

# Prevention of Postpartum Hemorrhage at Home Birth A Program Implementation Guide





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Cover Photos: Photo on left from Indonesia by Gail Chanpong; Photo on right from Afghanistan by Harshad Sanghvi.

The ACCESS Program is the U.S. Agency for International Development's global program to improve maternal and newborn health. The ACCESS Program works to expand coverage, access and use of key maternal and newborn health services across a continuum of care from the household to the hospital—with the aim of making quality health services accessible as close to the home as possible. Jhpiego implements the program in partnership with Save the Children, Constella Futures, the Academy for Educational Development, the American College of Nurse-Midwives and IMA World Health.

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# **ACKNOWLEDGMENTS**

The authors gratefully acknowledge the following individuals who helped to make this publication possible:

Anna Alisjahbana
Nanet Prihatini Ambaretnani
Nasratullah Ansari
Ghulam Shams Bigana
Yusti Friandini
Patricia Gomez
Kristina Gryboski
Katie Huffling
Erlina Kartabrata
Johannes Moses
Nyanita Noviantina
Ndola Prata
Asha Pun
Swaraj Rajbhandari

This publication was made possible in part through support provided by the Maternal and Child Health Division, Office of Health, Infectious Diseases and Nutrition, Bureau for Global Health, U.S. Agency for International Development, under the terms of the Leader with Associates Cooperative Agreement GHS-A-00-04-00002-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

# ABBREVIATIONS AND ACRONYMS

AMTSL Active management of the third stage of labor

ANC Antenatal care

BCC Behavior change communication

BPS Badan Pusat Statistic—Central Statistic Bureau

CHW Community health worker

DFID Department for International Development (U.K.)

EmOC Emergency obstetric care

FIGO International Federation of Gynecologists and Obstetricians

GTZ Deutsche Gesellschaft fur Technische Zusammenarbeit

(German Development Assistance)

ICM International Confederation of Midwives

IEC Information, education and communication

MDG Millennium Development Goal

MMR Maternal mortality ratio

NGO Nongovernmental organization

NSAID Non-steroidal anti-inflammatory drug

PPH Postpartum hemorrhage

TAG Technical Advisory Group

TBA Traditional birth attendant

USP DI United States Pharmacopeia Drug Information

WHO World Health Organization

# **FOREWORD**

Approximately 585,000 women die every year from maternal causes, and the vast majority of these deaths occur in developing countries. Among the causes of maternal death, severe bleeding is responsible for 25% of those deaths worldwide. Among the cases of bleeding, postpartum hemorrhage (PPH), defined as blood loss of more than 500 cc within 24 hours following delivery, is the leading cause of maternal mortality. At the 2004 workshop on "Preventing Postpartum Hemorrhage: From Research to Practice" in Bangkok, Dr. Mehr Afzoon Mehr Nessar, from Afghanistan, said, "Women will continue to become pregnant and women will continue to die whether we are ready or not. We have to act now and not delay any more."

This Program Implementation Guide is designed to help service providers and public health decision-makers act now to begin implementing programs that use community-based distribution of misoprostol as a tool in the fight against maternal mortality. Decades of research have proven the safety and efficacy of misoprostol. This guide will help service providers create programs that reach the most vulnerable populations of women—those who live in rural areas and who are unable to access a skilled birth attendant to assist with delivery. There must be no missed opportunity in this campaign to promote maternal survival, and the use of misoprostol allows service providers one more intervention to prevent PPH.

The case studies and field experiences in this guide come from the work of many individuals and organizations. Indonesia concluded a successful pilot study in 2003 and is now taking its misoprostol program to scale across the country. Nepal is beginning its own program, as only 11% of deliveries there are attended by a person with midwifery skills. In Afghanistan, where 39% of maternal deaths are due to hemorrhage, Jhpiego is working with counterparts to begin an intensive misoprostol program.

At the 2004 Bangkok conference, Dr. Mary Ellen Stanton said, "We have the opportunity to accelerate success in reduction of maternal mortality by putting the spotlight on postpartum hemorrhage—the biggest maternal killer." This guide puts the spotlight on misoprostol and its contribution in preventing PPH. We have the tools to act, so act we must.

# **ABOUT THE GUIDE**

Prevention of Postpartum Hemorrhage at Home Birth: A Program Implementation Guide has been developed to provide the managers of reproductive health programs with a step-by-step guide to setting up a community-based misoprostol program. This guide was developed to provide organizations and agencies with the information they need to introduce, implement and sustain a program of community-based distribution of misoprostol as an approach to the prevention of PPH. This approach is a low-cost, evidence-based practice that has been demonstrated to be effective in preventing PPH and improving women's health around the world.

The purpose of this implementation guide is to provide reality-based guidance for a country-specific adaptation of misoprostol distribution. The experience gained in Gambia, Indonesia, Nepal and Afghanistan, among other countries, has determined the steps and procedures in this guide, which will contribute to the success of a program. The guide assumes that any group or individuals advocating for a program will have already answered the questions below to determine if they are ready to begin a new program:

- Is PPH a major public health concern in our country?
- Is there a high demand for a solution?
- Is there a readily available solution?
- Will the solution have a significant impact on correcting the problem?
- Is the solution feasible to implement? (i.e., Will it reach the most vulnerable population?)
- Are the limitations of the solution acceptable?

Using misoprostol as a new approach to preventing PPH takes into account many of the realities that confront program managers in developing countries, namely:

- Emergency care is largely unavailable at the home and remote health facility level.
- There is an inadequate cool/cold chain; oxytocin and other injectable uterotonics require refrigeration to maintain potency.
- Ergotamine is contraindicated with hypertension in pregnancy.
- Injection safety remains a major problem.
- Few women have access to skilled care.

This guide addresses all of the major areas of program implementation, including site selection, monitoring and evaluation, creating stakeholder cohesion and decision-making, and using advocacy to advance program aims. Some of what program managers will learn includes designing effective communication/dissemination practices, addressing resistance to change, and implementing a systematic method of taking good innovations and sound practices to novices and learners. The guide transfers the available research to program practice and takes the practice to impact. The four parts of the guide will provide solutions and resources for the most fundamental challenges of getting a good program started and then taking it to scale. It is designed to be used alone or in conjunction with other materials, such as the resources, developed by Jhpiego, for training community volunteers.

One such set of materials is "Prevention of Postpartum Hemorrhage at Home Birth: Resources for Training Community Volunteers," the second section of this document. These training resources include an introduction on prevention of PPH, what the community volunteer does, and how the community volunteer should talk with pregnant women, as well as the course syllabus, schedule, outline, role plays, skills checklist and post-course questionnaire.

# **PART ONE: BACKGROUND**

# GLOBAL MATERNAL MORTALITY AND INCIDENCE OF POSTPARTUM HEMORRHAGE

The World Health Organization (WHO) estimates that eight million of the estimated 210 million women who become pregnant each year suffer life-threatening complications related to pregnancy, and many experience long-term illness and disabilities (WHO 2002, 1995). The world maternal mortality ratio (MMR), which measures the risk of death once a woman has become pregnant, is 400 per 100,000 live births. **Table 1** shows regional mortality estimates. The figures for Africa include 17 countries with MMRs of 1,000 or greater. Afghanistan, also with a MMR of more than 1,000, is included with Asia.

Table 1. Maternal Mortality Estimates by United Nations MDG<sup>+</sup> Region, Year 2000

| REGION                                | MMR<br>(MATERNAL<br>DEATHS PER<br>100,000 LIVE<br>BIRTHS) | NUMBER OF<br>MATERNAL<br>DEATHS | LIFETIME RISK<br>OF MATERNAL<br>DEATH,<br>1 IN: |
|---------------------------------------|---|---------------------------------|---|
| World total                           | 400   | 529,000                         | 74  |
| Developed regions*                    | 20  | 2,500                           | 2,800   |
| Developing regions                    | 440   | 527,000                         | 61  |
| Africa                                | 830   | 251,000                         | 20  |
| Asia                                  | 330   | 253,000                         | 94  |
| Latin America<br>and the<br>Caribbean | 190   | 22,000                          | 160   |
| Oceania                               | 240   | 530                             | 83  |
|                                       |   |                                 |   |

<sup>\*</sup> Includes Europe, Canada, United States of America, Japan, Australia and New Zealand

Of those eight million women who are pregnant and experience complications, WHO estimates that every year, nearly 585,000 of those women will die from the complications of pregnancy and childbirth (WHO 1995). This number remains an estimate because obstetric deaths are frequently not recorded and vital records for many countries do not adequately capture the full extent of the problem.

<sup>+</sup> MDG: Millennium Development Goal

Almost 99% of the maternal deaths occur in developing countries, in areas with:

- Transport systems that do not have enough motorized transport, or have poorly maintained access roads
- Poor referral systems
- Limited access to skilled health care providers for many women, particularly women in rural areas
- Limited emergency obstetric care services established within the public health service delivery system

Among the complications, PPH is the major cause of maternal mortality in low-resource settings, responsible for 25–60% of all maternal deaths (WHO 1991, 1989) and is of major concern in areas where many women give birth at home, without the care of a skilled provider. Immediate PPH is the single most important cause of maternal death worldwide, accounting for almost half of all postpartum maternal deaths in developing countries (McCormick et al. 2002).

## **KEY DEFINITION**

**POSTPARTUM HEMORRHAGE** is defined as blood loss greater than 500 cc within 24 hours after childbirth. Countries can adapt this clinical definition to measures easily understandable to the community, such as soaking two or more cloth sarongs, which are traditionally used at home births in Indonesia, within 24 hours.

However, it is not easy to diagnose PPH, because:

- It is difficult to measure blood loss because blood may be mixed with amniotic fluid and sometimes with urine; soaked into sponges, towels, and linens; and spilled into buckets or onto the floor.
- PPH bleeding may occur slowly, over several hours, and the condition may not be recognized until the woman goes into shock.
- The impact of blood loss on a woman's condition may depend on the woman's hemoglobin level. This means that a woman with a normal hemoglobin level will be able to lose more blood than a woman who is anemic. However, even women who are not anemic can die from PPH.

Most PPH cases occur within 24 hours after birth and are due to uterine atony, a failure of the uterus to contract properly after the child is born. As a result of the failure of the uterus to contract, bleeding from the blood vessels in the uterus is not controlled. Without immediate and appropriate medical care,

a woman with PPH will probably die within two hours after the onset of PPH if she does not receive treatment (drugs, blood transfusion or surgery).

It is impossible to predict accurately who will experience PPH, so preventive interventions are necessary for all women who give birth. About 80% of PPH can be prevented by appropriate care during labor and childbirth, the most significant intervention being active management of the third stage of labor (AMTSL). This involves giving oxytocin (a uterotonic drug) immediately after the birth of the baby, before the delivery of the placenta, followed by controlled cord traction to help the placenta deliver faster, and finally rubbing the uterus to keep it contracted after delivery of the placenta.

## **KEY MESSAGE**

Any woman can be at risk for PPH. If a woman has PPH, she can die in two hours if not treated.

A factor influencing the outcome when a woman experiences PPH is whether she had pre-existing severe anemia. It is well-documented that a woman who is already anemic is unable to tolerate the same blood loss as that of a healthy woman. Therefore, the PPH prevention program must work in tandem with other initiatives, such as use of malaria prophylaxis during pregnancy, because malaria can contribute to anemia, or treatment of hookworm, which is another common contributor to anemia.

In many developing countries, births occur in the home because of:

- Cultural preferences
- Economic reasons
- Poor quality services
- Services that are difficult to access

When these births at home are not attended by skilled providers, and systems are not in place for the rapid referral and transport to respond to hemorrhage, the prevention of hemorrhage in these situations becomes very important to maternal survival. To respond to these realities of the field and to add an additional approach to the prevention of PPH, service providers and decision-makers in many countries are now beginning to use misoprostol. This drug can be used in low-resource settings and by a woman having a home birth, whether or not she is attended by a skilled provider. Years of clinical studies have shown that misoprostol is effective in preventing PPH. This guide will outline the step-by-step process for initiating a community-based misoprostol program in a country.

"I took the drug like CHW told me, this time I did not have any bleeding. Before I had to stay in the house for many days after delivery. I was so weak and tired, [but] this time I did not have bleeding. I did not have to rest, I was ready to start working."

An Afghan mother of eight who had experienced excessive bleeding in previous births, seven days after she delivered at home, having received PPH information and misoprostol

"Our wives will not die anymore because of bleeding, if they take this drug after birth of the baby and before expulsion of the Baar (placenta). We must support and encourage you. Thank you for distributing the drug to our district."

~ A community leader in Afghanistan

# CURRENT AND FUTURE THERAPIES FOR THE TREATMENT OF POSTPARTUM HEMORRHAGE

PPH can stem from a number of causes, although uterine atony accounts for 70–90% of cases of PPH. Other causes are:

- Retained placenta or placental tissue
- Genital tract trauma
- Episiotomy
- Postpartum infections
- Coagulation defects
- Obstructed and prolonged labor

Although it is not possible to predict who will suffer from PPH, we do know that some current practices are not supportive of women's health and contribute to the probability of PPH. These practices include failing to use a partograph to track how long labor is lasting, and routinely performing episiotomies on women who are having their first babies. Worldwide, 48% of providers do this, even though women can lose between 200 and 300 cc of blood because of an episiotomy.

**Table 2** presents strategies for preventing and managing postpartum hemorrhage, both in situations without a skilled birth attendant and with a skilled birth attendant.

Table 2. Strategies for Reduction of Mortality from Postpartum Hemorrhage

|            | WITHOUT A SKILLED BIRTH ATTENDANT   | WITH A SKILLED BIRTH ATTENDANT  |  |
|------------|---|---|--|
| Prevention | <ul> <li>Community awareness—Behavior change communication (BCC)/Information, education and communication (IEC)</li> <li>Birth planning</li> <li>Promotion of skilled attendance at birth</li> <li>Family planning and birth spacing</li> <li>Detection and treatment of anemia (clinical signs and symptoms)</li> <li>Community-based distribution of misoprostol for routine third stage use</li> </ul> | <ul> <li>Community awareness—BCC/IEC</li> <li>Antenatal care (to include birth planning)</li> <li>Detection and treatment of anemia</li> <li>Family planning and birth spacing</li> <li>Use of partograph to reduce prolonged labor</li> <li>Limiting episiotomy at normal birth</li> <li>Active management of the third stage of labor</li> <li>Routine inspection of placenta for completeness</li> <li>Routine inspection of perineum/vagina for lacerations</li> <li>Routine immediate postpartum monitoring</li> </ul> |  |
| Management | <ul> <li>Birth planning</li> <li>Community emergency planning</li> <li>Transport planning</li> <li>Referral strategies</li> </ul>   | <ul> <li>Active triage of emergency cases</li> <li>Rapid assessment and diagnosis</li> <li>Emergency protocols for PPH management</li> <li>Basic emergency obstetric care (EmOC):         <ul> <li>Intravenous fluid resuscitation</li> <li>Manual removal of placenta</li> <li>Removal of placenta fragments</li> <li>Parenteral oxytocics and antibiotics</li> </ul> </li> <li>Comprehensive EmOC:         <ul> <li>Blood bank/blood transfusion</li> <li>Operating theater/surgery</li> </ul> </li> </ul>                |  |
|            | Supporting Components: Women's empowerment; respect for human rights; access to care; community support and mobilization; access, utilization and quality of essential obstetric care services  |   |  |

Active management of the third stage of labor will help prevent PPH, but if a woman does suffer blood loss, a service provider has a number of options for treatment, depending on the cause of the bleeding. To treat PPH, a provider can do:

- Minor procedures:
  - Bimanual compression
  - Suturing of lacerations
  - Aortic compression
  - Manual removal of the placenta
- Major procedures:
  - Uterine artery ligation
  - B-lynch procedure
  - Hysterectomy
- Management of shock: IV fluid and blood

There are also some new therapies being tried out, including the use of antishock garments and hydrostatic tamponade, in which a condom is inserted into the uterus and then inflated. The benefits of this approach are that condoms are inexpensive and easily available, the device can be quickly assembled during an emergency and there are rapid results. Older therapies that were originally thought to reduce the risk of PPH, such as putting the baby to the breast, have been scientifically evaluated and found not to have an impact because the quantity of natural oxytocin produced is too small to cause significant uterine contraction.

Misoprostol, which has been available for a number of years, is now being recognized more extensively for its gynecological uses. It is a drug for prevention of PPH and also a drug for treatment of PPH once a woman has begun to bleed. This guide focuses on the use of misoprostol for **prevention** of PPH, and the next sections will begin to explain how to start a community-based misoprostol program to prevent PPH.

## WHY MISOPROSTOL?

Misoprostol is a prostaglandin E1 analogue that acts like a uterotonic drug by causing the muscles of the uterus to contract. It can be administered orally, rectally, buccally or vaginally and can be stored at room temperature. The safety and efficacy of misoprostol as an alternative to oxytocin is well-documented. Countries adopting the use of misoprostol as treatment for PPH will have significant data to draw on when beginning implementation (see **Table 3**) and should not need to use scarce resources in replicating drug trials.

# **KEY DEFINITION**

**UTEROTONIC DRUGS** are medicines such as oxytocin, ergometrine and misoprostol that help the uterus contract. They are especially helpful for inducing or augmenting labor and decreasing blood loss after delivery.

Table 3. A Comparison of the Three Most Common Uterotonics and Their Relative Benefits

| ASPECT OF PPH PREVENTION            | OXYTOCIN | ERGOMETRINE   | MISOPROSTOL   |
|-------------------------------------|----------|---------------|---------------|
| Effectiveness                       | +++      | -/?           | ++            |
| Needs skilled provider              | Yes      | No            | No            |
| Preparation suitable for home birth | No       | Yes           | Yes           |
| Serious side effects                | Rare     | Common        | Rare          |
| Contraindications                   | 0%       | 15%           | 0%            |
| Heat stability                      | No       | No            | Yes           |
| Cost                                | \$0.80   | \$0.30-\$0.50 | \$0.35-\$0.50 |

A recent study at a university teaching hospital in England demonstrated that giving misoprostol to women immediately after childbirth resulted in significantly lower rates of PPH than when the third stage of labor was managed only through controlled cord traction and rubbing of the uterus (El-Refaey et al. 2000). Several other studies also have demonstrated that orally or rectally administered misoprostol is effective in reducing PPH when oxytocin is not available. A WHO multi-center trial concluded that, in hospital settings, oxytocin is preferable to misoprostol in active management of third stage of labor. However, a meta-analysis of related studies concluded that 18% of women would experience PPH if the placenta were delivered on its own, 2.7% if oxytocin were used, and 3.6% if misoprostol were used (Gülmezoglu et al. 2001; Prendiville et al. 1988). Studies also demonstrate that misoprostol is safe when women take it immediately after giving birth (El-Refaey et al. 1997; Ng et al. 2001). Several researchers concluded in a 2001 review that when oxytocin is not available, use of misoprostol to prevent PPH is acceptable (Gülmezoglu et al. 2001).

## **KEY MESSAGE**

There is good and consistent evidence to support the recommendation to use 400–600 mcg of misoprostol, given orally or rectally after the delivery of a baby but before delivery of the placenta for prevention of PPH, where other uterotonic agents, including oxytocin and ergometrine, are not available. Misoprostol should be given by mouth only in situations where safe administration and/or appropriate storage conditions for other uterotonic drugs are not possible, such as in home birth.

In France, Egypt and Brazil, the drug is approved for gynecological use although not specifically for the prevention of PPH. Most recently, WHO has recommended that, in the absence of AMTSL, a uterotonic drug (oxytocin or misoprostol) be offered by a health worker trained in its use for prevention of PPH (strong recommendation, moderate quality evidence). It is important to note that WHO's definition of trained health workers—not to be confused with skilled attendants—includes village midwives and health visitors. The implication of the efficacy of oral misoprostol and these recommendations is that PPH prevention is possible even where there are no skilled attendants (WHO 2007).

In 2007, Nigeria became the first country in the world to register misoprostol for the prevention of PPH.

International formularies generally classify misoprostol as a drug to prevent gastric ulcers related to the use of non-steroidal anti-inflammatory drugs (NSAIDs). The United States Pharmacopeia did an evidence-based review and arrived at the following conclusions:

## **UNITED STATES PHARMACOPEIA (USP) CONCLUSIONS**

- Misoprostol is safe and effective in preventing PPH.
- Misoprostol is recommended as an alternative agent in preventing PPH, especially where oxytocin and other uterotonic drugs are not available.
- The prevention of PPH is considered an accepted off-label use for misoprostol in the USP Drug Information publication.

## **KEY MESSAGES**

- PPH can happen to any woman during labor.
- PPH is responsible for 25–60% of all maternal deaths.
- Uterine atony causes 70–90% of all cases of PPH.
- AMTSL can prevent 80% of all cases of PPH.
- Research shows that misoprostol can prevent the onset of PPH in many cases.
- Promoting the use of misoprostol to prevent PPH does not replace the mandate that all births should be attended by a skilled provider and that AMTSL and the use of oxytocin are the preferred management technique.

# PART TWO: PLANNING AND IMPLEMENTING THE PROGRAM—A CHECKLIST FOR PROGRAM ACTIVITIES

Part Two of this guide uses a checklist to assist program managers through the various phases of implementation. These phases are not sequential. At times, activities can be simultaneous, such as finishing policy changes while already beginning the training of change agents. There are a few activities in each phase that are mandatory. If they are not completed, the program cannot go on. Examples include creating the Technical Advisory Group (TAG) in Phase I, creating a brand name in Phase II, and training the outreach workers in Phase III, as they must all receive training in counseling and information before they can begin to identify clients. Below you will find the checklist for Phases I–V.

# THE CHECKLIST FOR A COMMUNITY-BASED MISOPPROSTOL PROGRAM Summary of Phase I: Beginning the Program

- 1. A person or an institution, responding to information in the professional literature on the use of misoprostol in preventing PPH, decides to begin a community-based PPH prevention program by distributing misoprostol.
- 2. This original innovator does a macro-environmental needs assessment, which demonstrates the need for the program.
- 3. The innovators select from among influential people from different sectors and institutions (university, ministry of health, women's groups, etc.) and creates the TAG for the program. This group will assist from implementation to supervision to roll-out and evaluation. The composition of the group may occasionally change.
- 4. The TAG drafts a timeline for program start-up, implementation, review and roll-out.
- 5. The TAG determines the key stakeholders and conducts stakeholder meetings.
- 6. The TAG identifies policy changes that need to be made for program facilitation.
- 7. The TAG and stakeholders discuss and agree on how to integrate the program with the existing safe motherhood structure and programs for the countries.

