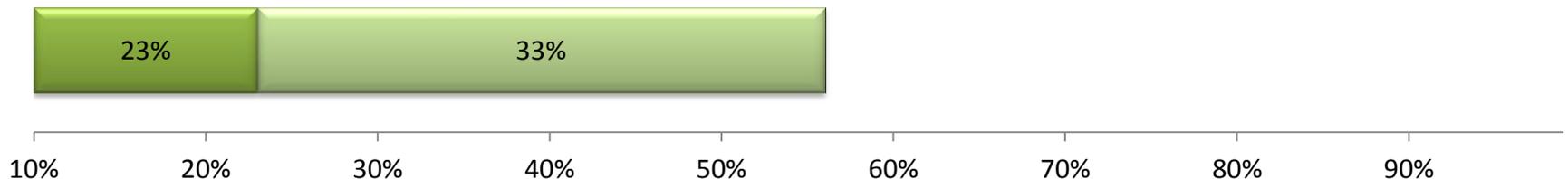
Population, geo and inputs are the same in the two areas



Area Y

Place of Counseling and Distribution of Misoprostol

■ Health Facility ■ Community Level

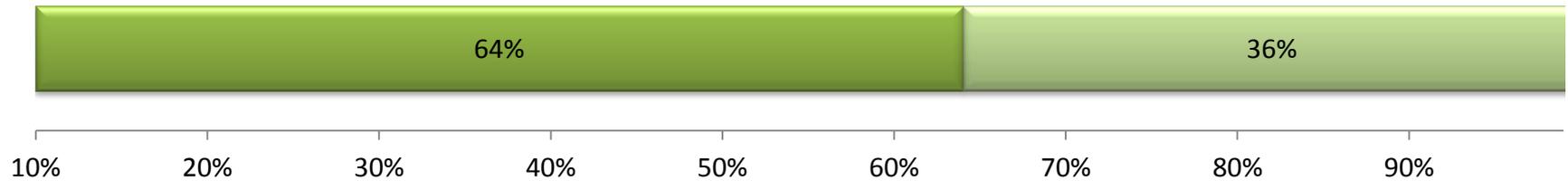


Place of Delivery

Start of the intervention

Place of Delivery

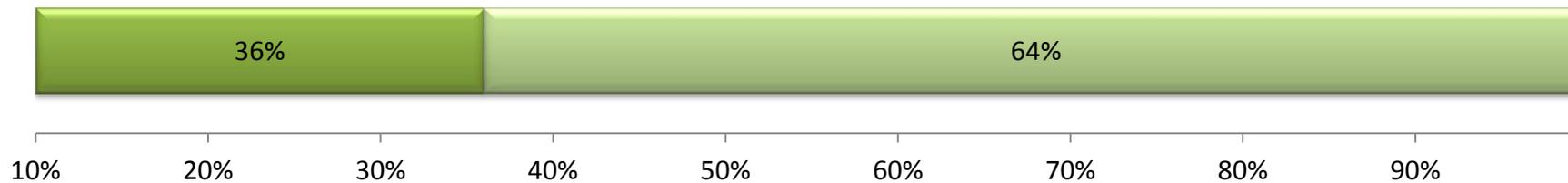
■ Health Facility ■ Community Level



Review after 12 months

Place of Delivery

■ Health Facility ■ Community Level



- More than half of the health facility staff trained in AMTSL/uterotonic have been transferred to locations outside the intervention area
- During counseling sessions, messages related to delivery at health facility is not being emphasized.

What measures will you take to address this issue?

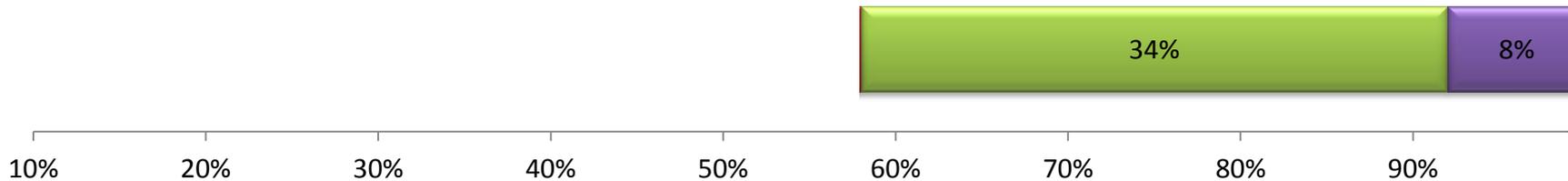
Uterotonic Coverage by Place of Birth – review after 6 months