# **Summary of Phase II: Preparatory and Planning Activities**

- 1. Select the counterparts in the health system at the province, district and township levels who will participate in the program.
- 2. Working with counterparts, identify who will be the community health workers who will counsel women and distribute the medication.
- 3. Select the site for implementation of the program, based on established criteria.
- 4. Hold focus group discussions at the community level to determine community members' perceptions of PPH and what they think they need in order to manage the problem.
- 5. Identify which company will be the supplier of choice for the drug and how the distribution system will be organized.
- 6. Create a brand name for the medication that links the drug solely to the program for the prevention of PPH and for no other use.
- 7. Develop the system that will identify how pregnant women will be named and registered for the program so that no woman is left out and there are no missed opportunities to reach women.
- 8. Using results from the community consultation and the stakeholder meetings, adapt training and counseling materials for use in-country, with local examples and graphics.
- 9. Develop the budget and identify resources that will fund activities.

# **Summary of Phase III: Early Implementation**

- 1. Train the identified change agents in how to identify women, record the home visits, distribute the pills, monitor for any adverse incidents and record outcomes for the birth.
- 2. Hold community meetings to create awareness of the new program (socialization).
- 3. Package, brand and distribute the medication out to the program areas and regions.
- 4. Using the forms developed in Phase II, begin to census and register the women in the program area.
- 5. Print all the IEC materials, counseling materials, identification forms and registration forms.

# **Summary of Phase IV: Full Implementation**

- 1. Begin to provide information and counseling to the women who are enrolled in the program.
- 2. Distribute the drug to women enrolled in the program.
- 3. Conduct the monitoring and supervision visits.
- 4. Report all of the monitoring results to the TAG on a quarterly basis.
- 5. Conduct final postpartum visits for all women who are enrolled in the program and have delivered.

# **Summary of Phase V: Review and Expansion**

- 1. Using the lessons from the field, including client feedback, make changes to the program to ensure better quality.
- 2. Use program results to generate further support for the program.
- 3. Expand coverage as resources allow.
- 4. Hold regular meetings with the stakeholders for continual feedback.

#### PHASE I: BEGINNING THE PROGRAM

# **Taking Innovation to Scale**

How does a home birth program using misoprostol to prevent PPH begin? In some countries, donors who are part of the international research effort may provide the momentum. In other countries, either a person who has read the current literature on misoprostol, or an institution, might be the catalyst for the program. It is essential that there be either a person or an organization that plays the role of "innovator"—the person or small group that will experiment, invent and adopt a completely new technology or approach if they believe it has merit. However, because sometimes they function outside established systems, they need to have the support of a group of people called early adopters. These people are opinion leaders, are integrated with the existing systems and, most important, they influence the behavior of others in adopting innovation.

#### THE BEGINNING

A person or organization accepts the innovation of misoprostol for the prevention of PPH and decides to implement a program that will use community-based distribution to bring misoprostol to all women who need it.

After this person or organization takes the initial step, it does a macroenvironmental needs assessment to gather basic data on why misoprostol would be a necessary addition to the current maternal health program. This completes Step 2.

#### MACRO-ENVIRONMENTAL NEEDS ASSESSMENT

- Collects data on the nation's maternal mortality ratio (MMR).
- Shows how PPH contributes to the MMR.
- Outlines how the current system prevents PPH.
- Identifies weaknesses in the current system. (For example, in Nepal, only 11% and in Afghanistan only 8% of deliveries are attended by persons with midwifery skills.)
- Shows opportunities for the use of misoprostol. (In Indonesia, more than 50% of births are still home-based.)

# **Creating Technical Advisory Groups**

Step 3 of Phase I is to create the TAG. This is one of the key steps, as this group will follow the program from inception to completion. This group will also answer questions, respond to concerns, disseminate information to the stakeholders and guide the process. It is important to make sure that the early adopters are part of the TAG.

#### **KEY MESSAGES**

Without a functioning and proactive TAG, this program will not work.

A sample of a scope of work for a TAG is presented in the box below.

#### SAMPLE SCOPE OF WORK FOR A TAG

- Develop a proposal for a program to prevent PPH at home birth.
- Provide guidance to the Ministry of Health and other institutions that will be partners in implementation.
- Discuss and commit to how the program will be implemented. (Will it be a trial pilot first, will it be considered research, will it start in certain regions and then expand each year?)
- Develop and approve all the educational and training materials, counseling guides and monitoring framework.
- Clarify policies and work for policy change in support of the program.
- Monitor the progress of implementation and review the results on a periodic basis.
- Lead dissemination of results and plan for the scale-up.
- Initiate measures to have misoprostol registered for use in-country or added to the essential drug list.
- Identify the most cost-efficient supplier of the drug for long-term distribution.
- Continue providing oversight and monitoring as the program grows.

Once the TAG has been established, the fourth step is for the TAG to create the timeline for the program to begin activities. From Phase I, which is the beginning of the program to Phase II, which is early implementation, is usually about a six-month process.

#### **Stakeholder Consultation**

The TAG will be responsible for obtaining approval of the program, monitoring progress and securing commitments for the budget and personnel to implement the program. This TAG will most likely include leaders in the health sector, professional organizations and universities.

Once this group is developed it must take Step 5, which is to determine who the stakeholders are. Typical stakeholders include groups such as:

- The central Ministry of Health, particularly the family health department and the drug management agency
- Regional branches of the Ministry of Health, down to the lowest administrative unit; in Indonesia, this is provincial, district and then to community health center facilities throughout villages and hamlets
- National professional organizations, including the local associations for physicians, obstetricians, midwives and nurses, if nurses have a significant role in providing maternal care
- Faculty members of pre-service and in-service institutions, typically the medical and nursing schools and also faculties of public health institutions
- Legislators who regulate nursing practice acts, the essential drug list and the importation and distribution of drugs
- Local and international nongovernmental organizations (NGOs) that would be influential in obtaining community-level support for this intervention, particularly women's groups that want to promote increased access to health care for women
- Manufacturers and importers of the drug and representatives from the country's pharmaceutical industry and Ministries of Health, Food and Drug Administration
- Donors and United Nations organizations that will promote the policy

After identifying the stakeholders, the TAG will institute a series of consultative meetings to hear stakeholders' questions and concerns. During these meetings, the misoprostol program team should have ready:

- Fact sheets on frequently asked questions.
- References for all of the research that has been conducted on the efficacy of misoprostol.
- An outline of why misoprostol is needed for prevention of PPH in their country. This outline should include data on how many women experience PPH, the MMR for the country, the state of emergency obstetrics services and any identified cultural barriers that contribute to PPH. This reflects the macro-environmental needs assessment that was conducted in Step 2.
- If the stakeholder meetings are conducted over a length of time, the early results from the qualitative studies can also be added to the information available.

It is best to limit the number of participants at each meeting in order to facilitate dialogue. Meetings should be held frequently, particularly if there is a rapid turnover of leadership in the Ministry of Health or other key institutions. It is also best to try to have these meetings over a limited period of time, no more than two or three months, so that the program can move as rapidly as possible toward the ultimate goal of helping women obtain better prevention options for PPH.

#### TIPS FOR MEETINGS

Keep them small, focused and frequent.

# **Policy Change**

Step 6 is for the TAG to identify policy issues that will need to be reviewed and addressed. Common policy issues include:

- Is the drug available for gynecological and obstetric use in the country?
- What are the national policies concerning community-based distribution of medications?
- Does the government have a stated interest in preventing maternal mortality?
- Is the government prepared to shift resources in favor of this program?
- Are there groups that would oppose the program?
- What legislation will have to be enacted to support this program? Examples include changes in the essential drug list for the country and modifications to the service provider practice acts to allow distribution of the drug.

Who will be the identified change agent, and will that necessitate any changes to current practice acts that govern the duties of service providers?

In review of policy issues, it is often helpful to provide decision-makers with information from other countries so they can see how their counterparts are proceeding. For example, when the TAG in Afghanistan met with the Reproductive Health Task Force, one of the policy issues raised was whether the use of ultrasound, which can identify the sex of the baby, might lead providers to use misoprostol to terminate unwanted female pregnancies. This was never an issue raised in Indonesia but was of real concern to the Ministry of Health in Afghanistan. The reference section at the end of this guide may be useful in discussions of policy implications, as it lists all of the current research as well as some policy issues that arose.

The last step in Phase I is for the TAG to use the information from the stakeholder meetings to facilitate the discussion of how this new program can be integrated with the existing safe motherhood structures and programs for the country. There is always a competition for scarce resources and it is important to stress the risk-benefit and how the program can contribute to averting maternal deaths. If the audience includes members from the central planning bureaus, it can be helpful to link the averted deaths to economic productivity. The box below shows how the misoprostol home birth program in Afghanistan can contribute to averting 4,400 maternal deaths a year.

#### **ESTIMATED DEATHS AVERTED PER YEAR IN AFGHANISTAN**

- Births per year in Afghanistan: 1,100,000
- Current deaths from PPH: 7,800/year (30% of all maternal deaths/year)
- Cases of PPH (16% = midpoint of natural PPH): 176,000
- Cases of PPH (4% chance with misoprostol): 44,000
- Prevented cases of PPH/year (176,000 44,000 cases): 132,000
- Averted deaths from PPH/year (ratio of 1 death per 30 cases): 4,400

The important message to stress is that this program will assist in coverage by increasing the total number of women who have access to preventive measures, and it increases awareness of PPH. Due to the emphasis of the program on counseling and communicating information, women will be armed with the appropriate information so that they can act earlier and seek treatment if they have PPH.

#### KEY MESSAGES FOR PHASE I

- The Technical Advisory Group is the driving force for getting a program for community distribution of misoprostol at home births up and running in a country.
- Policymakers must be committed to invest in and devote the necessary resources and dedicated staff to program planning, implementation and monitoring.
- Policy change should be as participatory as possible, involving key stakeholders and clearly basing policy decisions on the needs and health priorities of the population.
- There is information already available that shows that misoprostol is effective in preventing PPH, so countries should understand that the program is taking research to practice and is not a drug efficacy trial.
- This program is about prevention, not treatment, and supports the other two key messages that promote maternal survival: namely, the use of the active management of the third stage of labor and the use of skilled providers at birth.
- The program will be integrated with other maternal health initiatives currently being implemented in a country.

#### PHASE II: PREPARATORY AND PLANNING ACTIVITIES

# **Development of Community Health Workers**

Although the TAG is a vital component of the program, no less important is having counterparts within the health system who will be responsible for the day-to-day management and oversight of the program. Thus Step 1 of Phase II is to select counterparts. In Indonesia, there were counterparts at all levels of the health care system, from the central to the provincial and district levels. Your country health system will guide the most appropriate placement of counterparts. Counterparts do not have to be physicians; they can be nurses, midwives or public health managers.

In an October 2005 meeting on the progress of the expansion of the misoprostol program in Indonesia, the Ministry of Health restated that training and promotion of the program must also focus on district health staff and doctors. Without this training, they will not understand the data being reported to them by the community village health workers and midwives. Without this understanding, it is very difficult for them to carry out their supervisory role or monitor the program. Although they do not have face-to-face contact with the clients in the misoprostol home birth program, they nonetheless are still responsible for ensuring their safety as well as effective monitoring and reporting.

Once the counterparts are selected, they should work in tandem with the TAG to decide who will be the change agent to distribute misoprostol to women and who will provide the counseling. The counterparts will have roles to play over the long term, so it is important to have a clear job description that outlines what each person will do in support of the misoprostol program.

**Annex A** presents sample job descriptions for four types of service providers who were active in the Afghanistan program.

The village health workers are the key staff who will receive training in communicating information, counseling, identifying pregnant women in their recruitment areas, distributing the drug and conducting the postpartum interview. There are a number of criteria used to identify who would be good candidates for this key position. For example, literacy with an eighth grade education is a usual criterion, but in countries like Nepal, where approximately 60% of the female community health volunteers are illiterate, and Afghanistan, where 90% of the community health workers are illiterate, it might not be appropriate to use this as a criterion. In Afghanistan, gender was a criterion for selection, but the program managers then needed to take into account religious behavioral constraints and thus had to plan for an escort for each female health worker. In Tanzania, the study used traditional birth attendants (TBAs) to provide misoprostol as a treatment for PPH. Although this is different from using the drug for prevention, one of the outcomes that the researchers found was that the TBAs could be successfully trained to identify PPH and administer misoprostol, even though they were functionally illiterate. The box below shows common criteria for selecting community health workers from around the world.

#### **KEY DEFINITION**

# CRITERIA FOR SELECTING COMMUNITY HEALTH WORKERS FOR MISOPROSTOL PROGRAMS

- Usually female
- Can be male if culturally appropriate
- Willing to work for no remuneration
- Willing to visit pregnant women house to house
- Previous experience in other public health programs
- Acceptable to the community
- Have a basic education level
- Have time available for training and follow-up

It is of particular importance when selecting community health workers for your country's program to adjust to the literacy levels of the community health workers available to the program. In Indonesia, which has an approximate 95% literacy rate, the program chose only community health workers who were literate. In Nepal, where only 40% of the population is literate, the program used both literate and non-literate workers. However, the workers who were non-literate received only one day of training and were restricted in their role to disseminating information. The workers who were literate received the complete three days of training and they were responsible for providing information, counseling and distributing the drug. Finally, in Afghanistan, the program chose not to differentiate between those who were

literate and those who were not, and used both kinds of workers in the program. However, the training and counseling materials had to be adapted so there was more information available in a pictorial format.

#### Site Selection

After the TAG and counterparts have identified who will be the change agents, they must also decide where the program will initially be implemented. Site selection will depend on a number of factors. Some of the factors to look at when deciding on sites are the following:

- Are basic data on MMR and causes of death available for the region?
- Does the particular region have a percentage of women who deliver at home that is greater than the national percentage? This was the case in choosing West Java.
- How many of the home births are attended by a skilled provider?
- If there have been maternal deaths in the region, how many of them were caused by PPH?
- Does the region have physical barriers such as very poor roads, boat access only or many isolated hamlets? Use of misoprostol in these settings could buy a woman more time if she experienced PPH and still had to be referred.
- Is the region still primarily rural? Rural women have less access both to facilities and to skilled attendants.
- Are there donor programs in the area that could contribute resources, such as paying for the adaptation of materials or buying the medication?
- Are there NGOs working in the area that could support the program?
- Are there existing networks of community health workers who could be used as the change agents for the misoprostol program?
- Where is the nearest facility that can provide EmOC in the case of extended treatment needs?
- In the event that a country such as Afghanistan is experiencing armed conflict, how close is the war front to the district?
- Will the war hamper efforts to distribute the drug?
- Does the region have funding that it can contribute to the program?

If a region meets three or more of these criteria, it would be a good place to begin the misoprostol program. Many countries do start out in just one or two regions and then expand after they have country-specific data that show how the program is contributing to maternal survival.

## **Formative Research**

The purpose of formative research in the home-based misoprostol program is to gather information about the underlying knowledge, beliefs and attitudes of women and their families as they relate to pregnancy, delivery and bleeding after delivery. These data are essential for the program to ensure that the information, counseling and drug interventions are culturally appropriate and accepted by the community. The formative research also guides the development of the pictorial educational materials. Specifically, the purpose of doing formative research is:

- To identify the local norms and cultures related to pregnancy and labor.
- To see how much men who have had children know and how they behave in facing the risk of labor experienced by their wives. Men are a focus in this research because they are usually the support persons for women and they usually decide whether women should seek treatment for bleeding.
- To elicit comments from women and their husbands about the intervention—taking the medicine to prevent PPH.

Formative research is defined as focus group discussions and in-depth interviews with key informants. The type of person who should be in the focus group will change from country to country; however, some typical participants are listed in the box below.

#### POSSIBLE FOCUS GROUP MEMBERS

- Women who have recently delivered
- Women who recently delivered and experienced a complication
- Women who recently delivered and experienced PPH
- Men with children
- Traditional birth attendants
- Community health workers
- Midwives or other health service providers

In addition to using focus groups, you can also conduct in-depth interviews that add greater detail and richness to this general level of knowledge. Some additional sources for in-depth interviews are community leaders and religious leaders, both of whom would be in the position to encourage or disapprove of the misoprostol program.

**Annex B** presents samples of focus group discussion questions that can be useful when you frame your own research. It is important to phrase your

questions in a manner that will elicit useful answers. For example, to evaluate whether women would take advice from a community volunteer, a focus group question originally asked from whom they would like to receive advice. This question did not provide answers that were of use in developing the misoprostol program. When the question was changed to ask what characteristics a person would have that would make the woman accept the advice that person had to offer, useful information was garnered. The women stated they would accept advice from a CHW who is polite, courteous and well-trained, and who the staff of the local health center felt was knowledgeable.

Another example of how the focus groups were able to clarify what level of knowledge is present in the community occurred when asking about twin pregnancies. A concern had been raised that women may unknowingly be carrying twins and would take the misoprostol after the birth of the first twin but before the birth of the second twin. From the focus groups, it was found that women were very good at identifying when they were carrying twins and would seek care from a health practitioner if they believed they were carrying twins.

If your country decides to do the misoprostol intervention as a trial program, there is then a second phase of formative research, designed to get feedback and information on how well the trial program worked and how women experienced taking misoprostol. In this case, the objectives would be as follows:

- Provide information on perception, attitude and behavior with regard to various issues related to pregnancy, and the use of a new medication in the implementation area.
- Collect information on the distribution process, acceptability and effectiveness of the new medication, which are influenced by various factors in the community.
- Provide programmatic recommendations about potential scale-up and replication of the new program.

In addition to focus groups and in-depth interviews, participatory observation is also a good way to get information on local customs. In Tanzania, this allowed researchers to find out that Tanzanian women used a cotton garment called a "kanga" when they were delivering their babies and this later allowed them to develop a common measure for blood loss (Prata et al. 2005).

Once these steps have been completed, the TAG and its counterparts can turn to the task of getting misoprostol into the country and branding it with a specific brand that links its use to the prevention of PPH and the health and safety of women. These are Steps 5 and 6 of Phase II.

# **Drug Supply and Branding**

The two largest manufacturers of misoprostol are Cipla and Searle. In the Tanzania study, misoprostol supplied by Zizhu Pharmaceutical, Beijing, was used. Other common names and where they are manufactured are in **Table 4** below (PATH 2005):

| Table 4. Misoprostol Manufactur | rers and Name Brands |
|---------------------------------|----------------------|
|---------------------------------|----------------------|

| DRUG NAME | WHERE/WHO MANUFACTURED |
|-----------|------------------------|
| Cytotec   | Searle and Pfizer      |
| Cityl     | Colombia               |
| Cyprostol | Austria                |
| Cytolog   | India                  |
| Gastotec  | Korea                  |
| Gastrul   | Indonesia              |
| Gymiso    | France                 |
| Misoprost | India                  |
| Misel     | Korea                  |
| Prostokos | Brazil                 |
| U-Miso    | Taiwan                 |
| Vagiprost | Egypt                  |
| Zitotec   | India                  |

In addition to these sources, the drug can be manufactured locally where national pharmaceutical manufacturing capacity exists. The decision about where to purchase the drug should be evaluated with regard to economic factors, because sometimes local taxes and tariffs make the importation of drugs more expensive than local manufacture. If the decision is made to supply the drug from local manufacturers, quality control measures must be enforced. The properties of misoprostol that make it good to use in low-resource settings are:

- It is heat-resistant and can retain efficacy even if not stored in cool temperatures.
- It can be administered in various ways, eliminating the need for injection.

 Because you do not have to use needles with it, you reduce the risk for infection and transmission of HIV.

One of the other issues the TAG will have to address is whether the country's policies allow the purchase of medications that are not on the essential drug list. Misoprostol has been put on the WHO Essential Drug List as of March 2005. In addition, the International Confederation of Midwives (ICM) and the International Federation of Gynecologists and Obstetricians (FIGO) issued a joint statement supporting the use of 400–600 mcg of misoprostol if oxytocin is unavailable.

If misoprostol is not on the list of mandated drugs in your country (Africa is the region where the fewest countries have registered misoprostol), then the TAG either must get it included on the list of essential drugs or obtain a waiver for its use in public sector programs. It is legal in many countries for clinicians to use a drug off label.

## **KEY MESSAGE**

#### **GET ENOUGH STOCK**

The important step is to get a source of misoprostol in the short run and then over the long run, work to change national drug policy so that it can be registered and used off label.

After securing a source of misoprostol, it is very important to develop a local name that will reflect that it is used to support the health of women and prevent PPH. This step is so important because one of the common worries about misoprostol is that it will be misused and that women will use it as an abortifacient. Establishing a new brand allows the program to promote the drug for its intended purpose, preventing PPH at home births and promoting maternal survival.

There are many ways to identify a brand name. In the Indonesia experience, a team with members from the local university, the district level of the Ministry of Health and service providers was asked to consider the topic of branding during the early phase of program implementation. Four names were selected as the most popular choices. They were: MenPen (Mencegah Perdarahan – Prevent Bleeding), Stop Darah (Stop Bleeding), Bugar (Ibu Segar – Healthy Woman) and Mampat (Melahirkan Aman dan Capat – Delivery Safely and Quickly); Mampat also means to plug up. That is one reason that Mampat was discarded as a choice. Women thought it would plug their bodies and prevent them from delivering their baby.

These names were field-tested with district village midwives and then the final decision was made. Indonesia chose to dub the tablet "PAS-Bayi." PAS stands for Perdarahan Atasi Segara or "immediate response to hemorrhage" after a baby; however, "PAS" is also an independent Indonesian word that indicates that something fits just right, and thus the connotation was that taking the drug fit in just right with having a baby safely. In other countries, you can use the focus groups as a way to brainstorm names. In Nepal, the Birth Preparedness Package is called Jeevan Suraksha and they chose the name Matri Suraksha Chakki, which means Mother's Protection Tablet. It is a very important step to get this name correct. If there are commercial sector branding services available in-country, they may serve as a possible source for technical assistance to ensure that the name is correct.

Phase II is almost complete now. There remain just the three steps of creating a registration form and a system to identify all of the pregnant women in the program site area, adapting training and counseling materials for use incountry with local examples and graphics, and developing the budget.

# **Mapping Systems and Forms**

One of the measures of success of a home-based misoprostol program is how many women are reached. Coverage is very important, with coverage being defined not as the size of a geographic area but rather the total number of women who received access to the program and benefited from taking misoprostol to prevent PPH. The program is about reaching out to the women who live away from community health centers and service providers and who are more likely to deliver at home without a skilled attendant. In order to reach these women, at the start of the program the community health workers and the local service providers should work together to create a map of all of the pregnant women in the area. This will happen on a repeated basis as women become pregnant throughout the year and as others deliver their babies.

Many countries are already using community mapping as a tool in their overall maternal health programs. Some countries are even using sophisticated geographic information system (GIS) mapping data to identify where pregnant women are located. However, it can be much simpler than that. Some of the inputs that can be used are:

- The latest census of the area, to get the basic knowledge of how many women of reproductive age are in the program area
- Service statistics from clinics or midwives who are giving antenatal care (ANC)

 Support from local village leaders to help identify women who are pregnant

In the beginning of the program, the community health workers will need to go door to door to complete the mapping or use opportunities such as weekly market days to identify pregnant women. In Indonesia, when the program was in a trial phase, the census for identifying and mapping pregnant women was done by the Central Bureau of Statistics (BPS – Badan Pusat Statistik). On every house, the BPS placed a sticker that contained information on whether or not there were one or more pregnant women in residence. When the program expanded, it dropped the sticker. In each village, the village midwife, helped by the village health workers, conducted the census of pregnant women, trying for 100% identification and registration. After the initial census, it should be repeated every two months, but in most villages it is difficult to do this. Every time the community health workers visit households, they ask the family members if there are any new pregnant women in their neighborhood. At the monthly health post visit, where many CHWs are involved, they ask registered pregnant women if they have heard about any new pregnant women around their homes.

Once the women have been identified, they need to be registered with the program. This begins with Phase III and early implementation. Registration will allow women to get counseling, identify when is her eighth month of pregnancy for a follow-up visit, and obtain the misoprostol dose. The information that will be part of the registration is:

- The name of the woman and her husband
- How old she is and the year she was born
- Her address or house number
- The last month she had her menstrual period and when she knew she was pregnant
- The estimated month of childbirth
- If she is getting ANC and with whom, if she plans to deliver at home or at a facility, and what kind of provider she will use

Even if she plans to go to a clinic and use a midwife to deliver, she is still eligible for getting misoprostol because sometimes midwives are not available or babies come too fast for the women to reach the clinic. The registration forms are very important and serve as the basic record for the entire program. Tips for making sure that the forms are in good condition are listed in the box on the next page.

#### TIPS FOR RECORDKEEPING

- Use neat handwriting.
- Complete the form when you talk to the woman and double-check so you don't forget any information.
- Keep the forms in a safe, dry place. A large plastic envelope is a good place.
- Do not let anyone else read the information on the forms; they belong to you, the midwives and the client.
- Give the forms to the supervisors at the health clinic when you go to get new supplies of misoprostol.

Establishing the registration system and forms is one of the last steps in Phase II. See **Annex C** for a sample registration form and **Annex D** for a sample participant identification card.

## **Adaptation of Materials**

Because there is a strong global interest now in the use of misoprostol to prevent PPH, there are many materials being developed. It is always cost-efficient to try to adapt existing materials rather then create new ones. Currently available material that is ready for adaptation is listed below:

- 1. Training materials for community health volunteers and midwives
- 2. Counseling materials for the clients to keep at home
- 3. Counseling materials for CHWs to use in sharing information
- 4. Counseling flip books
- 5. Pamphlets on the signs and symptoms of PPH
- 6. Pictographs
- 7. Safety reminder cards
- 8. Medical package inserts
- 9. Data collection forms for monitoring and evaluation
- 10. General health education materials
- 11. Advocacy materials, such as community orientation presentations
- 12. Literature related to misoprostol
- 13. Field team job descriptions
- 14. Illustrative examples of safety monitoring and drug tracking tools
- 15. Performance monitoring and evaluation framework

It is very important that all of the adapted materials be translated into appropriate languages and use words the community will understand. It is also important to modify messages in response to cultural practices specific to your region. Tips for adaptation of materials are listed in the box below:

#### TIPS FOR ADAPTATION OF MATERIALS

- If other manuals and counseling materials exist, try to replicate the same artwork to have consistency with other safe motherhood messages.
- Pictures used in the training and counseling materials should be the same.
- Field-testing is still an important phase before mass-producing; all
  messages should be translated into local dialects using local people as
  translators (teachers and village leaders for example) as much as
  possible.
- Double-check that the essential meaning of the message has not been lost by reverse translation—from the original language into the local language and then back again.
- Keep a dictionary of local words that are used for the same meaning so that village health workers can know them all.
- If possible, have someone like a sociologist or an anthropologist review the materials to make sure the cultural norms and values are well-represented.
- Use artwork that shows familiar faces.

## **Developing a Program Budget**

Cost considerations are always important in decisions to introduce a new public health measure into the health program. Fortunately, the overall cost of the use of misoprostol to prevent PPH at home births is relatively small, as there is no need for extensive infrastructure to implement the program.

Budget elements for the misoprostol at home birth program include the following:

- Stakeholder meetings
- Meetings held for the socialization process
- Development or adaptation of information materials
- Development or adaptation of training materials
- Printing costs for all materials that have been developed
- Adaptation, development and publication of counseling materials
- Purchase of adequate drug supply
- Creation of new drug packaging specific to the PPH prevention program

- Training courses for the personnel implementing the program, including per diem for the trainees, transportation costs, rental of facilities and honoraria for the trainers
- Printing of monitoring forms
- Transportation costs for supervision
- Staff salary and benefits costs (which are shared across other programs)
- Purchase of computers for monitoring and evaluation

Factors that influence the overall cost of the misoprostol program include:

- The procurement option chosen for supplying the misoprostol, particularly if there are high tariffs on imported drugs
- Local manufacture of the medication, which may be less expensive
- Payment schemes for community health workers for their role; if they work for no remuneration, then the overall costs will be lower
- The use of a dedicated training infrastructure and trainers for health activities already in existence
- No liability payments if a woman experiences an adverse event after taking misoprostol
- Limited geographic scope, which will reduce costs for transportation, fuel, etc.
- Existing costs for health staff personnel; if labor costs are high, this will impact the program

In determining what resources are available for this program, managers should approach donors, local philanthropic organizations and other nongovernmental sources for funding. In Nepal, the German development assistance organization GTZ and the British aid agency DFID were identified as two possible sources to pay for the misoprostol supply.

#### KEY MESSAGES FROM PHASE II

- Formative research is very important for establishing the right cultural context for messages and health information.
- Selecting the brand name that conveys the right message, which is that
  misoprostol prevents PPH and promotes maternal survival, is essential to the
  success of the program.
- There are many options for obtaining the drug. After securing the supply, the important step is to have safe and recognizable packaging and numbering so that drug doses can be tracked.
- There are many possible criteria for the selection of community health workers or change agents; the important thing is that they are accepted by the community, they can communicate the right counseling and information messages, and they can complete forms for tracking.
- Counterparts within the health system are equally important because of the monitoring and supervision role they play.
- There are already many appropriate materials available for all phases of the program; what is essential in adaptation is that you use the local language and pictures that will be easily understood by your target groups.
- Mapping pregnant women gives you the basic group of clients and ensures that the program will provide good coverage and miss no women.
- Misoprostol is a cost-effective program and budget resources will reflect that.

#### PHASE III: EARLY IMPLEMENTATION

## **Creating Community Awareness (Socialization)**

As you begin Phase III, one of the first key steps is to begin the process of socialization. This step is defined as the program team holding a series of meetings with all of the parties involved and having open dialogues on the goals of the new program. The purpose of this process is to lay a foundation of knowledge and awareness, which will prevent any misunderstandings as the program unfolds. Its purpose is not to create demand for the new program, although this might be a secondary effect when meetings are held at the community level. Socialization efforts:

- Must be conducted at all levels, from national levels down to village levels. If the program is being carried out on a limited basis, such as on a province basis, then socialization begins at that level.
- Must be transparent. In meetings and discussions, program officers must admit to any risks or drawbacks in the program. Because there are sensitivities about misoprostol being used as an abortifacient, the program team must be willing to answer these questions if raised. However, it is important to keep the focus on the use of the drug for PPH prevention and not the other gynecological uses.
- Must be consistent. The messages that are shared during these meetings are the same as those in the information and counseling materials that the individual client will get—signs and symptoms of PPH, how misoprostol will work, support for delivering with trained providers, and support for

AMTSL as the most effective PPH prevention tool. At the village level, the drug should be referred to by its newly branded name associated with the PPH prevention program and not the generic name of misoprostol, which might raise questions about use as an abortifacient.

- Must be thorough. If at the village level not enough questions are raised, program managers must raise the issues themselves. This includes discussion of side effects, costs and success rate.
- Must be repeated throughout the program. As data becomes available on a local basis, they must be shared, and as more areas become integrated into the program, they need to have the same access to information as earlier programs did. Also, as contact people who previously were informed move to other positions, it is necessary to continue the socialization process with their successors.

## **Training Community Health Workers**

One of the key steps in Phase III is training the community health workers to begin doing their job of providing counseling and education, along with the distribution of misoprostol when an identified client is eight months pregnant. This training section assumes that in your country, there are already established training centers and trainers, who usually work with the Ministry of Health. Under this assumption, the first training activity is to train the trainers, who will then continue with training the community health workers. There are many options for training of trainers and you can obtain technical assistance from other countries that have already done this, such as Afghanistan, Nepal and Indonesia. You can request assistance from institutions, such as Jhpiego, that have spearheaded training around the world, or you can request assistance from WHO or other donors with expertise in training health care trainers.

The best-case scenario is to use trainers with a great deal of experience, while at the same time having experts in home-based births with the use of misoprostol available so as to draw on their experiences from the field.

The basic training course is three days long, and the goal and objectives of the training are captured in the box on the next page.

#### MISOPROSTOL TRAINING COURSE GOAL

This three-day course is designed to prepare community health workers to give information to women, their families and their community members on the causes and prevention of postpartum hemorrhage (PPH). The course will focus on the use of misoprostol to prevent PPH at home birth and will provide CHWs with the attitudes, knowledge and skills needed to provide misoprostol to pregnant women in their community.

You should select the participants for the course in accordance with the criteria the program established for community health workers. If you have agreed to use both illiterate and literate workers, this can affect how you implement the training. In Nepal, illiterate volunteers received information only on training and counseling during a one-day training session, while literate volunteers received the three-day course, including how to distribute misoprostol.

#### TRAINING IS COMPETENCY-BASED

Participants must score 85% on the knowledge assessment and perform all of the steps and tasks on the checklist correctly in order to successfully complete the course.

The learning methods used in the training include:

- Illustrated lectures and group discussions
- Role plays
- Exercises
- Demonstrations
- Brainstorming
- Games

The illustrative training schedule on the next page uses all of these methods to keep adult learners engaged in what they are learning. In addition to using the training materials consisting of a flip book and handouts, if available, trainers should use the full range of teaching aids, such as:

- Flip charts
- Overhead projectors
- Writing boards
- Computers

Recognizing that there are resource constraints and different settings available for training, program managers should try as much as possible to create an environment conducive to learning (not too noisy or hot) and with as many

different kind of teaching aids as possible. When doing the actual training, trainers must ensure that all of the materials being used are the ones that the community health workers will then use on-site; trainers should also change from using the generic word misoprostol to the branded name that has been identified in-country. A recent lesson learned is that it is helpful to have Department of Health members participate in the training for community health workers, so they have a full appreciation of the expectations and capabilities of the community health workers they will be supervising.

The training schedules on the next two pages represent two different approaches to covering the necessary course content. In the first example, the course is for both literate and illiterate community health volunteers. Thus the first day has to cover extensive information as the illiterate volunteers leave training after that day. The objective of that training is to ensure that illiterate volunteers understand the key messages for the misoprostol home birth program and can share them. In the second example, the course is for literate volunteers only, so in day one, trainers can begin to include role plays and other techniques because they have more time to cover the same material.

Illustrated Training Schedule for the Three-Day Course with Both Literate and Illiterate Members

| 10:00 a.m.–2:00 p.m.   | Day 1   | Day 2  | Day 3  |
|--|---|--|--|
| Overview of course:  Goals and objectives Setting norms/ground rules Participants' expectations  Pre-course questionnaire  Brainstorming/discussion: Experience-sharing on maternal death and excessive bleeding after childbirth.  Discussion/brainstorming: Main causes of excessive bleeding after childbirth, how it can be prevented; why women should be attended by a skilled provider at birth; how a skilled provider at birth; how a skilled provider at pirth; how a childbirth.  Discussion:  Lunch 2:00-2:45 p.m.  Z:45-5:00 p.m.  Discussion: Information on misoprostol; how misoprostol to used to prevent excessive bleeding after childbirth at home birth.  Discussion/brainstorming:  Lunch 2:00-2:45 p.m.  Z:45-5:00 p.m.  Discussion: Information on misoprostol; how misoprostol to used to prevent excessive bleeding after childbirth at home birth.  Discussion: Information on misoprostol; to used to prevent excessive bleeding after childbirth at home birth.  Discussion: Information on or misoprostol; to used to prevent excessive bleeding after childbirth at home birth.  Discussion: Information on misoprostol; to used to prevent excessive bleeding after childbirth at home birth.  Discussion: Role of community health volunteer: literate vs. illiterate.  Discussion/brainstorming: Role and responsibilities of CHV in helping prevent excessive bleeding after childbirth and record information on their use of misoprostol.  Brainstorming/exercise  Illustrated lecture/game: Interpersonal and communication skills to talk to women and their families about excessive bleeding after childbirth.  Discussion/demonstration: Identify and register pregnant women.  Exercise: Using effective interpersonal skills to interview and register pregnant women, on preventing excessive bleeding after childbirth, how to prevent excessive bleeding after childbirth, how to prevent excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Provide information on their use of misoprostol.  Discussion: Lunch 2:00-2:45 p.m.  Discussion: Cour | 10:00 a.m2:00 p.m.  | 10:00 a.m2:00 p.m.   | 10:00 a.m2:00 p.m.   |
| <ul> <li>Goals and objectives         <ul> <li>Setting norms/ground rules</li> <li>Participants' expectations</li> </ul> </li> <li>Pre-course questionnaire         <ul> <li>Brainstorming/discussion:</li></ul></li></ul>   | Opening   | Review day's scheduled activities  |  |
| Lunch 2:00–2:45 p.m.  2:45–5:00 p.m.  Discussion: Information on misoprostol; how misoprostol is used to prevent excessive bleeding after childbirth at home birth.  Selection of community health volunteer (CHV)—Discussion: Role of community health volunteer: literate vs. illiterate.  Discussion/brainstorming: Role and responsibilities of CHV in helping prevent excessive bleeding after childbirth at home birth through use of misoprostol.  Brainstorming/exercise  Lunch 2:00–2:45 p.m.  2:45–5:00 p.m.  Demonstration/role play: Provide information to pregnant women and their families on preventing excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Provide misoprostol to women when they have completed the 8th month of their pregnancy.  Demonstration/role play: Provide misoprostol to women when they have completed the 8th month of their pregnancy.  Demonstration/role play: Conduct follow-up visits to women's homes after birth and record information on their use of misoprostol.  Closing  | Goals and objectives     Setting norms/ground rules     Participants' expectations  Pre-course questionnaire  Brainstorming/discussion: Experience-sharing on maternal death and excessive bleeding after childbirth.  Discussion/brainstorming: Main causes of excessive bleeding after childbirth, how it can be prevented; why women should be attended by a skilled provider at birth; how a skilled provider can prevent excessive | Interpersonal and communication skills.  Demonstration/role play  Discussion: Using effective interpersonal skills to talk to women and their families about excessive bleeding after childbirth.  Discussion/demonstration: Identify and register pregnant women.  Exercise: Estimating month of childbirth.  Exercise: Using effective interpersonal skills to interview and register pregnant women.  Demonstration/role play: Provide information to pregnant women on | Provide information on excessive bleeding after childbirth and its prevention to anyone in the community.  Discussion: Report information about registered women and their use of misoprostol to midwife at health center.  Role play/assessment: Use effective interpersonal skills to register pregnant women, provide information on excessive bleeding after childbirth, how to prevent excessive bleeding after childbirth, and how to use misoprostol. |
| 2:45–5:00 p.m.  Discussion: Information on misoprostol; how misoprostol is used to prevent excessive bleeding after childbirth at home birth.  Demonstration/role play: Provide information to pregnant women and their families on preventing excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Provide misoprostol.  Demonstration/role play: Provide misoprostol.  Demonstration/role play: Provide misoprostol.  Demonstration/role play: Provide misoprostol to women when they have completed the 8th month of their pregnancy.  Discussion: Course accomplishments relative to objectives.  Review and discuss: Midcourse questionnaire  Discussion: How participants will begin their work as community volunteers.  Closing  Closing   |   | childbirth using misoprostol.  |  |
| Discussion: Information on misoprostol; how misoprostol is used to prevent excessive bleeding after childbirth at home birth.  Selection of community health volunteer (CHV)—Discussion: Role of community health volunteer: literate vs. illiterate.  Discussion/brainstorming: Role and responsibilities of CHV in helping prevent excessive bleeding after childbirth at home birth through use of misoprostol.  Demonstration/role play: Provide information to pregnant women and their families on preventing excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Provide information to pregnant women and their families on preventing excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Provide information to pregnant women and their families on preventing excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Provide information to pregnant women and their families on preventing excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Conduct follow-up visits to women's homes after birth and record information on their use of misoprostol.  Closing  Closing   | -   |  | -  |
| misoprostol; how misoprostol is used to prevent excessive bleeding after childbirth at home birth.  Selection of community health volunteer (CHV)—Discussion: Role of community health volunteer: literate vs. illiterate.  Discussion/brainstorming: Role and responsibilities of CHV in helping prevent excessive bleeding after childbirth at home birth through use of misoprostol.  Discussions reaction/role play: Provide misoprostol to women when they have completed the 8th month of their pregnancy.  Demonstration/role play: Conduct follow-up visits to women's homes after birth and record information on their use of misoprostol.  Discussion/brainstorming: Role and responsibilities of CHV in helping prevent excessive bleeding after childbirth at home birth through use of misoprostol.  Brainstorming/exercise  | 2:45–5:00 p.m.  | 2:45–5:00 p.m.   | 2:45–5:00 p.m.   |
|  | misoprostol; how misoprostol is used to prevent excessive bleeding after childbirth at home birth.  Selection of community health volunteer (CHV)—Discussion: Role of community health volunteer: literate vs. illiterate.  Discussion/brainstorming: Role and responsibilities of CHV in helping prevent excessive bleeding after childbirth at home birth through use of misoprostol.   | information to pregnant women and their families on preventing excessive bleeding after childbirth using misoprostol.  Demonstration/role play: Provide misoprostol to women when they have completed the 8th month of their pregnancy.  Demonstration/role play: Conduct follow-up visits to women's homes after birth and record information on  | accomplishments relative to objectives.  Review and discuss: Midcourse questionnaire  Discussion: How participants will begin their work as community volunteers.  |
|  | _   | Review of day's activities   |  |

## Illustrated Three-Day Schedule for All Literate Volunteers

| Day 1  | Day 2  | Day 3   |
|--|--|---|
| 9:00 a.m12:45 p.m.   | 9:00 a.m12:00 p.m.   | 9:00 a.m.–12:45 p.m.  |
| Opening ceremony  Overview of course:  Goals and objectives Setting norms/ground rules Participants' expectations  | Simulation: Data collection: Done in groups of 6 CHWs. There should be a different exercise for each member of the group. Fill in the data collection form based on the cases she/he got.  | Providing counseling to a pregnant woman and her support person(s): Participants understand the importance of providing good counseling to make sure the woman will keep and use the drug correctly.  |
| Ice-breaking: Introduction among trainees done in such a way that participants enjoy it.  Pre-test: To assess the participants' knowledge prior to training.  Introduction: Discuss MMR and PPH, and factors related to them.  Discussion  Misoprostol tablet: To understand the benefits and correct use of misoprostol to prevent PPH. | Providing information to a pregnant woman and her family:  Realize the importance of establishing good relationship between cadre and pregnant women.  Know the basic communication techniques well.  Explain the purpose of their visit to pregnant women.  Discussion: Discuss difficulties in communication as experienced by participants. | Discussion: Discuss difficulties experienced by participants when conducting counselling.  Role play: Providing counseling (in groups): Ask each group to go to the place/room that has been assigned. One trainer facilitates one group.  Discussion: All participants: Ask a representative from each group to tell new or interesting things they found out during counseling simulation within the group. |
| Lunch 12:45-1:30 p.m.  | Lunch 12:00-1:00 p.m.  | Lunch 12:45-1:30 p.m.   |
| 1:30–5:00 p.m.   | 1:00–5:00 p.m.   | 1:30–5:00 p.m.  |
| CHWs' role and responsibility: Ensuring CHWs understand their role and how to perform it.  Discussion  Exercise: Estimating the due date and determining whether   | Role play (in groups): Divide participants into several groups and go to separate places. One trainer facilitates each group.  Discussion: All participants: Each group relates to the other groups things they found out or knew when doing simulation in   | Role play: Providing counseling (continued): Continue counseling simulation. Repeat the simulation until all participants have a chance to provide counseling.  Discussion: Ask each group to discuss findings during counseling simulation within the group.   |
| the pregnancy has reached 8 months.  Exercise: Filling in the form prepared for the CHWs.  Daily evaluation (Day 1): Participants fill in the evaluation sheet.  Review of day's activities  | the group.  Drug distribution and monitoring: Understand the flow of misoprostol distribution and monitoring the use of the drug.  Discussion  Daily evaluation (Day 2)  Review of day's activities  | Evaluation (last day)  Review of day's activities  Post-test  Closing ceremony  |

This training should be conducted by experienced trainers who:

- Have an understanding of group dynamics
- Know how to train people with low levels of basic education
- Can model strong interpersonal communication skills that the students can replicate when working with clients
- Ensure that local words for bleeding, vomiting, pain, etc. are used in the training so that the training context is culturally appropriate
- Include students' experiences in role plays and discussions, valuing the students' contribution to the learning process

## **Packaging and Distributing Misoprostol**

After the brand name has been established in Phase II, the drug doses should be repackaged for distribution within the misoprostol home birth program in Phase III. Local packaging will reinforce the message that this drug is to promote maternal survival and differentiate it from any other uses. Packaging must also take into account safety precautions and monitoring and evaluation needs. Guidance for packaging includes:

- The standard dosage for prevention of PPH is three tablets of 200 mcg per tablet, for a total of 600 mcg.
- Each dose should be independently packaged into small blister packs.
- Secondary packaging is a small plastic bag with a zip lock seal, accompanied by the instructions for use and graphics from the counseling materials.
- Each bag is then tagged with a number, which will be registered to district distribution sites; when the midwife or health volunteer dispenses the drug, she will note the number for tracking purposes.
- The external packaging design should reinforce the public health messages behind taking the drug. In the Indonesia example, the packaging was red, as a reminder of danger, and yellow because it contributed to the graphic look of the package. In Nepal, the packaging is currently a pale pink. However, the program managers are still not convinced that it is the correct color for ensuring that women will remember key messages.
- Distribution of misoprostol should comply with stock management norms about the expiration dates already in place in-country. To avoid stockouts, restocking is suggested when a health volunteer has only three dosages left or when a supervisory midwife has only 10 dosages left.