Provided Misoprostol



Health Facility Deliveries

■ Provided Uterotonic ■ Not provided Uterotonic



Total Distribution points

Oxytocin at Health Facility	35
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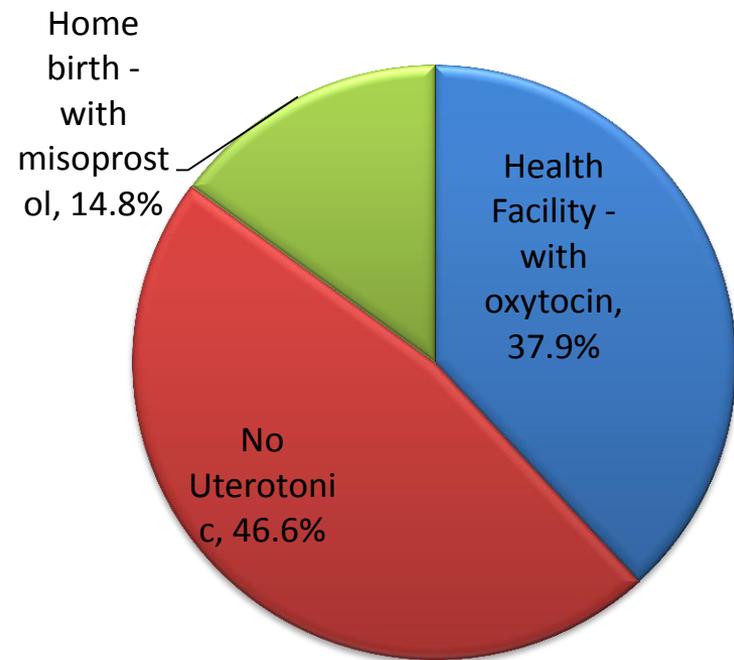
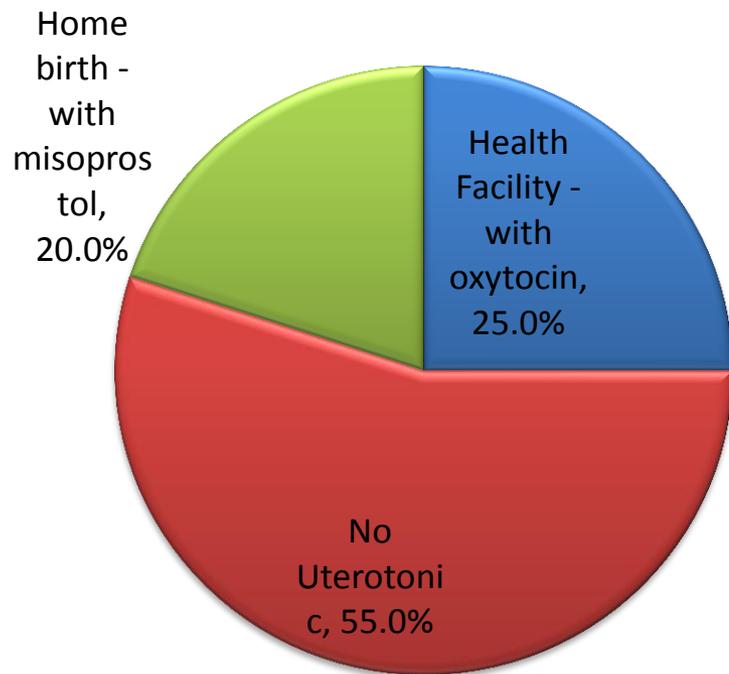
Misoprostol at CHW level	135
--------------------------	-----

Stock-outs

Oxytocin at Health Facility	7
-----------------------------	---

Misoprostol at CHW level	25
--------------------------	----

What measures will you take to address this issue?

Uterotonic Coverage before and after a 1 year implementation

- An adverse event has been reported by a CHW. What should be the action of the project team?

Exercise

- Misoprostol Distribution Rate (Health Facility & Community level)
- Uterotonic Coverage Rate
- Misoprostol Distribution points with NO Stock-outs
- Adverse events, PPH and Maternal Deaths
- Provide critical analysis and action steps
- Identify any missing Information/data elements