## **Registering Clients**

At this point in the program, you have community health workers who have been selected and trained, you have sites where the program will begin, you have stocks of misoprostol ready for distribution, and you have counseling and education materials ready to share. Now this step involves how to register the clients whom the community health workers will assist. Using the forms that were created in Phase II, the community health care workers will begin to do the mapping of their community. Working with village leaders and the local health care system, they will identify and register pregnant women, who will be identified the following ways:

- Self-reporting, noting nausea, weight gain and an absence of menstrual cycles
- Clinical confirmation of pregnancy recorded by a midwife and based on either a pregnancy test or physical examination

The community health worker should use good communication techniques when she is interviewing the woman about her pregnancy status. These communication skills include:

- Greeting and introducing herself
- Calling the woman and her family by their names
- Maintaining eye contact if culturally appropriate
- Using active listening techniques
- Clarifying any words that the client might not understand
- Using lay language and local words, not using too many medical terms
- Practicing respectful non-verbal communication

At the end of the interview, the community health worker should have a completed registration form that includes:

- The client's full name
- The kind of ANC she is getting
- Signed consent to receive misoprostol (if necessary)
- The estimated date of delivery and when the client will be eight months pregnant, as this is when she will receive her dose of misoprostol

To figure out when a woman is eight months pregnant, a CHW must first know the woman's estimated month of childbirth. This information may be obtained from the woman's antenatal clinic card if she has attended a clinic. If the woman has not attended the ANC clinic, the volunteer can figure out the estimated month of birth by using the following formula: Date of last menstrual period plus 7, the month of the last menstrual period minus 3, and the year of the last menstrual period plus 1. The result is the estimated delivery date.

# CALCULATING THE ESTIMATED DELIVERY DATE Example:

A woman's last menstrual period is 12 August 2009. Her due date will be:

12 + 7 = 19 8 - 3 = 52009 + 1 = 2010

So her estimated date of delivery is: 19 May 2010

To enable a field midwife or community health worker to determine whether a woman has entered her eighth month of pregnancy and is eligible to receive the dose, the easiest way is to subtract two months from the due date. Take the woman's first day of her last menstrual period. Calculate the expected due date. Count back from the due date two months. Then compare it to the date of the current interview. If the date of the day of the interview is before the due date minus two months, then she is not yet in her eighth month. If it is past, then she is already in her eighth month and eligible to receive the drug.

#### **QUESTION:**

A woman's first day of her last menstrual period is 15 August 2008. The date of the interview is 10 March 2009.

Is she already eight months pregnant or not?

#### Answer:

Determined due date: 22 May 2009.

The due date subtracted by 2 months makes: 22 March 2009.

The date of the interview is 10 March 2009. Since it is earlier than 22 March, it means that the woman has not started her 8th month.

Based on the estimation above, the village health worker would know that the woman will be eligible to receive her misoprostol tablet in the next 12 days. The CHW should make an appointment with the woman to give her the dose of misoprostol between March 22 through the end of the month, depending on the client's availability. It is advisable that the purpose of the follow-up visit be explained again to the woman. If the woman is in her eighth month of pregnancy at the time that she is registered, the community volunteer should tell the woman about misoprostol and give her the pills if she is giving birth at home and wants to use misoprostol.

The forms should be filled out in ink and kept in a weather-proof envelope. The community health worker also needs to take care that the client is not being doubly registered, e.g., at her own home but also at her mother-in-law's home. In some countries, once the registration is completed, there are local regulations that it must be filed with the local midwife or health center. If this is the case, the CHW needs to make two copies, one for herself and one for the health counterparts.

## **Preparing Counseling Materials**

Counseling is the core of the entire approach to home-based PPH prevention.

#### **KEY MESSAGE**

If a woman has not received counseling on the key messages regarding PPH and misoprostol, she should not receive the drug.

The program is not about taking the pills but about providing information to pregnant women and their support members so they are informed, are aware and can respond if they encounter PPH during their delivery. With that objective, the program continues to provide information on two key messages: 1) women should deliver with skilled service providers if at all possible, and 2) the best way to prevent PPH is active management of the third stage of labor, which includes a skilled provider giving oxytocin. In addition to those messages, information and counseling will include the following:

- Encouraging the client to get ANC with a skilled provider
- Explaining what are danger signs of pregnancy
- Urging the woman and her family to have a birth preparedness plan
- Explaining what PPH is in terms that the woman can readily understand
- Telling her what causes PPH
- Telling her that if she thinks she might deliver at home, she should consider taking misoprostol

The messages on misoprostol are very clear and include the following:

- Where to store misoprostol
- When to take misoprostol
- When not to take misoprostol
- What side effects to expect from taking misoprostol
- What to do about side effects

- What to do if bleeding continues after taking misoprostol
- How to return the misoprostol if she ends up not using it

Counseling sessions should include time for the CHW to encourage the woman to ask for any other information or to explore questions that she has about her pregnancy and delivery. CHWs should ensure that if they are not able to answer a question they bring it up to their supervisor and get back to the client with the correct information.

These messages are in a flip chart format that the CHW can sit and review with the client. In Nepal, they also use a small key chain that they give to the client to help her remember the information used frequently.

### KEY MESSAGES FROM PHASE III

- For the program to succeed, program managers need to explain at every level the purpose of the program, through a process of socialization.
- The purpose of the program is to provide education and counseling for women in under-served areas and provide them with a tool to manage PPH if they do not deliver with a skilled provider who practices active management of the third stage of labor.
- Before there can be community health workers distributing misoprostol, they must complete training so they fully understand PPH, how misoprostol works, and their responsibility in distributing it and following up with clients. The information presented in the training cannot be changed, although the format and number of days can change.
- Training is competency-based.
- Misoprostol for the home birth program must be repackaged in distinct, separate packaging so there is no confusion about its purpose in preventing PPH.
- Community health volunteers begin their service through mapping all the pregnant women in their area. This is done on a rolling basis to keep enlisting women as they become pregnant. If a woman has not registered, she is not able to get services.
- If a registered woman does not receive counseling and information or if she does not understand it, she cannot receive misoprostol.

## PHASE IV: FULL IMPLEMENTATION

By now, all the tools are in place and the community health workers have been well-trained. They have completed the identification of all pregnant women in their area and are set to begin providing information and counseling to clients. They also have a stock of misoprostol, ready to distribute it to any of the registered clients who have completed counseling and are eight or more months pregnant.

## Information and Counseling for the Client

There are four points of interaction between the community health worker and a client. They are:

- Registration into the program
- The first counseling visit
- The second counseling visit at approximately eight months when the client receives misoprostol
- The postpartum visit between seven days and three weeks after the birth of the baby

Sometimes these visits can be collapsed, such as if the CHW has not registered many clients and thus can combine registration with the first counseling visit. Sometimes, a woman is not identified until she is in her eighth month, thus her first counseling visit and the visit to receive the medication are combined. There are also cases when women are unsure if they want to join the program, so the community health workers will make additional visits to explain the program.

During counseling, the CHW will direct her information not only to the client but also to her support person. Typically, a support person can be any of the following:

- Her husband
- Her mother or sister
- Her mother-in-law
- A neighbor

The reason to have the support person is so that the person can help the woman remember to take the medicine right after the baby is born and also observe any side effects. The other important reason to include the support person, especially if it is the husband, is so that the person can understand the danger signs in pregnancy and how quickly PPH can cause mortality. This information will help the support person understand the need to be very quick in responding to danger signs and PPH.

A successful counseling visit should:

- Happen in the woman's home.
- Include her support person.
- Be convenient to her schedule so she has time to listen and ask questions.

- Take between 30 minutes and one hour.
- Use interactive actions. The community health worker should bring with her the counseling flip chart, which is in the local language and has pictures that help explain the messages. The visit should include time for questions and clarification.
- Use the interpersonal skills learned in training.

The community volunteer should give the following information to the pregnant woman and her support persons.

Antenatal Care. Ask the woman if she has attended a clinic or skilled provider for ANC. If she has, the volunteer should encourage her to continue to attend ANC. If the woman has not, the volunteer should encourage her to visit a clinic or skilled provider for ANC as soon as she can. All women should attend ANC, even if they plan to give birth at home, because complications for the woman or her baby can occur even in a normal pregnancy. If a woman is having any problems with her pregnancy, she should seek ANC immediately.

Being Prepared for Birth and Ready if a Complication Occurs. If the woman attends ANC, the midwife will help her and her family prepare a plan for what do for a normal birth, and what to do if there is a problem during pregnancy, labor or childbirth. The woman and her family should prepare for childbirth by doing the following:

- Identify a skilled provider and a support person to be present at birth
- Attend ANC, either at the clinic or by visiting a skilled provider
- Gather items needed for a clean and safe birth, including soap, clean bed clothes, clean and unused razor blade, and clean strips of cloth to tie the cord
- Have funds available to pay for care during a normal birth, or for emergency transportation and care if there is a problem
- Have a plan for transportation to the nearest clinic or hospital if there is a problem
- Know the danger signs of pregnancy. If any of the following are present, the woman should seek skilled care immediately:
  - Vaginal bleeding
  - Difficulty breathing
  - Fever
  - Severe abdominal pain

- Severe headache/blurred vision
- Seizures, loss of consciousness
- Foul-smelling discharge from the birth canal
- Decreased or absent fetal movements
- Leaking of green- or brown-colored fluid from the birth

#### What is PPH?

- PPH is too much bleeding after the baby is born. It is the main reason why so many women die in childbirth. It is not possible to know ahead of time whether a woman will have PPH.
- Some bleeding after childbirth is normal.
- It is often hard to know when this normal bleeding becomes too much bleeding because it may happen over a long period of time instead of all at once.
- If a woman gives birth at home and has too much bleeding, she could die. Her family should immediately take her to the nearest health center for treatment or for transfer to a hospital.

#### What causes PPH?

- The woman's womb remains soft and large after the baby is born.
- The afterbirth does not come out completely.
- There are cuts on the opening of the woman's womb (cervix) or her birth canal (vagina).
- The womb tears open (ruptures).

#### **KEY MESSAGE**

#### **Danger Signs for Postpartum Hemorrhage**

- Bleeding after childbirth that soaks one cloth or pad in less than five minutes, or more than two cloths within 30 minutes of the birth.
- Woman is pale and feels faint and weak.
- Woman has abdominal pain.

If any of these signs are present, the woman and her family should go to the local health center immediately. **Do not wait—delay can mean death for the woman.** 

#### How to prevent PPH

The best way to prevent PPH is to give birth with a skilled provider who can perform three steps after childbirth to stop the bleeding. The skilled provider gives the woman an injection of a drug called oxytocin, delivers the afterbirth and rubs her stomach to help it contract.

If a woman plans to give birth at home without a skilled provider, there is a drug called misoprostol that she can take as soon as the baby is born but before the placenta comes out. Misoprostol will help her womb get smaller and prevent too much bleeding. Misoprostol has been tested in many countries around the world and is safe for the woman and baby.

**How to use misoprostol.** (The CHW should refer to misoprostol by the name that the TAG selected for the brand.)

- The woman should store misoprostol in a safe and locked place in the woman's home. She should be sure that her support persons know where the misoprostol is stored and how to unlock the storage place.
- The woman should take the pills as soon as the baby is born, but before the placenta comes out. If the placenta comes out with the baby, she should still take the tablets.
- If the woman is giving birth at the clinic or hospital, she should take the misoprostol with her and tell the skilled provider that she has the pills. The skilled provider will decide whether to use misoprostol. Or, if the woman arrives at the clinic or hospital and the skilled provider is not in attendance, the women should take the misoprostol as directed.

The woman should not take misoprostol before the baby is born because it will harm the mother and baby.

**Side effects of misoprostol.** After childbirth, it is normal for a woman to have some shivering. After taking misoprostol, the woman may have shivering for about 30 minutes. If she is uncomfortable, she should drink a cup of warm, sweet tea. The woman may have some other side effects from misoprostol, including:

- She may feel like vomiting.
- She may have watery stool.
- She may have a low fever.

"After I took the misoprostol, I began to shiver and I started to become a little scared. Then I remembered what the CHW had taught me about side effects. So I drank some warm tea and was soon okay."

 $\sim$  A woman who has participated in the misoprostol program

These side effects do not happen often but if they do, will last only two to three hours.

#### KEY MESSAGE ON BLEEDING

If the bleeding does not stop after she takes misoprostol, the woman should immediately go to the nearest clinic or hospital.

The community volunteer should visit every pregnant woman when she is eight months pregnant to see if she is planning to give birth at home and if she wants misoprostol.

#### **KEY MESSAGE**

# GIVE MISOPROSTOL ONLY TO WOMEN WHO UNDERSTAND THE INFORMATION THEY RECEIVED

Do not give misoprostol to a woman who has not been given all of the information about PPH and how to use misoprostol. Before giving it to any woman, be sure that she can repeat back to you all of the information on how to store and use misoprostol correctly.

During this visit, the community volunteer should:

- Give the woman and her support persons, if present, all of the information that she gave to them on her first visit to the home.
- Ask the woman and her support persons to repeat the information to her in their own words.
- Repeat any additional information that the woman did not remember, and correct any misinformation in the same way that she did at the first visit.
- Get the woman's signature that she has understood the information and is planning to take the misoprostol.
- Give her information on how to store and when to take the tablets.
- Ensure that the woman and her support persons understand this information, especially when to take the misoprostol.
- Get the client and support persons to repeat back the information again about when to take the misoprostol and how to store it.
- Give the woman the misoprostol only if she and her support persons can repeat the information completely and correctly.

The volunteer will know that the woman understands the information about PPH and misoprostol if the woman can tell her:

- The danger signs for PPH
- The causes of PPH
- How to store the misoprostol tablets
- When to take the misoprostol tablets
- Side effects and what to do if they occur
- What to do if bleeding does not stop after taking the misoprostol

The volunteer should make sure that the woman or her support persons understand that they should not give the misoprostol to any other pregnant woman for her to use. If the woman does not use the misoprostol, she should return it to the community volunteer when she visits after the baby is born. If the woman does not want to use misoprostol, the volunteer should record the date of the visit and the reason why the woman did not wish to use the drug. If the woman is no longer pregnant, the CHW should record the date of the visit and note the reason if known (for example, spontaneous abortion, premature childbirth or incorrect calculation of estimated date of childbirth and has already given birth).

Sometimes when doing the eighth-month visit, the CHW finds that the woman who was registered is no longer at her original address. In this case, the community volunteer should talk to community members and elders to find out where she is living. If she has moved to another village or homestead within the volunteer's area, the volunteer should visit her at her new address and write down her new information. If the woman has moved to a village or homestead that is not within her area, the volunteer should inform the midwife of her new location.

If, during home visits to other registered women, the volunteer meets a pregnant woman who is new to the community, the volunteer should ask the woman if she received information or misoprostol in another village or homestead.

If the woman has not received information, the volunteer should:

- Register her.
- Give her all of the information about PPH and misoprostol.
- Give her misoprostol if she wishes to use it when she is eight months pregnant.

If the woman has received only information, the volunteer should:

- Ask her to repeat the information.
- Give her any additional information needed.
- Correct any misinformation, and give her misoprostol if she wishes to use it.
- Add the woman to her registration form.

If the woman has received misoprostol from another volunteer or the midwife, the community volunteer should:

- Check that the medicine has been kept in good condition.
- Ask her to repeat the counseling and information she received.
- Give her any additional information needed.
- Correct any misinformation.

The volunteer should add the woman to her registration form.

## **Drug Distribution to Clients**

Misoprostol is distributed from the national or central level warehouses out to the provincial and district health systems. The coordinating supervisor for the region receives the drugs and then distributes them to each community health worker according to the number of clients she has registered, or the midwife at the local health center can give the community volunteer 20 doses of misoprostol. The supervisor should re-order stock depending on the average number of pregnant women or deliveries they are experiencing a month, but should always keep one month of stock on hand. **Annex E** is a sample "Drug Request and Receive Form" from Afghanistan.

When the volunteer has five doses of misoprostol remaining, she should give her record form to the midwife at the local health center. The midwife will then give her 15 more doses of misoprostol, to keep her stock at 20. If the volunteer has less than five doses of misoprostol remaining, the midwife will give her enough doses to total 20 doses. Since a CHW will distribute the medication over a certain time period, she should make sure to keep the pills in a safe, locked, dry place in her home where there is no possibility of the pills being damaged or stolen.

The drug is distributed to each client after she has received counseling and is in her eighth month. The drug comes in a three-tablet, 600 mcg formulation. The CHW should observe the client's house and make recommendations for where a safe place would be to store the drug. The drug should be stored away from children and under lock and key. It is important that the support persons for the client know where the drug is kept and where the key is kept so they can give the woman the dose within five minutes after she has delivered her baby.

During the follow-up postpartum visit, the CHW will make sure to record when and how the drug was taken and if there were any side effects. (**Annex F** presents a sample draft form for the postpartum interview.) Sometimes

clients forget to take the drug. If that is the case, the CHW should return to the supervisor any misoprostol that she collected from a registered client after delivery. The midwife will inspect the misoprostol to see if the pills are broken, discolored or wet. If they are, the midwife will destroy the misoprostol. If the misoprostol is in its original packaging and is not damaged in any way, the midwife may return it to her inventory.

## **Monitoring and Supervision and Reporting**

In a home birth misoprostol distribution program, there are a number of key things to monitor. These include:

- Coverage and acceptance of the message
- Number of women enrolled in the program
- How the community is responding to the program
- How well the CHWs are doing their job and reaching out to clients with the correct information
- The overall knowledge and competency of both the CHWs and the supervisory staff, including midwives
- The overall drug supply, drug distribution patterns and any stockouts
- How many women who are enrolled actually took the drug

In addition, if it is a new program or being done on a pilot basis, there needs to be rigorous safety monitoring. This would include:

- Reporting if there are any complications
- Monitoring adverse events
- Monitoring the CHW-client interaction to ensure that the complete messages are being transmitted

**Annex G** contains a sample monitoring and evaluation tool from Afghanistan, and **Annex H** contains a sample supervision checklist.

#### **KEY MESSAGE**

**Remember:** Monitoring is to observe and know how well the program is functioning. It is not to evaluate how well misoprostol works; that has been done around the world in many studies.

Monitoring is done on a periodic basis and should be aligned with the other monitoring and supervision practices already implemented in your country. There are many different ways to monitor the program's progress, including:

- Review by a midwife or supervisor of the different forms the CHW fills out
- Observation by a supervisor of client encounters
- Exit interviews with clients
- Refresher training events and observations to determine if any key messages or practices are not being carried out by the CHWs
- In-depth interviews with key informants

Monitoring this program will also contribute data to the national health system and to the progress that is being made toward Millennium Development Goals. Over time, collecting these kinds of data will document changes and show public health progress in your country and, it is hoped, the positive effects of spending public health dollars on this program. **Table 5** below presents some suggested indicators:

Table 5. Table of Suggested Indicators in Monitoring Programs to Prevent PPH in Home Births

| INDICATOR  | SOURCE   |
|--|--|
| # of facility admissions because of PPH                              | Facility records   |
| # of blood transfusions  | Facility records   |
| Change in % PPH contributes to overall complications                 | Health system records  |
| Mother's perceived blood loss  | Postpartum interview   |
| % of pregnant women accepting the drug                               | Health system and CHW records  |
| % of women taking the drug at the right time                         | Postpartum interview   |
| % of unused drug unaccounted for (measure of possible abuse)         |  |
| % of women reporting side effects                                    | Postpartum interview   |
| % of women who delivered with a skilled provider                     | Demographic and Health Survey, every 5–10 years, country health assessment or MDG report |
| % of women who report they would take misoprostol again              | Postpartum interview   |
| % of women who took the drug and would recommend it to others        | Postpartum interview   |
| % of women who would be willing to buy the drug                      | Postpartum interview   |
| Change in perception of drug among service providers, including TBAs | In-depth interviews  |

In Indonesia, the program managers were able to collect some of these data during the trial phase before the program expanded nationally. Of the 719 women who experienced one or more side effect, 92% said they would

recommend it to one of their friends, 82.7% said they would use it again if they were to get pregnant again, despite having experienced side effects, and 79% said they would be willing to pay for the drug if it was not free of charge. Of the women who did not experience side effects, 91.1% will recommend it to a friend, 86.1% will use it again if they are pregnant again, and 84.3% would be willing to pay for it.

The information that is collected through the monitoring and supervision process must be used to continually refine the program. Using both the normal reporting channels already in use in-country (such as monthly reports, annual statistical reports) and a quarterly report to the TAG, program managers will disseminate the results of monitoring.

## **Final Postpartum Visit**

The very last step in the full implementation of Phase IV is to conduct the final postpartum visit. This is the last step, which discharges a woman who has given birth from the program. In order to conduct this step, volunteers will do the following:

## What to do when visiting the woman after childbirth

The volunteer should visit the woman between seven days and three weeks after childbirth. However, in Nepal, where the misoprostol program is part of the overall Community-Based Maternal and Neonatal Health Program (CBMNH), it was decided that the postpartum visit must be conducted by day three after delivery. This is because the visit is combined with a neonatal assessment visit, which should be done as soon as possible.

The purpose of the postpartum visit is to see if the woman used the misoprostol correctly and to take back the misoprostol if she did not use it. The volunteer should record the following information on the postpartum visit form:

- Date of the visit
- Date of childbirth
- Place of childbirth
- Whether the woman was attended by a skilled provider
- When the woman took the misoprostol (before birth, after the birth of the baby but before delivery of the placenta, after birth of the baby and delivery of the placenta)
- Any side effects the woman had
- Whether the woman thought she had more bleeding than normal

- Whether the woman went to the health center or hospital after the birth, and why
- If the woman would take misoprostol again

If the woman did not take the misoprostol pills, the volunteer should record this and take back the misoprostol. The volunteer should keep all returned misoprostol separate from her other misoprostol so that it can be returned to the community midwife as was explained in the section on drug distribution.

#### KEY MESSAGES FROM PHASE IV

- Community health workers have four points of interaction with the client, and should use each visit to reinforce the key messages of the program.
- Information and counseling are the core of this program and there can be no shortcuts to providing good counseling. Without completing and understanding counseling, women should not receive misoprostol.
- Misoprostol distribution to the client can be done only after the client has successfully demonstrated that she understands how to use the drug and when to use it. Misoprostol is only distributed to the woman in her eighth month of pregnancy.
- Monitoring visits are to review how well the program is working, whether CHWs
  are providing the correct information, whether the community is still responding
  well and if coverage is good. Monitoring is not about proving the efficacy of
  misoprostol, as that has already been done in studies around the world.
- Clients will not be considered discharged from the program until the CHW has filed the final postpartum report.
- Reporting from the program will feed national data on progress toward Millennium Development Goals at the macro level.

#### PHASE V: REVIEW AND PROGRAM EXPANSION

#### **Quality Improvement Based on Feedback**

The monitoring that is conducted in Phase IV will serve to improve the ongoing program. If there are issues identified such as lack of interpersonal communication skills or misuse of the drug, these can be addressed by quality improvement. It is very important that a country program continue with ongoing improvement. Two years into program management in Indonesia, issues that are emerging are:

- Replacement of personnel at the district level is making program implementation somewhat slow. This is because there are supervisors at the district health level who do not fully understand the program or the data collection forms in the way their predecessors did, and thus are having difficulty monitoring and supervising.
- Tracking the returned drugs is a stock management issue because the personnel involved have not yet discussed how to record the return and reissue.

■ There is an issue over the expiration date of the drug. In the literature, misoprostol is said to be good for seven years because of its stable chemical composition, but on the packaging, manufacturers are providing only a two-year expiration date. Therefore, program managers need to know how to handle the discrepancy.

## **Expansion of the Program**

Because misoprostol distribution to prevent PPH at home births is a new program and is based on innovative practices, many country programs will begin only with a pilot to see how well the misoprostol can be integrated with existing maternal health programs. The key to expansion is to present the success of the program within the national context so that decision-makers understand exactly how misoprostol will change public health across a nation. Of particular concern when expanding is where the resources will come from to fund the expansion, and whether expansion will make it more difficult to monitor, therefore unintentionally making drug leakage or misuse of the program more likely. These concerns will need to be addressed by the TAG as they negotiate to move the program forward.

Adoption of an innovative program initially depends on (Rogers 1995; Ryan and Gross 1943):

- Whether the innovation is consistent with values, beliefs and current needs
- The simplicity of the innovation
- The adaptability of the innovation and how readily it can be modified to fit local conditions
- Observability or how easily potential adopters can observe that the innovation is being used

The ultimate aim is to move the misoprostol program from being innovative to the transition point. This is the point where innovation is fully integrated with its environment. When this point is reached, all operating costs should be funded by in-country sources, training should be done at the pre-service level, and supervision and monitoring systems should be in place and operational (McIntosh 2004). In the public health world, there are many examples of programs moving from innovation to integration, including family planning and the use medication to prevent mother-to-child transmission of HIV.

In moving the misoprostol program from innovation to transition, the TAG will need to keep checking in with stakeholders and facilitate transparent dialogue. If other public health issues compete for resources, such as an outbreak of avian flu or increase in the incidence of HIV/AIDS, program

managers will need to determine what characteristics of the misoprostol program are compelling enough to continue receiving funds. For existing program managers, the answers are clear. By implementing the home-based PPH prevention program at the community level, the health system empowers women to be proactive and participate in an action that could save their lives.

## KEY MESSAGES FROM PHASE V

- Program improvement is continuous.
- Program managers must be focused to retain resources for the misoprostol program in the face of competing public health needs.
- The home-based misoprostol program empowers women to be proactive and use action to save their lives.

## PART THREE: LESSON FROM THE FIELD

#### PROGRAM IMPLEMENTATION PITFALLS AND SOLUTIONS

In implementing this program, service providers will encounter unexpected pitfalls or conditions that hinder the implementation of the program. However, many of these pitfalls have been experienced in other countries and service providers have arrived at ingenious solutions. As this manual will be updated as more and more countries implement a community-based distribution program for misoprostol, service providers are urged to share their lessons learned with the authors. **Annex I** presents sample pictorial counseling materials from Afghanistan, Indonesia and Nepal.

**Pitfall:** Client shares or gives her medication to someone who has not undergone counseling.

**Solution:** During the counseling, all clients need to know that the medication will be tracked and that it is not safe to provide the medication to women who have not been adequately counseled. Keeping the medication with the midwife until clients enter eight months of gestation will also reduce the possibility of inappropriate use.

**Pitfall:** Client receives two doses of the medication from different service providers.

**Solution:** When receiving the drug, clients should be counseled that one dose is sufficient and they should not have two doses. The health service system needs to have a tracking system in place so that each prescribed dose is linked to both a client and a service provider. In systems where health volunteers report to the midwives, the responsibility for managing the distribution of the drug will rest with the midwife.

**Pitfall:** Clients are unable to remember counseling messages and thus are ineligible to participate in the program.

**Solution:** If a client is unable to comprehend the key counseling messages, the provider must first try different approaches of sharing the information. The provider should make sure that the support persons (such as husband, mother or other relative) accompanying her during counseling, and who will also accompany her during birth, are able to comprehend and help the client implement the program. If that fails, the provider should try to provide more visual clues for women of low literacy and her support persons. If those efforts are not successful and the local health volunteer lives nearby, the volunteer can check in on the client frequently and be available to provide the medication after the birth. However, if that is not possible, the client

needs to understand that it would be safer for her to deliver with a midwife or be referred to a hospital facility.

**Pitfall:** The program depends on volunteers to monitor pregnant women in the community and to track use of the drug, and volunteers are unhappy they are not getting paid.

**Solution:** Increase the number of volunteers so that no one volunteer must spend too much time on the program or on the road. If that solution fails, convene a health services administrative meeting to determine if another cadre of health providers can oversee the program. If no other cadres are available, the health service managers must decide if paying volunteers a small stipend is in accordance with government compensation rules. Some countries with active social marketing programs can consider doing a small pilot-test of charging for the drug and using that money to compensate the volunteers.

**Pitfall:** Identified pregnant women do not want to enroll in the program. **Solution:** It is their right not to participate in this program. However, it is then very important for the health volunteers and midwives to encourage them to deliver with a skilled provider. They must be informed that they may, at any time before they deliver their baby, still be able to participate in this program and to receive the drug after receiving counseling.

**Pitfall:** A woman refused to be enrolled in the program because she plans to deliver with a midwife. However, she fails to deliver with the midwife and is being attended by an unskilled provider and she now wishes to take the medication.

**Solution:** If she has not received counseling, but a trained health volunteer who has the medication can be identified, the volunteer can give the medication to the woman at the appropriate time, despite her not having received counseling. The point of the counseling is to ensure that clients take the medication appropriately if they are alone. However, because a trained health volunteer would be providing the medication, the probability for error in dosing is very small.

**Pitfall:** Previous members of the consensus-building groups change half way through initial program implementation and raise issues previously discussed and resolved.

**Solution:** Have frequent meetings and provide frequently asked question (FAQ) sheets to all new members and minutes from previous meetings so they can see and understand the record.

**Pitfall:** The formal language of instruction used for health promotion messages is not understood at the village level.

**Solution:** To ensure maximal comprehension among village-based clients, the language of counseling must be in the local language. This entails using the health volunteers as counselors, while using midwives as technical backup because clients perceive them to be more "expert" and thus more trustworthy.

**Pitfall:** A client does not know when she became pregnant and thus cannot provide the date of her last menstrual cycle. How can the provider determine when she will be eight months pregnant and able to receive the misoprostol tablet?

**Solution:** Ask the pregnant woman whether she has ever visited a midwife (or any other heath providers). If yes, ask her to show the control card given to her by the midwife. Usually there is information about the date of last menstrual cycle and the due date estimated by the midwife. If there is no such control card from the midwife, or no such information on the control card, then the health volunteer should visit the midwife when she has time to discuss the case and arrive at an estimated due date.

If the woman has never visited a midwife, the health volunteer must persuade her to visit a midwife as soon as possible. The health volunteer can even accompany her, especially for a woman in her first pregnancy. The midwife will then estimate the due date through fundal measurement and assist the health volunteer in determining when the woman reaches eight months pregnant.

If the woman refuses to visit a midwife, the health volunteer needs to determine the last menstrual cycle her/himself. The health volunteer should ask the woman about important events before or after, but very close to, her last menstrual cycle. Then find out about the date of that event and estimate the due date from that time.

#### FREQUENTLY ASKED QUESTIONS AND ANSWERS

The two years of field research and implementation of community-based distribution of misoprostol in Indonesia provided ample time for clients, service providers and Ministry of Health officials to ask questions about the program. The following questions and answers are intended to let new programs get a head start on implementation by already having information at the ready.

1. Q: Why is prevention of PPH more important than other health interventions?

- A: Severe bleeding after childbirth is the most common cause of maternal mortality, accounting for at least one-quarter of maternal deaths worldwide. An estimated 585,000 women die every year of maternal causes. Among these, an estimated 125,000 to 150,000 deaths are from PPH, making PPH the largest cause of maternal death that is completely preventable.
- 2. Q: What is the current approach to prevention of PPH?
  - A: Because it is impossible to predict accurately who will get PPH, all women should be considered at risk. This is why all women who give birth must have a skilled provider who can perform AMTSL. AMTSL involves giving oxytocin (10 units) immediately after the birth of the baby, before the delivery of the placenta, followed by controlled cord traction to help the placenta deliver faster, and finally by rubbing the uterus to keep it contracted after the delivery of placenta. Oxytocin can be given only by injection, therefore requiring a skilled provider, such as a midwife or doctor. Misoprostol is another way to prevent PPH, and the client herself can take the medication if for some reason she does not deliver with a skilled provider.
- 3. Q: What is misoprostol?
  - A: Misoprostol is a prostaglandin E1 (PGE1) analogue available in tablet form. It was first developed for treatment of stomach ulcers but has become an important drug in obstetric practice because of its ability to make the uterus contract and become firm (Goldberg, Greenberg and Darney 2001). Its action is similar to oxytocin, but its advantage is that it can be given orally and also by the rectal and vaginal route.
- 4. Q: How is the medication to be taken to prevent PPH?
  - A: For prevention of PPH, 600 mcg of misoprostol (three tablets of 200 mcg each) should be taken orally immediately after the birth of the baby and before the expulsion of the placenta. The tablets should be held in the mouth for 30 seconds before swallowing. The medication should not be taken before the birth of the baby. If the placenta comes out too quickly, the medication should be taken after the placenta has been expelled.
- 5. Q: Is the medication safe?
  - A: Misoprostol taken immediately after the birth of the baby has been documented to be very safe since it was first introduced in 1953. Common discomforts associated with misoprostol use are

shivering, nausea and loose stool. El-Refaey et al. (2000) found shivering in 72% of women given misoprostol and 37% of women given oxytocics, compared to up to 20% of women reporting shivering postpartum who delivered without taking any uterotonic drugs. In the Hong Kong study, Ng et al. (2001) found that 32% of women using misoprostol had shivering. Shivering starts within five to 10 minutes of taking the drug and lasts for 20 to 30 minutes. Five percent of patients taking misoprostol also had a self-limiting rise in temperature of 2 degrees centigrade. Nausea, vomiting and diarrhea were more common with oxytocin than with misoprostol. Lumbiganon et al. (1999) documented that these side effects are dose-dependent and determined that the optimal dose of misoprostol for postpartum use is 600 mcg. Goldberg, Greenberg and Darney (2001) concluded in their review that where oxytocin is not available, misoprostol used to prevent PPH be considered a category A recommendation (classified as a good and consistent evidence to support the recommendation). Finally, the US Pharmacopeia Expert Advisory Panel (USAP) recommends that prevention of PPH be considered an "accepted" indication in the US Drug Information monograph on misoprostol (Carpenter 2001).

- 6. Q. If a woman forgets to take the pill immediately after giving birth, is there a time limit to when she can take it?
  - A: The clinical recommendation is that a client should take the pill right after the baby is delivered or at least within 10 minutes of giving birth and before the placenta is delivered, to provide the maximum uterotonic effect. If she forgets, it is still reasonable to take the pill within two hours of giving birth to prevent PPH. If after two hours, but within 24 hours, there is some bleeding, she may still take the medication but should also be referred immediately to the midwife.
- 7. Q: How long does the client have to wait to know that the drug was effective?
  - A: If the client takes the medicine as instructed and there is no abnormal bleeding within the first two hours postpartum, then the risk of incurring PPH is very small.
- 8. Q: What should a community health worker do if a registered pregnant woman comes to her and says she is going to leave town and go stay with a family member when she is seven months pregnant and she would like to get her misoprostol tablet early?

- A: The community health worker should:
  - Assess and reinforce the woman's knowledge of PPH and misoprostol.
  - Provide misoprostol with a reinforcing message.
  - Ask the woman to report back to the community health worker on her return.
  - Ask the woman to return any unused misoprostol tablets to the community health worker.
  - Advise the woman not to travel too late in her pregnancy.
- 9. Q: What symptoms would indicate that the pill has not been effective in preventing PPH?
  - A: There are three reasons to refer a woman to the midwife or immediately to the hospital. These are:
    - If more than two sarongs (or other local measure used to "guestimate" blood loss greater then 500 cc) are used to absorb the blood flow.
    - If a woman complains of feeling dizzy, faint and weak. If a woman is anemic, she could have difficulty in tolerating small amounts of blood loss.
    - If blood loss continues for longer than one hour, although not in great amounts, as this could indicate the bleeding is from a laceration and the woman will need another intervention other than an uterotonic drug.
- 10. Q: What if misoprostol is inadvertently taken before the birth of the baby?
  - A: Misoprostol has been used to induce labor and does this successfully with doses of 25–100 mcg. The 600 mcg (three tablets of 200 mcg) dose should never be taken before the birth of the baby, because there is a risk of rupture of the uterus. In the Maternal and Neonatal Health (MNH) Program/Indonesia PPH demonstration project, women were counseled by midwives and community volunteers on the correct time to take the medication, which is immediately after the birth of the baby. Patients and their support persons received this information on two occasions during their pregnancy from midwives and community volunteers who were specially trained for this purpose. Patients were asked to correctly recount the information before being given the medication. Women were given a sealed misoprostol medication packet with a

permanently attached safety information leaflet at approximately the eighth month of pregnancy to ensure no accidental misuse in early pregnancy. Trained field supervisors supervised the counseling. As a result of these measures, no women took the medication before the birth of the baby.

- Q: Is misoprostol more affordable then oxytocin? 11.
  - The current price for 600 mcg is about USD \$0.35 to \$0.50 and is coming down as more generic formulations of misoprostol are available. The cost is lower for this oral medication than for injectable uterotonic drugs since no syringe or skilled provider fee are necessary.
- 12. Q: Should midwives switch to using misoprostol if they are already allowed to use oxytocin?
  - Misoprostol is effective in preventing PPH, but has been shown to be slightly less effective than oxytocin in the WHO multi-center hospital-based clinical trial (Gülmezoglu et al. 2001). Therefore, midwives who assist home births should continue to use oxytocin, unless they are unable to store oxytocin in a cool place or cannot guarantee safe injection.
- Q: Is misoprostol effective in preventing PPH? 13.
  - Misoprostol is effective in preventing PPH, but slightly less effective than oxytocin. Therefore, midwives who assist home births should continue to use oxytocin, unless they are unable to store oxytocin in a cool place or cannot guarantee safe injection.

El-Refaey et al. (1997) showed that misoprostol given immediately after birth of the baby resulted in significantly lower rates of PPH than those found in physiologically managed third stage of labor. Several other studies have demonstrated that oral or rectally administered misoprostol is effective in reducing the incidence of PPH (Broekhuizen 2000). The WHO multi-center trial concluded that in hospital settings, oxytocin is preferable to misoprostol in active management of third stage (Gülmezoglu et al. 2001). From a recent meta-analysis of many studies, it was concluded that 18% of women would have PPH if the placenta was delivered on its own, 2.9% would have PPH if oxytocin was used and 3.9% would have PPH if misoprostol was used (Prendiville et al. 1988; Villar et al. 2002). So for home births, where a midwife is not present, misoprostol is an effective option.

- 14. Q: How will women who are unlikely to have a midwife at birth be able to get this medicine?
  - A: This medicine is available only through the network of trained community health workers and is available only to women who have registered and received counseling. The medication is not for sale at local pharmacies or informal drug depots; it can be obtained only through the health system and the trained workers. If a client has had a good experience with using misoprostol and her friends also want to use the drug, they need to understand that they have to register and receive counseling and only then can they get the medication from a trained community health care worker.
- 15. Q: How can you ensure that the intervention medication will not be misused?
  - A: First, patients are counseled to ensure that they have correct information about the safe use of misoprostol. Counseling must emphasize that the medication should be used only after birth of the baby, should not be shared with anyone else and should be returned if not used. Community volunteers should obtain the medication for distribution under the supervision of the community health center program coordinator, who is required to keep an accurate inventory.

On a broad level, misoprostol is available in many pharmacies for the treatment of stomach ulcers. Pharmacists need to be educated not to provide misoprostol to patients without a valid prescription and appropriate counseling about PPH prevention and the safe use of the medication. Drug regulatory bodies should continue to regulate and re-educate the pharmaceutical sales industry.

- 16. Q: How do you prevent unauthorized distribution channels for the drug?
  - A: Health systems need to emphasize that the distribution of the drug is to be limited to certain classes of health providers and controlled by the lead midwife in the area. If traditional birth attendants want to be involved in the program so they can offer the drug to their clients, they must complete the training and counseling sessions, just as any other service provider would.
- 17. Q: What happens if my child finds my pills and takes them?
  - A: Never leave any medications in an unlocked place where children can get them. However, if your child took the drug, take her or him to the nearest health facility immediately.

- 18. Q: Will taking misoprostol affect my future fertility if I want to get pregnant again?
  - A: Absolutely not. Misoprostol has been used throughout the world to treat women of reproductive age in the prevention of gastric ulcers and there are no scientific data that demonstrate they had decreased fertility. In addition, where women have used the drug for obstetric purposes, they have gone on to have additional births.
- 19. Q: How do you use misoprostol in the case of multiple births?
  - A: You should suspect there are twins if the woman had excess vomiting in early pregnancy and her abdomen appears larger than expected gestation. In any case, after the birth of the baby, you should check to determine if there is another baby. If there is indeed another baby, wait to give the woman the misoprostol until after the second baby is delivered.
- 20. Q: Can oxytocin be used in conjunction with misoprostol?
  - A: Yes, there are no medical contraindications from using the two drugs together, but there is no need to use both.
- 21. Q: Can trained midwives who are assisting home births ever substitute the use of oxytocin with misoprostol?
  - A: Yes, if the client does not want to receive an injection, misoprostol can be used instead. However, nursing practice acts have to allow midwives to use uterotonic drugs in general.
- 22. Q: Does this program encourage women to use traditional birth attendants instead of more skilled providers?
  - A: Up until now, there is no evidence that access to community-based distribution of misoprostol serves as an incentive to use traditional birth attendants because they are less expensive or because women perceive that having access to misoprostol makes it safer to deliver with a TBA. The overall message of the counseling in the program is that all women should plan to have a midwife attend them in childbirth. Patients are informed that midwives can provide care for complications that may occur in pregnancy and childbirth. This home-based distribution intervention is aimed at helping those women who either choose not to have a midwife or cannot access a midwife, whether because of economic or physical reasons. In Indonesia, for example, we know that in 25% of planned midwife births, the midwife was not able to get to the woman in time. By having this medication with her, the patient can have some protection for preventing PPH, even if the midwife is unable to

- attend the birth. It is reassuring to note that from the program experience in Indonesia, the proportion of births occurring at the midwife's house actually increased 12% as a result of the counseling provided by community health volunteers in the program.
- 23. Q: Why don't we use TBAs as the change agent since there are so many of them who still practice?
  - A: Because you cannot always be certain that a TBA will be present for a birth, because there is the supposition that TBAs would be more likely to abuse the medication (this still needs further research) and because, overall, the maternal health community is trying to redefine the role of TBAs and does not want to give them access to something that will enhance their value. In a Tanzania study, one of the conclusions was "It is notable that the status of the TBAs in the intervention area [those who had been trained to give misoprostol] rose rapidly and as those in the non-intervention area heard about misoprostol they began immediately to ask for it" (Prata et al. 2005).
- 24. Q: Why is it recommended that the woman keep the drug and not the midwife or the health volunteers?
  - A: One of the reasons for the community-based distribution strategy is so that women who give birth at home have immediate access to a medication that will help prevent PPH. Thus, the women need to keep the medication with them as it is not possible to predict when and where a woman will go into labor. In addition, even if a woman has planned to give birth with a midwife, midwives are sometime not available when needed.
- 25. Q: Can this program be implemented if health volunteers are not paid?
  - A: The work of community-based volunteers is crucial to the success of this program. They should be compensated in accordance with the norms and practices of the country. In Indonesia, for example, because the program was integrated with the national health system, health volunteers did not expect to get paid. There are also administrative strategies that can reduce monetary outlays among volunteers, such as giving them small catchment areas that are accessible by foot, thus avoiding transportation expenses.
- 26. Q: In the trial in Indonesia, 22% of the women who received the oral misoprostol tablet didn't use it. Why was that the case?
  - A: The 22% of women who had received the medication prior to delivering but who did not use it in the end had many reasons.

Included among the reasons were: they lost the tablets, they forgot to take it after the baby was born, husbands who were not present in the counseling sessions refused permission for them to take the medication after delivery, and finally a few clients heard of side effects (mainly shivering) from friends who had taken the drug and decided not to take the medication. In some cases, medical complications unrelated to delivery ensued immediately after the birth and were more pressing to address (such as a client with dengue fever and a client with heart disease), so the medication was not taken. In a few other cases, the women ended up delivering with traditional birth attendants who were unaware of the program or the action of the drug and thus they asked the client not to take the drug. This was based on their own unfamiliarity with the medication and not on client willingness or awareness.

- 27. Q: What should you do if a woman says she has lost her previously distributed dose?
  - A. She should report it to health volunteer, who will then report to the supervisory midwife. If the nursing practice acts allow for the midwife to make a decision, she may then decide whether to replace the client's dose or not. Factors determining her decision are whether she trusts the client's information, or whether investigation reveals that the client sold the drug or gave it to someone else. If nursing practice acts refer the decision to a higher administrative authority (for example, a midwife coordinator at a community health center), the midwife should report the loss to her supervisor.
- 28. Q: What happens if a woman took only two tablets instead of three?

  A: In order to get the optimum effect of the drug for preventing PPH, a woman should swallow all three tablets of the drug given to her, otherwise she will not experience maximum protection against PPH. If she takes only a partial dose, she will still receive a limited benefit. However, she and her support person must monitor blood loss very carefully as she still may have the possibility of getting PPH.
- 29. Q: Can the drug be taken with a cup of milk?
  - A: It is not recommended to take the drug with dairy products—the woman should take the drug with water.

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- 30. Q: Can the medication be taken with liquids such as warm tea, fruit juice or alcohol?
  - A: It is acceptable to take the medication with warm tea or fruit juice. There are not sufficient data on alcohol use and misoprostol but we recommend that the drug not be used with alcohol.
- 31, Q: How can I know that the drug is not expired?
  - A: On the detailed packaging, the manufacturer's expiration date will be written. The drugs will be purchased in accordance with the national policy of drug purchasing and stored using the "First In, First Out" policy so that no drugs will be distributed after expiration.
- 32. Q: Where and when I can get the drug?
  - A: For this program, the drug is available only from midwives and community health volunteers and can be distributed only in conjunction with counseling on to how to take the drug, when to take the drug and the expected action of the drug.
- 33. Q: How do we go about implementing this within the existing service delivery system?
  - A: This program or demonstration program should be approved by the Ministry of Health, as well as by the PPH Prevention Technical Advisory Group (TAG). Local community health centers will provide the staff to supervise the community health workers; drug distribution will follow existing national channels and the drug will be stored in public sector warehouses; misoprostol will be added to the country essential drug list; and the information and counseling messages will echo those that are already being used in other safe motherhood interventions. The only significant change is that the drug is available only through a network of trained community health volunteers.
- 34. Q: How do we make sure that all of the pregnant women will have access to this program?
  - A: You have to recruit enough community health workers so each one serves between 100 and 150 households. Fewer households per CHW is better so that the CHWs do not feel overly burdened. This allows each community health worker to be able to go door to door by walking, if there is no transportation available, and allows them to concentrate on their immediate neighborhood.

- 35. Q: Which women are at risk for possibly experiencing PPH?
  - A: All women, without any exception, have the possibility of experiencing PPH, even though they feel that they are healthy and have not experienced PPH in previous deliveries. However, because of certain medical conditions such as anemia, some women do have a higher possibility compared to others.
- 36. Q: Why should we receive and keep the drug although we plan to deliver with a skilled provider?
  - A: Even though you plan to deliver with a skilled provider, circumstances beyond your control could result in your giving birth without the assistance of a skilled provider. She may be out delivering another client at the time of your labor, or you might go into labor late at night and not be able to get to the midwife because she lives far away. It is best to deliver with a skilled and trained provider but in the event that is not possible, having this medication on hand will provide you with an option to prevent PPH.
- 37. Q: If misoprostol is such a great drug, why is it not used more in developed countries for prevention of PPH?
  - A: These countries have access to the storage facilities necessary to store oxytocin, and oxytocin is the most effective drug for the prevention of PPH. However, more countries are utilizing misoprostol for prevention of PPH. For example, women in the United Kingdom may be given misoprostol to avoid having to receive a shot of oxytocin.

### ANNEX A: SAMPLE JOB DESCRIPTIONS FOR STAFF INVOLVED IN THE MISOPROSTOL HOME BIRTH PROGRAM (AFGHANISTAN)

### FIELD COORDINATOR JOB DESCRIPTION

While the project will be integrated in the Basic Package of Health Services (BPHS) program, in demonstration project sites, one field coordinator for each province will give full-time, daily, on-site support to the Prevention of Postpartum Hemorrhage (PPPH) project:

- Attend CHW training of trainers (TOT) course arranged in the field, and later ensure that the project activities are progressing as per the Action Plan in both intervention and control areas.
- Identify problems, and discuss with Health Manager, and area MCH promoters and CHS to find solutions. Ensure that these solutions are implemented.
- Monitor and supervise newly hired CHSs on regular basis.
- Conduct monthly, joint (with CHS and MCH promoters) monitoring and supervision of trained CHWs.
- Attend meeting with community elders, Shuras members (female) and reinforce social marketing
  of misoprostol as well as highlight the importance of skilled birth attendance.
- Assist CHSs in data collection and in the collection of unused misoprostol.
- Assist CS19 MCH Promoters (SC) and CHS in preparing monthly reports and submitting these to the HMIS officer.
- Help in the documentation.
- Report to Heath Manager on a monthly basis.

### **CHW JOB DESCRIPTION**

### **Existing CHW Roles:**

CHWs' work is based on community maps, which they and Councils have created with detailed village information about locations and occupants (especially pregnant women and children under the age of five) of all houses and types of clients. Integrating PPH intervention (education on birth preparedness, misoprostol) within the existing role of CHW is possible.

Two CHWs, usually both females and/or occasionally a couple, work in a health post. A health post is usually a house in the community. About four or five health posts (or eight to 10 CHWs) work in the catchment area of a health facility. In other words, a health facility is responsible for overseeing the performance of health posts/CHWs in its catchment area.

Each CHW is responsible for providing health services and information to 150 families or each health post to a total of about 300 families or 1,500 people. The CHWs usually visit the houses of the clients (women of reproductive age, children, etc.) to provide services. Each CHW is responsible for providing:

- Education on birth preparedness and danger signs (during pregnancy, delivery and postpartum period)
- Iron and folic acid tablets to pregnant women
- Family planning methods (condoms) to potential clients
- Health education regarding child care
- First aid: ORS, tablet paracetamol, wound dressing, etc.
- Referral of patients or clients (clients for antenatal, postnatal, immunization services) to the health facility

### CHWs' Role in Prevention of PPH Demonstration Project

- 1. Attend CHW training course in the field.
- 2. Find out which women in their community are pregnant.
- 3. Register pregnant women in the community and record specific information about them and their pregnancy.
- 4. Provide information to pregnant women on antenatal care, being prepared for birth and being ready if a complication occurs, and use of a skilled provider for birth.
- 5. Describe why women should have a skilled provider for birth.
- 6. Explain what a skilled provider can do to prevent PPH.
- 7. Give counseling using the Prevention of PPH educational material.
- 8. Provide misoprostol to women when they are in the eighth month of their pregnancy.

- 9. Conduct follow-up visits to women's homes after birth and record information on use of misoprostol.
- 10. Report information about registered women and their use of misoprostol to the CHS at the health center on a regular basis.
- 11. Request the drug from CHS on weekly basis.

### CHW SUPERVISOR JOB DESCRIPTION

- 1. Attend PPH CHW TOT course and later support CHWs in implementing PPPH activities in their respective areas.
- 2. Make community visits to support each CHW at least once a month.
- 3. Conduct joint visits to families. Provide on-the-spot technical assistance to CHWs and supervise CHWs' counseling process until all CHWs are able to do it well.
- 4. Support trained CHWs on a regular basis in the new role. Ensure that this new role is integrated within their existing one.
- 5. Conduct weekly, joint (with CHWs and CS19 MCH promoters) visits to the homes of pregnant women to reinforce messages related to PPH, especially to reinforce the correct, safe use of misoprostol.
- 6. Meet community elders, shura members (female), and reinforce the importance of skilled birth attendants as well as social marketing of misoprostol.
- 7. Assist in data collection, tabulation and preparation of area monthly reports by completing the CHS reporting form.
- 8. Receive misoprostol from the pharmacist (central drug store in Andkhoy and Qarabagh) by filling the CHS and CHW drug request forms, and distribute to CHWs according to the CHW form.
- 9. Identify CHW and PPH program implementation problems, and discuss with area CS19 MCH promoters and field coordinators to find solutions. Ensure that these solutions are implemented.
- 10. Conduct weekly, joint (with CHWs and CS19 MCH promoters) visits to the homes of post-delivered mothers to assist in the interviews and collect unused misoprostol.
- 11. Check the CHW form on a regular basis; if there is a mistake, make the correction and advise the CHW how to fill it in correctly.
- 12. In close coordination with the pharmacist, review the CHW supplies and arrange for re-supplies.
- 13. At the end of each month, conduct CHW PPH referral analyses (of referral slips that are brought to the facility by referred patients) and prepare feedback for CHWs (shared at the monthly meetings) and review the individual CHW reporting form.
- 14. Discuss with health shuras or health council members problems that are identified related to CHW motivation, mobility and performance.
- 15. Implement community-based activities such as community mapping exercises, usually with participation from CHWs.

### PHARMACIST JOB DESCRIPTION

### Pharmacist (Central Drug Store)

The REACH/BPHS pharmacist is responsible for all essential drugs and supplies for the BPHS program. It is his/her duty to store misoprostol in the central store located in the Shiberghan offices. He/she will:

- Receive orientation training on the PPH program and on the use of misoprostol.
- Store misoprostol tablets at the central drug store in the Shiberghan Office and maintain a ledger/ record of misoprostol tablets.
- Receive requests for misoprostol from the facility pharmacist (Qurghan and Qaramqol).
- Supply misoprostol to pharmacists within three to four days of receiving the request.
- Review the monthly consumption report submitted by facility-based pharmacists, and the pharmacist's misoprostol distribution log book.
- Conduct (joint visits with field coordinators and CHSs) monitoring and supervision visits to ensure that clinic pharmacists and CHSs follow misoprostol usage and storage protocols closely.
- Attend monthly CHW meetings (at the clinics) where possible.
- Submit the monthly consumption report and field visit reports to the health project manager.
- Work closely with facility-based pharmacists, CHSs and field coordinators.

### Pharmacist (Facility Level):

The REACH/BPHS pharmacist is responsible for all essential drugs stored at the health facility and for dispensing drugs based on a doctor's prescription. For the PPH project, he will be responsible for doing the following:

- Receive orientation training on the PPH program and on the use of misoprostol.
- Store misoprostol tablets at the health facility (in Qurghan and Qaramqol).
- Maintain a ledger/record of misoprostol tablets.
- Receive requests for misoprostol from CHS and double-check reported drug consumption, recollection rates and balance with CHWs.
- Supply misoprostol to the CHS within one day of receiving the request.
- Follow up with the CHS and demand the misoprostol usage report. Emphasize re-collection of unused misoprostol tablets. Collect unused misoprostol from the CHSs and re-store them.
- Analyze monthly consumption and balance. Prepare the monthly consumption report and submit it to central drug store keeper/pharmacist.
- Participate in monitoring and supervision visits conducted by the central drug store keeper/pharmacist.
- Implement recommendations from field supervisors and the central drug store keeper/pharmacist.
- Attend monthly CHW meetings (at the clinics).

### ANNEX B: FOCUS GROUP SAMPLE QUESTIONS

### RECENTLY DELIVERED WOMEN

### 1. Knowledge and Source of Knowledge about Pregnancy

- 1.1. a. How do you know if you are pregnant?b. When did you know you were pregnant?
- 1.2. What do you know about your pregnancy?
- 1.3. What kinds of taboos do you practice related to pregnancy?
- 1.4. When did you or your family decide to check your pregnancy with a midwife or TBA?
- 1.5. When/how did you tell your husband, family or other people about your pregnancy?
- 1.6. How do you know if you are going to have twins?
- 1.7. Have you ever heard from anyone that a mother has delivered twins in this area?
- 1.8. How did you know when you would be delivered/when the pregnancy reaches term?
- 1.9. Did you still practice a blessing ceremony? (Adapt this to other cultural practices present in the country. A blessing ceremony is practiced at the fourth month of pregnancy in Afghanistan and during the seventh month in Indonesia.)
- 1.10. How did you decide to go to seek the help of a midwife or TBA?

### 2. Knowledge about Bleeding/PPH

- 2.1. Do you think it is normal to see bleeding during the birth of a baby?
- 2.2. How do you suspect that excessive bleeding is occurring?
- 2.3. What do you consider the difference between normal and dangerous bleeding?
- 2.4. Have you ever heard from anyone about excessive bleeding just after delivery?
- 2.5. What action(s) do you take to respond to excessive bleeding?
- 2.6. Have you ever heard from anyone that a mother has died because of bleeding after delivery?

### 3. Emergency Response

- 3.1. Thinking about the time when a woman is pregnant, what kinds of health problems can you have when you are pregnant?
- 3.2. Can you tell us what kinds of problems can happen to a woman during labor and during the birth?
- 3.3. Concerning perceptions of shivering, nausea, vomiting, fever after childbirth: What is the perceived severity, that is, are these perceived as very dangerous or tolerable?
- 3.4. How do you respond to manage this?
- 3.5. How did the family member anticipate to respond PPH?

### 4. Delivery Process

- 4.1. Where do you prefer to deliver the baby?
- 4.2. Who do you prefer to help you?
- 4.3. Who will attend to assist the mother at the time of delivery?
- 4.4. Did you decide on your own in which place or from whom you wanted to get help?
- 4.5. What do you do immediately after your baby is born?

### 5. The Time of Birth

- 5.1. What do you know about the time of birth?
- 5.2. What do you know about the placenta?
- 5.3. Who is burying the placenta?
- 5.4. Who was present during the time of birth?
- 5.5. What were you/they doing?
- 5.6. What did you do between the time the baby was born and delivery of the placenta?
- 5.7. What kinds of taboos do you practice within the community related to the time of birth?

### 6. Medication

- 6.1. Is there any medication to be taken at the time of birth?
- 6.2. a. What do you think if there are medications to prevent excessive bleeding? b. Are you interested?
- 6.3. If there were any medications you used to prevent excessive bleeding before, do you have any interest in changing the medications?
- 6.4. If you have medication(s) available, will you take it while bleeding occurs?
- 6.5. Do you make the decision by yourself or do you need to discuss it with your husband?
- 6.6. What do you think: are there any medications to make the placenta come out faster? Did you hear about any specific medications?
- 6.7. Who do you think is the right person to give the medication to the woman having the baby?
- 6.8. When you have to keep the medication, where do you store it?
- 6.9. Will you watch where the medication is stored and will you warn the delivery helper when you deliver?
- 6.10. What should the packaging be like so that the medication is easy to remember, keep, take and deliver?

### 7. Information Media

- 7.1 When/where is the usual time/place for taking/getting the information about medications?
- 7.2. Who usually attends this meeting?
- 7.3. Who is the person who gives you the information?
- 7.4. Who is the appropriate person from whom you can learn about the medication? Can this person distribute the medication to you?
- 7.5. What is the right medium to use to give you the information effectively?
- 7.6. What is the appropriate name for PPH prevention medicine?

### THE HUSBANDS OF RECENTLY DELIVERED WOMEN

### 1. Knowledge and Source of Knowledge about Pregnancy

- 1.1. How did you know that your wife was pregnant?
- 1.2. When did you know that your wife was pregnant?
- 1.3. What did you know about your wife's pregnancy?
- 1.4. Are there any taboos or prohibitions that you should obey during your wife's pregnancy?

- 1.5. When did your wife and you decide to have the pregnancy examination?
- 1.6. When did your wife tell you, other family member or neighbors about her pregnancy?
- 1.7. How did your wife tell you or your family about her pregnancy?
- 1.8. How would you suspect that your wife is carrying twins?
- 1.9. Have you ever heard from anyone that a mother has delivered twins in this area?
- 1.10. How did you know that your wife will deliver a baby?
- 1.11. Did you hold a blessing ceremony on your wife at the fourth or seventh month pregnancy?
- 1.12. How did you decide to get assistance from a midwife or TBA?

### 2. Knowledge of Excessive Bleeding

- 2.1. Do you think bleeding is something normal during delivery?
- 2.2 How do you tell the difference between normal and dangerous bleeding?
- 2.3. How do you suspect that excessive bleeding occurs?
- 2.4. Is it possible to prevent bleeding?
- 2.5. What action(s) do you take to respond to excessive bleeding?
- 2.6. Have you ever heard from anyone about excessive bleeding just after delivery?
- 2.7. Have you ever heard from anyone that a mother has died because of bleeding after delivery?

### 3. Emergency Responses

- 3.1. Do you know about any health problem that may appear during pregnancy?
- 3.2. Could you explain any problem that may appear during the delivery process?
- 3.3. What are your perceptions about shivering, nausea, vomiting and fever after delivery?
- 3.4. How would you manage that situation?
- 3.5. How would the family anticipate bleeding? Have they prepare for an extra financial payment, if needed?

### 4. The Delivery Process

- 4.1. When did you decide on the place to deliver your baby?
- 4.2. Whom did you decide on to assist your wife with the delivery process?
- 4.3. Who accompanied your wife during the delivery?
- 4.4. Did your wife make her own decision about the person whom she preferred to assist her when giving birth?
- 4.5. What do you do immediately after you know that your baby is born?

### 5. Time of Delivery

- 5.1. What do you know about time of delivery?
- 5.2. What do you know about the placenta?
- 5.3. Who buried the placenta?
- 5.4. Who was present when your wife was giving birth?
- 5.5. What were you/they doing?
- 5.6. What was your wife doing after the baby's birth and while waiting for the placenta to come out?
- 5.7. Are there any taboos that should be obeyed during your wife's delivery?

### 6. Medication

- 6.1. Did your wife get any tablets from the midwife or TBA after delivering the baby?
- 6.2. What do you think about tablets to prevent bleeding after delivery? Are you interested?
- 6.3. Would you and your wife try this new tablet as a substitute for the previous tablet (if any)?
- 6.4. If you have medication(s) available, will you asked your wife to take it when bleeding occurs?
- 6.5. Will you discuss taking this new tablet with your wife before suggesting your wife take it?
- 6.5. What do you think if there is a tablet to enhance the placenta coming out?
- 6.6. Have you heard about that kind of tablet?
- 6.7. Who do you think is the right person to give the tablet to the delivering mother?
- 6.8. If your wife gets the tablet when her pregnancy almost reaches the delivery time, where will your wife keep it?
- 6.9. Will you give any attention to keeping this tablet, and remind the midwife or TBA about it when your wife is ready to deliver?
- 6.10. Could you give any suggestion for the packaging? What do you think is the right packaging to be easily recognized and remembered?

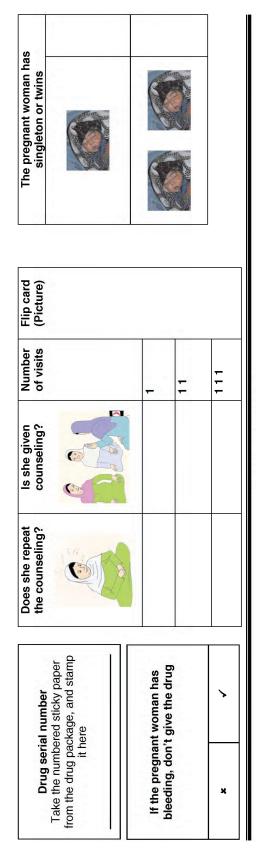
### 7. Information Media

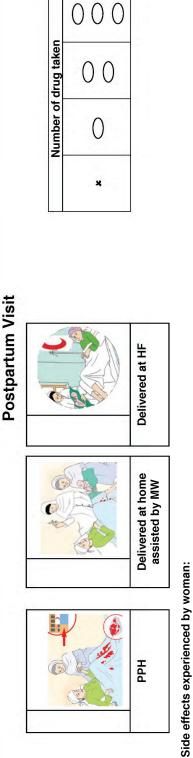
- 7.1. When is the convenient time to get information about pregnancy and delivery? From what/whom?
- 7.2. Who usually comes to get the information?
- 7.3. Who gives the information?
- 7.4. Who is the right person to know about the tablet and be responsible for distributing it?
- 7.5. What do you think is the most effective medium to communicate the information?
- 7.6. What do you think is the most appropriate name for a tablet to prevent bleeding after delivery?

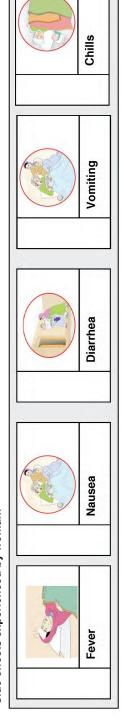
# ANNEX C: PREVENTION OF PPH DEMONSTRATION PROJECT IN AFGHANISTAN: **COMMUNITY HEALTH WORKER FORM**

|                        |              | Prevention of PPH       | Demonstration<br>CHW form | Prevention of PPH Demonstration Project in Afghanistan<br>CHW form | istan               | For Inte          | For Intervention areas |
|------------------------|--------------|-------------------------|---------------------------|--|---------------------|-------------------|------------------------|
| CHW's Name             | CHW ID       | Village                 | District                  |  | Province            |                   |                        |
|                        |              |                         | FIRST PHASE               | HASE   |                     |                   |                        |
| Name of pregnant woman | an           | Age                     |                           | ID Number  | House Number        |                   |                        |
| Name of her husband    |              | Age                     |                           |  |                     |                   |                        |
|                        | DOES THE PRE | GNANT WOMAN KNOW        | V THE SIGNS               | GNANT WOMAN KNOW THE SIGNS OF HEAVY BLEEDING (PPH)                 | Ŧ                   |                   | ever heard             |
| تصوير يک لپ خون        | لقته خون     | ide (1)                 |                           |  |                     |                   | about PPH              |
| Postpartum Visit       | sit          | Counseling within 8th M | M                         | Last Monthly Period  | ``                  |                   | normal                 |
| 11111                  | 1111111111   | 111111111 قوس           | 11111                     | च  |                     |                   | during                 |
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|                        | 111 جوزا     |                         | 1 حمل                     | 1111 luc   | 11                  | 7                 | children?              |
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| سنبله                  | 111111       | سرطان                   | 1111                      | 11111111 عقرب  | 1 1 the counseling? | seling?           | counseling?            |
| 1 میزان                | 111111       | l mr                    | 11111                     | 11111111   | 11                  |                   | 0                      |
| 11 غۇرب                | 1111111      | 11 سنبله                | 11111                     | 1111111111 جدی   | 11                  | 112               |                        |
| 111 قوس                | 11111111     | 111 ميزان               | 111111                    | 11111111111 داو  | 1-                  | an F              |                        |
| 1111 संश               | 111111111    | 1111 عقرب               | 11111111                  | 11111111111111111111111111   | 1-                  |                   |                        |
|                        |              | تم حامله کی             | در ماه هشتم حامله گور     |  |                     |                   |                        |

## SECOND PHASE (DISTRIBUTION OF THE DRUG)







### ANNEX D: PREVENTION OF PPH DEMONSTRATION PROJECT—PARTICIPANT ID CARD

### Front side

| Part             | H Demonstration Project<br>icipant ID Card |
|------------------|--|
| Name:            | _ Village:                                 |
| ID No:           | _ District:                                |
| Husband's name:  | _ Province:                                |
| House number:    |  |
| Verified by CHS: | Signature:                                 |

# ANNEX E: CHS DRUG REQUEST AND RECEIVE FORM (AFGHANISTAN)

### (TO BE FILLED IN BY CHS AND GIVEN TO THE PHARMACIST) **CHS DRUG REQUEST AND RECEIVE FORM**

| rages packages distributed to each CHW now drugs with write serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHS now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)  The serial numbers in 4 each CHW now drugs with columns below)   | Name of CHS:  |  |  |   |     |                   | District:   |  |                                 |   | Suk   | Sub-District: | #                                   |                 |                     |                             |               |
|--|---|--|--|---|-----|-------------------|---|--|---------------------------------|---|---|---------------|-------------------------------------|-----------------|---------------------|-----------------------------|---------------|
| No. of All drug serial numbers packages distributed to each CHW now drugs with from women columns below)  Te-collected (write serial numbers in 4 each CHW e | Health Centre:  |  | Dat  | Dat                                       | Dat | ਬ                 | e:  |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  | Health CHW packages packages post ID name lost by damaged at CHW eacl | No. of No. of No. of packages packages lost by damaged at CHW women by women last week | No. of No. of packages damaged at CHW by women last week | No. of<br>packages<br>at CHW<br>last week |     | p<br>dist<br>eacl | No. of<br>packages<br>distributed by<br>each CHW last<br>week | No. of<br>packages<br>re-collected<br>from women | All dr<br>distribut<br>(write s | ug seria<br>ed to ea<br>serial nu<br>olumns I | il number<br>ich CHW<br>imbers ir<br>below) |               | Remaining<br>drugs with<br>each CHW | Drugs<br>(write | s added<br>serial r | to CHS<br>numbers<br>below) | now<br>s in 4 |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |
|  |   |  |  |   |     |                   |   |  |                                 |   |   |               |                                     |                 |                     |                             |               |

Remaining packages at CHS: Packages distributed by CHS this month:\_

■ Make sure that each of the unused packages still contains three tablets of unopened drugs.

■ All CHSs must make two copies of drug-request and receive form. One copy must be kept by the pharmacist.

Total packages distributed to this CHS until this month:

### ANNEX F: AFGHANISTAN PREVENTION OF PPH DEMONSTRATION PROJECT; MATERNAL AND NEONATAL HEALTH PROGRAM—POSTPARTUM INTERVIEW

| DRAFT |
|-------|
|-------|

### Afghanistan Prevention of PPH Demonstration Project MATERNAL AND NEONATAL HEALTH PROGRAM

### **Postpartum Interview**

Respondent: Postpartum women in pilot project area

| IDENTIFICATION  | CODE      |
|---|-----------|
| District:   | [][]      |
| Basic Health Center:                                    | [ ]       |
| Village:  | [ ][ ]    |
| Household:  | [ ][ ][   |
| Name of woman:  |           |
| Identification number (From identification visit form): | [ ][ ][ ] |

| HOUSEHOLD INFORMATION      |
|----------------------------|
| Name of head of household: |
| Address:                   |

|                                   |             | IN                                    | TER         | VIEW                 | ER VISITS                           |          |                             |    |                                 |
|-----------------------------------|-------------|---------------------------------------|-------------|----------------------|-------------------------------------|----------|-----------------------------|----|---------------------------------|
| Dat                               |             | /                                     | -           |                      |                                     |          |                             |    |                                 |
| Result                            | **          | [ ]                                   |             |                      |                                     |          |                             |    |                                 |
| Next visit: Dat                   | te          | //                                    | _           |                      |                                     |          |                             |    |                                 |
| Tim                               | е           |                                       | _           |                      |                                     |          |                             |    |                                 |
| **Result codes                    | 1<br>2<br>3 | Completed<br>Not at home<br>Postponed | 4<br>5<br>6 |                      | sed<br>y completed<br>oondent incap |          | 8 Other                     |    | t deceased specify)             |
| *Month codes                      |             | January<br>February<br>March          | 05          | April<br>May<br>June | (                                   | 07<br>08 | July<br>August<br>September | 11 | October<br>November<br>December |
| Supervisor's Name  Date Received: |             |                                       | [           | ][ ]                 | Data Entry N                        | Var      | me:                         |    | [ ]                             |
|                                   |             | · ·                                   |             |                      |                                     |          |                             |    |                                 |

| Q # | QUESTIONS  | Response   | SKIP       |
|-----|--|--|------------|
|     | EXPOSURE AND COMPREHENSIO  | N  |            |
| 1.  | During this last pregnancy, did you receive any information about bleeding after childbirth?                 | Yes 1<br>No 2<br>Don't remember 8  | <b>→</b> 4 |
| 2.  | What information did you receive about bleeding after childbirth?  (CIRCLE ALL THAT APPLY)                   | Can cause death 1 Go to health facility promptly 2 Get help from midwife 3 Get help from Dai 4 Other (specify) 6 |            |
| 3.  | Please name all the sources from which you learned about bleeding after childbirth.  (CIRCLE ALL THAT APPLY) | Midwife 1 CHW 2 Dai 3 BHC 4 Friend/Relative 5 Poster 6 CHC/Hospital 7 Other (specify) 96                         |            |
| 4.  | During this last pregnancy, did you receive any information about a drug called?                             | Yes 1<br>No 2<br>Don't remember 8  | → 13       |

| Q # | QUESTIONS   | Response  | SKIP         |
|-----|---|---|--------------|
| 5.  | What does do?   | Prevents, stops, or reduces the chances of bleeding after childbirth 1 Other (specify) 6 Don't know 8   |              |
| 6.  | When and how should the medication be taken?  | Swallow the tablet immediately after the baby is born 1 Other (specify) 6 Don't know 8  |              |
| 7.  | Please name all the sources from which you learned about  (CIRCLE ALL THAT APPLY)                                       | Midwife 1 CHW 2 Dai 3 BHC 4 Friend/Relative 5 Poster 6 CHC/Hospital 7 Other (specify) 96  |              |
| 8.  | From all of the sources you just named, which source would you say was your most important source of information about? | Midwife 1 CHW 2 Dai 3 BHC 4 Friend/Relative 5 Poster 6 CHC/Hospital 7 Other (specify) 96  |              |
| 9.  | Did you receive any information about the side effects of?  | Yes 1<br>No 2<br>Don't remember 8   | → 11<br>→ 11 |
| 10. | What side effects were you told you might experience?  (CIRCLE ALL THAT APPLY)  | Shivering 1 Nausea 2 Abdominal cramping 3 Vomiting 4 Diarrhea 5 Raise of temperature 6 No information about side effects 7 Other (specify) 96 |              |
| 11. | Did you receive any information about the number of tablets that should be taken?                                       | Yes 1<br>No 2<br>Don't know 8   | → 13<br>→ 13 |
| 12. | How many tablets should you take?   | Tablets   |              |
| 13. | Did anyone offer you medication at any time during this last pregnancy or during the delivery?                          | Yes 1<br>No 2<br>Don't know 8   | → 22<br>→ 22 |

| Q # | QUESTIONS   | Response  | SKIP      |
|-----|---|---|-----------|
| 14. | Who offered you?  | CHW 1 Other (specify) 96  |           |
| 15. | (CIRCLE ALL THAT APPLY)  Did you accept the medication when it was offered to you?  | Yes 1<br>No 2<br>Don't remember 8   | → 17<br>→ |
| 16. | Why did you choose NOT to accept the medication when it was offered?  (CIRCLE ALL THAT APPLY)                             | It has side effects 1  My husband/family didn't let me accept it 2  The information was not clear 3  Other (specify) 6  | →         |
| 17. | Who else in your household besides you received information about bleeding after childbirth and?  (CIRCLE ALL THAT APPLY) | Husband 1  Mother 2  Mother-in-law 3  Sister 4  Sister-in-law 5  No one 6  Other (specify) 96   |           |
| 18. | Did you receive any information about the signs of excessive bleeding?  | Yes 1<br>No 2<br>Don't know 8   | → 20      |
| 19. | What signs of excessive bleeding were you told about?  (CIRCLE ALL THAT APPLY)  | The bleeding soaks 2 sarongs or more1 Feel weak and faint2 Little bleeding but lasts for more than 1 hour after the baby is born3 Blood clots are passed4 Don't remember 8                              |           |
| 20. | Did you receive any information about the causes of excessive bleeding?   | Yes 1<br>No 2<br>Don't know 8   | → 22      |
| 21. | What causes of excessive bleeding were you told about?  (CIRCLE ALL THAT APPLY)   | Womb does not get firm after placenta comes out 1 Placenta or part of placenta is left in the womb 2 There is an injury or cut on the womb or the opening of the womb or birth canal 3 Don't remember 8 |           |
|     | ANC   |   |           |
| 22. | Did you talk to a midwife about this pregnancy, including at BHC?   | Yes 1<br>No 2   | → 25      |
| 23. | How many times did you talk to a midwife about this pregnancy?  | Number of visits  |           |

| 24. Whom did you see for ANC visits?    CHW   | Q #         | QUESTIONS                         | Response                                | SKIP   |
|---|-------------|-----------------------------------|---|--|
| BHC 3 CHC/Hospital 4  DELIVERY INFORMATION  25. What was the date you gave birth?  Don't know 88/88/88  26. Did you deliver singleton or multiple?  Multiple birth multiple 2  27 How many deliveries did you have?  More than one 2  28. Where was (s)he born?  At home 1  Dai's house 2  Midwife's house 2  Midwife's house 2  Maternity clinic 5  CHC/Hospital 6  Other (specify) 96  31. Who delivered her?  BHC 3  Other (specify) 6  Doctor-OB/GYN specialist 1  Doctor-general practitioner 2  Midwife 3  Dukun 4  Friend/Relative 5  Other (specify) 96  32. Who else was present during delivery of him/her?  Doctor-OB/GYN specialist 1  Doctor-general practitioner 2  Doctor-OB/GYN specialist 1  Doctor-general practitioner 2   | 24.         | Whom did you see for ANC visits?  | Midwife 1                               |  |
| DELIVERY INFORMATION  25. What was the date you gave birth?  26. Did you deliver singleton or multiple?  27. How many deliveries did you have?  28. Where was (s)he born?  28. Where was (s)he born?  29. What is the name of this health facility?  29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  31. Who delivered her?  31. Who delivered her?  DELIVERY INFORMATION  MM/DD/YY//  |             |                                   |   |  |
| DELIVERY INFORMATION  25. What was the date you gave birth?  26. Did you deliver singleton or multiple?  27. How many deliveries did you have?  28. Where was (s)he born?  28. Where was (s)he born?  29. What is the name of this health facility?  29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  31. Who delivered her?  31. Who delivered her?  32. Who else was present during delivery of him/her?  33. Who else was present during delivery of him/her?  34. Malpon't know 88/88/88  35. MM/DD/YY  |             |                                   |   |  |
| 25. What was the date you gave birth?  26. Did you deliver singleton or multiple?  27. How many deliveries did you have?  28. Where was (s)he born?  28. Where was (s)he born?  29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  31. Who delivered her?  32. Who else was present during delivery of him/her?  28. Who was (s)he born?  29. What is the name of this health facility?  29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  31. Who delivered her?  32. Who else was present during delivery of him/her?  33. Who else was present during delivery of him/her?  34. Who else was present during delivery of him/her?  35. Single birth singleton 1 Multiple in this negleton 1 Multiple in this negleton 1 After the baby was born. 1 After the baby was born. 1 After the baby was born, but before the placenta was delivered 2 After the baby and placenta were delivered 3 Other (specify) 6  36. Other (specify) 6  37. Who else was present during delivery of him/her?   |             |                                   | CHC/Hospital 4                          | •  |
| Don't know 88/88/88  26. Did you deliver singleton or multiple?  How many deliveries did you have?  How many deliveries did you have?  The many deliveries did you have?  Where was (s)he born?  At home 1 Dai's house 2 Alidwife's house 3 BHC 4 Maternity clinic 5 CHC/Hospital 6 Other (specify) 96  31. Who delivered her?  Who else was present during delivery of him/her?  Doctor-OB/GYN specialist 1   |             | DELIVERY INFORMATION              |   |  |
| 26. Did you deliver singleton or multiple?  27 How many deliveries did you have?  28. Where was (s)he born?  28. Where was (s)he born?  29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  31. Who delivered her?  31. Who delivered her?  32. Who else was present during delivery of him/her?  29. Who else was present during delivery of him/her?  30. Other (specify)  31. Who else was present during delivery of him/her?  32. Who else was present during delivery of him/her?  33. Single birth singleton 1  Multiple birth multiple 2  And Multiple birth multiple 2  And Multiple birth multiple 2  And home 1  And home 2  And home 2 | 25.         | What was the date you gave birth? |   |  |
| multiple?  How many deliveries did you have?  Nultiple birth multiple 2  28. Where was (s)he born?  At home 1  Dai's house 2  Midwife's house 3  BHC 4  Maternity clinic 5  CHC/Hospital 6  Other (specify) 96  29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  After the baby was born, but before the placenta was delivered 2  After the baby and placenta were delivered 3  Other (specify) 6  31. Who delivered her?  Doctor-OB/GYN specialist 1  Doctor-general practitioner 2  Midwife 3  Dukun 4  Friend/Relative 5  Other (specify) 96  32. Who else was present during delivery of him/her?  Doctor-OB/GYN specialist 1  |             |                                   | Don't know 88/88/88                     |  |
| 27 How many deliveries did you have?  28. Where was (s)he born?  At home 1  Barbara house 2  28. Where was (s)he born?  At home 1  Barbara house 2  At home 1  Barbara house 2  At home 1  Barbara house 3  BHC 4  Maternity clinic 5  CHC/Hospital 6  Other (specify) 96  29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  After the baby was born, but before the placenta was delivered 2  After the baby and placenta were delivered 2  After the baby and placenta were delivered 3  Other (specify) 6  31. Who delivered her?  Doctor-OB/GYN specialist 1  Doctor-general practitioner 2  Midwife 3  Dukun 4  Friend/Relative 5  Other (specify) 96  32. Who else was present during delivery of him/her?  Doctor-OB/GYN specialist 1  Doctor-OB/GYN specialist 1  Doctor-general practitioner 2  | 26.         |                                   |   |  |
| More than one 2  28. Where was (s)he born?  At home 1 → 30 Dai's house 2 → 30 Midwife's house 3 → 30 BHC 4 Maternity clinic 5 CHC/Hospital 6 Other (specify)  |             | multiple?                         | Multiple birth multiple 2               |  |
| 28. Where was (s)he born?  At home 1 Dai's house 2 At home 1 Dai's house 3 BHC 4 Maternity clinic 5 CHC/Hospital 6 Other (specify)  | 27          | How many deliveries did you have? |   |  |
| Dai's house 2 Midwife's house 3 BHC 4 Maternity clinic 5 CHC/Hospital 6 Other (specify)   |             |                                   | More than one 2                         |  |
| Midwife's house 3 BHC 4 Maternity clinic 5 CHC/Hospital 6 Other (specify)   | 28.         | Where was (s)he born?             |   | → 30   |
| BHC 4 Maternity clinic 5 CHC/Hospital 6 Other (specify)   |             |                                   |   | → 30   |
| Maternity clinic 5 CHC/Hospital 6 Other (specify)   |             |                                   |   | → 30   |
| 29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  31. Who delivered her?  32. Who else was present during delivery of him/her?  33. Who else was present during delivery of him/her?  34. Who tis the name of this health facility?  35. Other (specify)   |             |                                   |   |  |
| 29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  31. Who delivered her?  32. Who else was present during delivery of him/her?  33. What is the name of this health facility?  34. What is the name of this health facility?  35. Before the baby was born 1  After the baby was born, but before the placenta was delivered 2  After the baby and placenta were delivered 3  Other (specify)  |             |                                   | -                                       |  |
| 29. What is the name of this health facility?  30. At what point in your labor and childbirth did you go to this health facility?  Before the baby was born 1  After the baby was born, but before the placenta was delivered 2  After the baby and placenta were delivered 3  Other (specify)  |             |                                   | •                                       |  |
| facility?  30. At what point in your labor and childbirth did you go to this health facility?  Before the baby was born 1  After the baby was born, but before the placenta was delivered 2  After the baby and placenta were delivered 3  Other (specify)  | 20          | What is the name of this health   | Other (specify) 30                      | <del>                                     </del> |
| childbirth did you go to this health facility?  After the baby was born, but before the placenta was delivered 2  After the baby and placenta were delivered 3  Other (specify)   | <b>29</b> . |                                   |   |  |
| facility?  placenta was delivered 2 After the baby and placenta were delivered 3 Other (specify)  | 30.         |                                   | Before the baby was born 1              |  |
| After the baby and placenta were delivered 3  Other (specify)   |             |                                   |   |  |
| Who delivered her?  Doctor-OB/GYN specialist 1 Doctor-general practitioner 2 Midwife 3 Dukun 4 Friend/Relative 5 Other (specify)  |             |                                   | •                                       |  |
| Other (specify) 6  31. Who delivered her?  Doctor-OB/GYN specialist 1 Doctor-general practitioner 2 Midwife 3 Dukun 4 Friend/Relative 5 Other (specify) 96  32. Who else was present during delivery of him/her?  Doctor-OB/GYN specialist 1 Doctor-general practitioner 2  |             |                                   |   |  |
| 31. Who delivered her?  Doctor-OB/GYN specialist 1 Doctor-general practitioner 2 Midwife 3 Dukun 4 Friend/Relative 5 Other (specify) 96  32. Who else was present during delivery of him/her?  Doctor-OB/GYN specialist 1 Doctor-general practitioner 2   |             |                                   |   |  |
| Doctor-general practitioner 2  Midwife 3  Dukun 4  Friend/Relative 5  Other (specify) 96  32. Who else was present during delivery of him/her?  Doctor-OB/GYN specialist 1  Doctor-general practitioner 2   | 31          | Who delivered her?                | , |  |
| Midwife 3 Dukun 4 Friend/Relative 5 Other (specify) 96  32. Who else was present during delivery of him/her? Doctor-OB/GYN specialist 1 Doctor-general practitioner 2   | 011         | Time delivered fier.              | •                                       |  |
| Friend/Relative 5 Other (specify) 96  32. Who else was present during delivery of him/her? Doctor-general practitioner 2  |             |                                   | • •                                     |  |
| Other (specify) 96  32. Who else was present during delivery of him/her? Doctor-OB/GYN specialist 1 Doctor-general practitioner 2   |             |                                   | Dukun 4                                 |  |
| 32. Who else was present during delivery of him/her? Doctor-OB/GYN specialist 1 Doctor-general practitioner 2   |             |                                   | Friend/Relative 5                       |  |
| delivery of him/her?  Doctor-general practitioner 2   |             |                                   | Other (specify) 96                      |  |
|   | 32.         |                                   | •                                       |  |
|   |             | delivery of him/her?              | • •                                     |  |
| Midwife 3   |             | (CIDCLE ALL THAT ADDLY)           |   |  |
| (CIRCLE ALL THAT APPLY)  Dai 4  |             | (CIRCLE ALL THAT APPLY)           |   |  |
| Husband 5   |             |                                   |   |  |
| Mother 6 Mother-in-law 7  |             |                                   |   |  |
| Sister 8  |             |                                   |   |  |
| Sister 6  |             |                                   |   |  |
| No one 10   |             |                                   |   |  |
|   |             |                                   | Other (specify) 96                      |  |

| Q # | QUESTIONS   | Response                             | SKIP        |
|-----|---|--------------------------------------|-------------|
| 33. | Did you have a caesarean section?                                   | Yes 1                                |             |
|     |   | No 2                                 |             |
|     | PROMPT: Did a doctor cut open your abdomen to deliver the baby?     |                                      |             |
| 34. | Did you have any bleeding before                                    | Yes 1                                |             |
|     | the baby was born (including during your pregnancy)?                | No 2                                 |             |
| 35. | Did your labor last more than 24                                    | Yes 1                                |             |
|     | hours?  | No 2                                 |             |
| 36. | Was the baby born head first?                                       | Yes 1                                |             |
|     |   | No 2                                 |             |
| 37. | Did you have convulsions before,                                    | Yes 1                                |             |
|     | during or after labor?  | No 2                                 |             |
| 38. | Did you bleed a lot more than                                       | Yes 1                                |             |
|     | normal following childbirth?  | No 2                                 |             |
|     |   | Don't know 8                         |             |
| 39. | How many cloths did you use to absorb the blood during the first 24 |                                      |             |
|     | hours after your baby was born?                                     | Don't know/can't remember 88         |             |
|     |   | Boilt know/cart temember oo          |             |
|     | PROBE: Was it more than three?                                      |                                      |             |
| 40. | In the first 6 hours following                                      | Yes 1                                |             |
|     | delivery, did you feel faint or dizzy?                              | No 2                                 |             |
| 41. | In the first 6 hours following                                      | Yes 1                                |             |
|     | delivery, did you actually faint or lose consciousness?             | No 2                                 |             |
| 42. | In the first 6 hours following                                      | Yes 1                                |             |
|     | delivery, did you experience shivering?                             | No 2                                 | <b>→</b> 44 |
| 43. | For how long?   | One half hour or less 1              |             |
|     |   | Between one half hour and one hour 2 |             |
|     |   | More than one hour to two hours 3    |             |
|     |   | More than 2 hours 4                  |             |
| 44. | In the first 6 hours following                                      | Yes 1                                |             |
|     | delivery, did you experience nausea?                                | No 2                                 | <b>→</b> 46 |
| 45. | For how long?   | One half hour or less 1              |             |
|     |   | Between one half hour and one hour 2 |             |
|     |   | More than one hour to two hours 3    |             |
|     |   | More than 2 hours 4                  |             |
| 46. | In the first 6 hours following                                      | Yes 1                                |             |
|     | delivery, did you experience vomiting?                              | No 2                                 | <b>→</b> 48 |

| Q # | QUESTIONS   | Response  | SKIP        |
|-----|---|---|-------------|
| 47. | For how long?   | One half hour or less 1 Between one half hour and one hour 2 More than one hour to two hours 3 More than 2 hours 4  |             |
| 48. | In the first 6 hours following delivery, did you experience fever?              | Yes 1<br>No 2   | <b>→</b> 50 |
| 49. | For how long?   | One half hour or less 1 Between one half hour and one hour 2 More than one hour to two hours 3 More than 2 hours 4  |             |
| 50  | In the first 6 hours following delivery, did you experience abdominal cramping? | Yes 1<br>No 2   | <b>→</b> 52 |
| 51. | For how long?   | One half hour or less 1 Between one half hour and one hour 2 More than one hour to two hours 3 More than 2 hours 4  |             |
| 52. | In the first 6 hours following delivery, did you have a watery stool?           | Yes 1<br>No 2   | <b>→</b> 54 |
| 53. | How many times?   | Don't know/can't remember 88  |             |
|     | REFERRAL  |   |             |
| 54. | Were you referred to a health facility for treatment for this delivery?         | Yes 1<br>No 2   | <b>→</b> 64 |
| 55. | When were you referred?   | During pregnancy, before going into labor 1  After labor started, but before birth of the baby 2  After the birth of the baby, but before the placenta was delivered 3  After the baby and placenta were delivered 4  Don't know/Can't remember 8 |             |
| 56. | For what reason were you referred?  | Long labor 1<br>Bleeding 2  |             |
|     | (CIRCLE ALL THAT APPLY)   | Placenta did not deliver soon enough 3 Other (specify) 6  |             |
| 57  | Who referred you?   | Doctor-OB/GYN specialist 1 Doctor-general practitioner 2 Midwife 3 CHW 4 Daya 5 Other (specify) 96  |             |

| Q # | QUESTIONS   | Response   | SKIP                                       |
|-----|---|--|--|
| 58. | Did you go?   | Yes 1<br>No 2  |  |
| 59. | Why didn't you go?  | No transport 1 Too expensive 2   |  |
|     | (CIRCLE ALL THAT APPLY)   | Didn't want to go to the health facility 3 Other (specify) 6   | ]→ 64                                      |
| 60. | Where did you go?   | BHC 1 CHC/Hospital 2 Other (specify) 6   |  |
| 61. | What was the name of the health facility?   | Other (specify) 6  | → 62                                       |
| 62. | How did you get there?  | Personal car 1 Car borrowed from friend/neighbor/relative 2 Health care provider's car 3 Public transportation 4 Walking 5 Other (specify) 6   |  |
| 63. | How long did it take you to get there?  | Hours [ ] Minutes [ ][ ] Don't know/Can't remember 888   |  |
|     | MEDICATION  |  |  |
| 64. | Did a midwife or doctor give you an injection in the thigh or buttocks right after the baby was born? | Yes 1<br>No 2<br>Don't know/Can't remember 8   |  |
| 65. | Did you take, the tablet(s) offered to you by CHW?  | Yes 1<br>No 2<br>Don't know 8  |  |
| 66. | Did you take thebefore or after (s)he was born?   | Before 1<br>After 2  | → 68 and fill in the pill before baby form |
| 67. | How many minutes after (s)he was born did you take the medicine?                                      | Don't know/Can't remember 8  Minutes [ ][ ][ ]  Don't know 888   | → 69                                       |
| 68. | (If she had twins) When did you take the drug during delivery of the second baby?                     | Not applicable 99 After the first baby was born 1 After the placenta of the 1st baby was delivered 2 After the 2nd baby was born 3 After the placenta of the 2nd baby was delivered 4 Don't know/Don't remember 88 |  |
| 69. | How many tablets did you take?  | Tablets  |  |

| Q # | QUESTIONS  | Response   | SKIP |
|-----|--|--|------|
| 70. | Did you take<br>before or after the placenta<br>delivered?   | Before the placenta 1<br>After the placenta 2<br>Don't know 8  |      |
| 71. | Why did you take?  (CIRCLE ALL THAT APPLY)   | To prevent heavy bleeding after delivery 1 CHW told me to take it 2 Husband/Family/Friend told me to take it 3 Other (specify) 6   |      |
| 72. | How many minutes after (s)he was born did the placenta come out?  (CHECK CONSISTENCY)  | Minutes [ ][ ][ ]<br>Don't know 888  |      |
| 73. | Why did you NOT take the medication?  (CIRCLE ALL THAT APPLY)  IF ANSWER "DIDN'T WANT TO TAKE MEDICATION" PROBE:  "Why did you not want to take the medication?"  PROBE TWO TIMES: "Any other reason?" | My midwife gave me the injection (oxytocin) instead 1  My midwife/dai did not want me to take it2  My husband/family did not want to let me take it3  Fear of side effects 4  Didn't think I would need it 5  Didn't think it would work 6  I didn't have any information about it 7  Didn't know how to take it 8  Did not have the medication 9  Couldn't find the medication 10  Forgot 11  Just didn't want to take the medication 12  Other (specify) |      |
|     | ACCEPTABILITY  |  |      |
| 74. | Would you recommend<br>to a friend or relative?  | Yes 1<br>No 2<br>Don't know 8  |      |
| 75. | If you got pregnant again, do you think you would use?   | Yes 1<br>No 2<br>Don't know 8  | END  |
| 76. | Would you <i>purchase</i> ?  | Yes 1<br>No 2<br>Don't know 8  | END  |
| 77. | Would you be willing to buy at the following prices?  (CIRCLE YES OR NO FOR EACH AMOUNT)   | 50 afs Y N<br>100 afs Y N<br>200 afs Y N   |      |

Thank you for your time. Do you have any questions?

# ANNEX G: PREVENTION OF PPH DEMONSTRATION PROJECT IN AFGHANISTAN— **PPH MONITORING & EVALUATION TOOL**

DRAFT

### PREVENTION OF PPH DEMONSTRATION PROJECT IN AFGHANISTAN **PPH M&E TOOL**

| No. | Items to be Monitored                        | Source/Method                                     | Who Collects and Keeps the Data | Remarks  |
|-----|--|---|---------------------------------|--|
| -   | drug packaging                               | Drug<br>distribution/<br>receive form             |                                 | <ul> <li>3 tablets per package</li> <li>drug serial number (so that it is traceable: district, ilaka, vdc, ward, drug number)</li> <li>expired date</li> </ul> |
| 2   | drug distribution                            | Drug<br>distribution/<br>receive form             |                                 | <ul> <li>From to to</li></ul>   |
| 3   | % of pregnant women received PPH<br>messages | <ul><li>Visit form</li><li>PP interview</li></ul> | CHW<br>PP interviewer           | # of women received PPH messages  X 100%  Total # of pregnant women in intervention areas  |
| 4   | % of women offered drug                      | <ul><li>Visit form</li><li>PP interview</li></ul> | CHW<br>PP interviewer           | # of women offered drug X 100%  Total # of pregnant women in intervention areas  |
|     |  |   |                                 | # of women offered drug  # of women received PPH messages  |

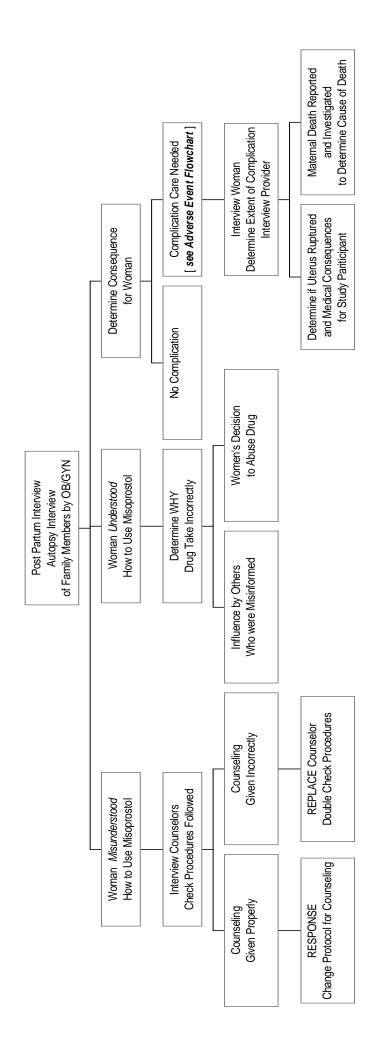
| Š. | Items to be Monitored                    | Source/Method               | Who Collects and Keeps the Data | Remarks   |  |
|----|--|-----------------------------|---------------------------------|---|--|
| 2  | % of women received drug                 | Visit form     PP interview | CHW<br>PP interviewer           | # of women offered drug                         | X 100%                                 |
|    |  |                             |                                 | Total # of pregnant women in intervention areas | 0<br>0<br>0                            |
|    |  |                             |                                 | # of women received drug                        | X 100%                                 |
|    |  |                             |                                 | # of women offered drug                         | °\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
| 9  | % taken the drug                         | PP interview<br>Visit form  | PP interviewer<br>CHW           | # of women taken drug                           | × 1000,                                |
|    |  |                             |                                 | Total # of pregnant women in intervention areas | ° 000                                  |
|    |  |                             |                                 | # of women taken drug                           | × ×                                    |
|    |  |                             |                                 | # of women received drug                        | %<br>000<br>V                          |
| 7  | % of women perceive excessive blood loss | PP interview                | PP interviewer                  | # of women perceive<br>excessive blood loss     | / <sub>0</sub> 00+ >                   |
|    |  |                             |                                 | # of women taken drug                           | %<br>20<br>4                           |
|    |  |                             |                                 | # of women perceive<br>excessive blood loss     | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
|    |  |                             |                                 | # of women did not<br>take drug                 | % 00 V                                 |
| 8  | % of drug taken before the birth of baby | PP interview                | PP interviewer                  | # drug taken before the<br>birth of baby        | %000 X                                 |
|    |  |                             |                                 | # of women taken drug                           | °\                                     |
| 6  | % of drug taken less the 3 tablets       | PP interview<br>Visit form  | PP interviewer<br>CHW           | # of drug taken less the<br>3 tablets           | × 100%                                 |
|    |  |                             |                                 | # of women taken                                | 200                                    |

| Š. | Items to be Monitored   | Source/Method | Who Collects and Keeps the Data | Remarks                                       |               |
|----|---|---------------|---------------------------------|---|---------------|
| 9  | % of drug lost/damage   | Miso log book | CHW                             | # of drug lost/damage                         | × 100%        |
|    |   |               |                                 | # of women received drug                      | %001 <b>Y</b> |
| 11 | % experiences any side effects (shivering, etc.)                          | PP interview  | PP interviewer                  | # experiences any side<br>effects             | × 100%        |
|    | same indicators should be calculated for the control areas for comparison |               |                                 | # of women taken drug                         | ° 001         |
|    |   |               |                                 | # experiences shivering                       | )<br>)<br>)   |
|    |   |               |                                 | # of women taken drug                         | ° 001 <       |
|    |   |               |                                 | # experiences nausea                          | >><br>>>      |
|    |   |               |                                 | # of women taken drug                         | %<br>200<br>4 |
|    |   |               |                                 | # experiences vomiting                        | ,<br>,<br>,   |
|    |   |               |                                 | # of women taken drug                         | °<br>00<br><  |
|    |   |               |                                 | # experiences diarrhea                        | ,<br>,        |
|    |   |               |                                 | # of women taken drug                         | %001<br>V     |
|    |   |               |                                 | # experiences temperature raising             | )<br>)<br>)   |
|    |   |               |                                 | # of women taken drug                         | %001 <b>v</b> |
|    |   |               |                                 | # experiences abdominal cramping              | × 1           |
|    |   |               |                                 | # of women taken drug                         | 8/ 001 V      |
| 12 | % will take it again in the next pregnancy                                | PP interview  | PP interviewer                  | # will take it again in the<br>next pregnancy | X 100%        |
|    |   |               |                                 | # of women taken drug                         | 0/ 001 V      |

| So. | Items to be Monitored                                    | Source/Method | Who Collects and Keeps the Data | Remarks   |  |
|-----|--|---------------|---------------------------------|---|--|
| 13  | % taking who will recommend to others                    | PP interview  | PP interviewer                  | # taking who will recommend to others x 100%                |  |
|     |  |               |                                 | # of women taken drug                                       |  |
| 14  | % willing to purchase if not free of charge              | PP interview  | PP interviewer                  | # willing to purchase if not free of chart                  |  |
|     |  |               |                                 | # of women taken drug                                       |  |
| 15  | % of woman not allowed to receive drug by husband/family | PP interview  | PP interviewer                  | # of woman not allowed<br>to take drug by<br>husband/family |  |
|     |  |               |                                 | # of women offered<br>the drug                              |  |
| 16  | % of woman not allowed to take drug by husband/family    | PP interview  | PP interviewer                  | # of woman not allowed<br>to take drug by<br>husband/family |  |
|     |  |               |                                 | # of women received<br>the drug                             |  |
| 17  | % know the signs of PPH                                  | PP interview  | PP interviewer                  | # know the signs of PPH X 100%                              |  |
|     |  |               |                                 | # of women received<br>PPH messages                         |  |
| 18  | % know the causes of PPH                                 | PP interview  | PP interviewer                  | # know the causes of<br>PPH X 100%                          |  |
|     |  |               |                                 | # of women received<br>PPH messages                         |  |
| 19  | % know # of tablets should be taken                      | PP interview  | PP interviewer                  | # know # of tablets<br>should be taken X 100%               |  |
|     |  |               |                                 | # of women received drug                                    |  |

| No. | Items to be Monitored                       | Source/Method                   | Who Collects and Keeps the Data | Remarks  |                  |
|-----|---|---------------------------------|---------------------------------|--|------------------|
| 20  | % know when to take the drug                | PP interview                    | PP interviewer                  | # know when to take<br>the drug                | × 100%           |
|     |   |                                 |                                 | # of women received drug                       | °/ 00            |
| 21  | % know what side effects can be experienced | PP interview                    | PP interviewer                  | # know what side effects<br>can be experienced | × 100%           |
|     |   |                                 |                                 | # of women received drug                       | °/ 001           |
| 22  | % know what to do if side effect happened   | PP interview                    | PP interviewer                  | # know what to do if side<br>effect happened   | , 100°,          |
|     |   |                                 |                                 | # of women received drug                       | ° 00             |
| 23  | # of PPH cases                              | PP interview                    | PP interviewer                  | # of PPH cases                                 | , 1000°          |
|     |   |                                 |                                 | # of women taken drug                          | °/ 00            |
|     |   |                                 |                                 | # of PPH cases                                 | × 100%           |
|     |   |                                 |                                 | # of women did not<br>take drug                | °<br>20          |
| 24  | # of hospitals admissions for PPH           | Facility record<br>PP interview | PP interviewer                  | # of hospital admissions<br>for PPH            | )<br>000         |
|     |   |                                 |                                 | # of women taken drug                          | %001 <b>&lt;</b> |
|     |   |                                 |                                 | # of hospital admissions<br>for PPH            | )<br>000<br>2    |
|     |   |                                 |                                 | # of women did not<br>take drug                | °<br>20          |

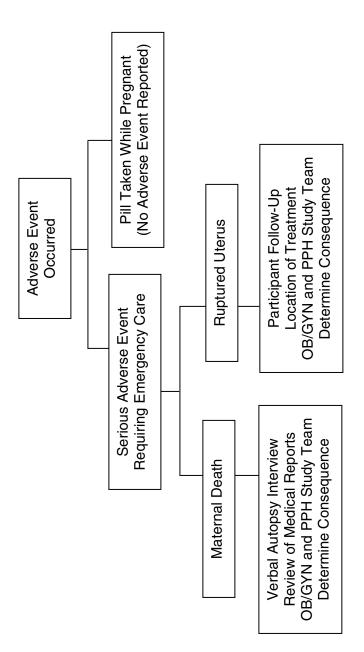
| Š<br>Š | . Items to be Monitored                        | Source/Method                   | Who Collects and Keeps the Data | Remarks   |   |
|--------|--|---------------------------------|---------------------------------|---|---|
| 25     | # of blood transfusions                        | Facility record PP interview    | PP interviewer                  | # of blood transfusions   | X 100%                                  |
|        |  | (if the question is included)   |                                 | # of women taken drug   | ° > > > > > > > > > > > > > > > > > > > |
|        |  |                                 |                                 | # of blood transfusions   | × 100%                                  |
|        |  |                                 |                                 | # of women did not<br>take drug                                     | °<br>•                                  |
| 56     | # of maternal deaths                           | PP interview<br>Facility record | Field coordinator               | # of maternal deaths<br>caused by PPH (with or<br>without referral) | × 100%                                  |
|        |  |                                 |                                 | # of women taken drug   | ° > > > > > > > > > > > > > > > > > > > |
|        |  |                                 |                                 | # of maternal deaths<br>caused by PPH (with or<br>without referral) | ×<br>100%                               |
|        |  |                                 |                                 | # of women did not<br>take drug                                     | % 001 <b>X</b>                          |
| 27     | # of maternal deaths related to misuse of drug | Facility record                 | Field coordinator               | # of maternal deaths related to misuse of drug                      | %00%<br>X                               |
|        |  |                                 |                                 | # of women received drug  | °/ 001 K                                |



Determining the Consequence Following Inappropriate Use of Misoprostol

# Safety Monitoring and Participant Follow-Up

(Adverse Event = Ruptured Uterus or Maternal Death)



It would also be important to determine the probable cause and potential preventable factors.

### ANNEX H: PREVENTION OF PPH DEMONSTRATION PROJECT—COMMUNITY HEALTH WORKER SUPERVISION CHECKLIST

Intervention Area

### PREVENTION OF PPH DEMONSTRATION PROJECT CHW SUPERVISION CHECKLIST

| Name of CHW: |          | _ Province | ):         |    |    |
|--------------|----------|------------|------------|----|----|
| District:    | Village: |            | Observer's |    |    |
|              |          |            |            |    |    |
|              |          |            |            | တ္ | 71 |

| No.   | Points to Be Evaluated   | First Time<br>Date: | Second Time<br>Date: | Third Time<br>Date: | Fourth Time<br>Date: |
|-------|--|---------------------|----------------------|---------------------|----------------------|
| First | Phase  |                     | 1                    | 1                   | 1                    |
| 1.    | Does he/she greet and then introduce himself/herself?                                      |                     |                      |                     |                      |
| 2.    | Does he/she explain the purpose of meeting?  |                     |                      |                     |                      |
| 3.    | Does he/she mention about the time?  |                     |                      |                     |                      |
| 4.    | Does he/she use the flip chart while providing education and counseling?                   |                     |                      |                     |                      |
| 5.    | Does he/she provide education on birth preparedness?                                       |                     |                      |                     |                      |
| 6.    | Does he/she explain the signs of risk to the mother?                                       |                     |                      |                     |                      |
| 7.    | Does he/she explain about postpartum hemorrhage to the mother?                             |                     |                      |                     |                      |
| 8.    | Does he/she use the tablet flip chart while providing education?                           |                     |                      |                     |                      |
| 9.    | Does he/she fill in the CHW form properly?   |                     |                      |                     |                      |
| 10.   | Does he/she mention anything about the anti-<br>hemorrhage tablets?                        |                     |                      |                     |                      |
| 11.   | Does he/she ask about the education provided?  |                     |                      |                     |                      |
| 12.   | Does he/she thank the pregnant woman, and fix the next appointment and bid farewell?       |                     |                      |                     |                      |
| Seco  | nd Phase   |                     |                      |                     |                      |
| 13.   | Does he/she provide the CHS with the list of women in their eighth month?                  |                     |                      |                     |                      |
| 14.   | Does he/she greet and introduce himself/herself while entering the pregnant woman's house? |                     |                      |                     |                      |
| 15.   | Does he/she explain the purpose of meeting?  |                     |                      |                     |                      |

| No.   | Points to Be Evaluated   | First Time<br>Date: | Second Time<br>Date: | Third Time<br>Date: | Fourth Time<br>Date: |
|-------|--|---------------------|----------------------|---------------------|----------------------|
| 16.   | Does he/she mention about the time?  |                     |                      |                     |                      |
| 17.   | Does he/she use the flip chart while providing education and counseling?   |                     |                      |                     |                      |
| 18.   | Does he/she educate on birth preparedness?   |                     |                      |                     |                      |
| 19.   | Does he/she explain the signs of risk to the mother?   |                     |                      |                     |                      |
| 20.   | Does he/she explain about postpartum hemorrhage to the mother?   |                     |                      |                     |                      |
| 21.   | Does he/she ask the woman if she has bleeding or not?  |                     |                      |                     |                      |
| 22.   | Does he/she ask the pregnant woman if she has twins?   |                     |                      |                     |                      |
| 23.   | Does he/she ask the women about the education provided?  |                     |                      |                     |                      |
| 24.   | Does he/she, after the proper repetition of education and counseling to women, explain the anti-hemorrhage tablets after delivery? |                     |                      |                     |                      |
| 25.   | Does he/she fill in the CHW form properly?   |                     |                      |                     |                      |
| 26.   | Does he/she stick the number of the drug in the designated location of CHW form?   |                     |                      |                     |                      |
| 27.   | Does he/she thank the pregnant woman, and fix the next appointment and bid farewell?   |                     |                      |                     |                      |
| Third | Phase  |                     |                      |                     |                      |
| 28.   | Does he/she provide the CHS with the list of women in their eighth month?  |                     |                      |                     |                      |
| 29.   | Does he/she greet and introduce himself/herself while entering the pregnant woman's house?   |                     |                      |                     |                      |
| 30.   | Does he/she explain the purpose of meeting?  |                     |                      |                     |                      |
| 31.   | Does he/she mention anything about the time?   |                     |                      |                     |                      |
| 32.   | Does he/she collect the unused tablets from mothers?   |                     |                      |                     |                      |
| 33.   | Does he/she collect the packs of used tablets from mothers after they deliver baby?  |                     |                      |                     |                      |
| 34.   | Does he/she fill in the CHW form properly?   |                     |                      |                     |                      |
| 35.   | At the end, does he/she thank the woman and bid farewell?  |                     |                      |                     |                      |

### **Comments and Suggestions:**

# ANNEX I: SAMPLE PICTORIAL COUNSELING MESSAGES, BY COUNTRY

# **AFGHANISTAN**



خانمی که د رخانه ولادت نموده است به زودی بعد از ولادت طفل(قبل ازولادت جوره)، سه گولی ضد خونریزی بعد از ولادت را بخورد. ضد خونریزی بعد از ولادت، خطر خونریزی بعد با خوردن سه گولی از ولادت کم می گردد و باعث خوشحالی اعضاً فامیل می گردد.



ولادت توسط یک کارمند مسلکی صحی (قابله یا داکتر) خطرات زمان ولادت و بعد از ولادت را کم می سازد. -تمام پیچکاری ها در زمان ولادت و بعد از ولادت باید توسط قابله و یا داکتر زنانه اجرا شود.

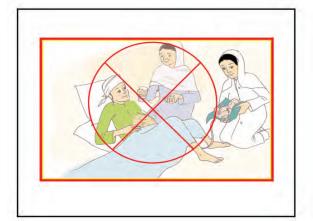


اگر ولادت در خانه صورت می گیرد خوردن سه گولی ضد خونریزی بعد از ولادت سبب بیرون شدن جوره طفل وجلوگیری از خونریزی مادر میشود. گرا در میشود.

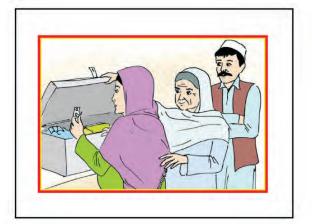
گولی ضد خونریزی بعد از ولادت درماه هشتم حاملگی توسط رضا کار صحی جامعه به صورت رایگان برای مادر داده میشود.



آگاه باشید! این سه گولی را قبل از ولادت طفل نخورید، زیرا به خانم حامله و طفلیکه در بچه دان مادر است صدمه می رساند. این گولی را بعد از ولادت طفل و قبل از خارج شدن جوره بخورید.



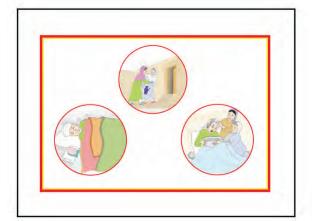
با خبر! هرگاه خانم حمل دوگانگی داشته باشد، هیچ وقت پیش از ولادت طفل دومی سه گولی ضد خونریزی بعد از ولادت را ندهید. این گولی ها را بعد از ولادت طفل دومی و قبل از خارج شدن جوره آن بدهید.



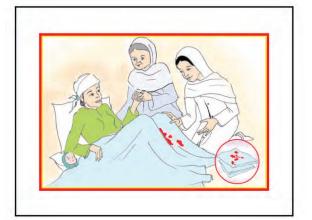
گولی ها باید در خانهٔ که درآن خانم ولادت می کند، دریک جای محقوظ نگهداری شده و شخص مسوول باید از آن با خبر باشد.



خوردن سه گولی ضد خونریزی بعد از ولادت، پس از تولد طفل و پیش از ولادت جوره، برای زن زچه آسان بوده و حیات بخش است. زن زچه می تواند سه گولی را حتی بعد از ولادت جوره بخورد.



بعد از خوردن سه گولی ضد خونریزی بعد از ولادت، بعضی مشکلات کم از قبیل اسهال، دلبدی، تب و لرزه ممکن است پیدا شود، که در جریان 15 دقیقه الی یک ساعت از بین میرود.



اگر خونریزی بعد از ولادت کم باشد یعنی دو تکه بسیار کم خون آلود شده باشد، خطرناک نیست



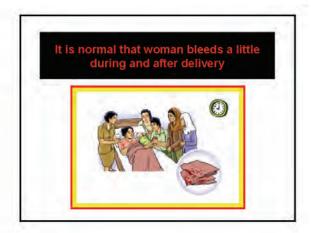
اگر بعد از خوردن سه گولی ضد خونریزی بعد از ولادت، خونریزی مادر باز هم دوام کند، به مرکز صحی یا شفاخانه انتقال دهید.



در صورت نشانه های خونریزی شدید هرچه ژودتر به شفاخانه انتقال دهید خونریزی شدید هرچه ژودتر به شفاخانه انتقال دهید گردد. گردد. و یا خانم احساس بی حالی وضعفیت نماید. و یا خونریزی در ظرف دو ساعت بعد ازولادت دوام نماید. و یابیرون شدن لخته های خون ازراه دامن و یا نزد خانم عرق سرد بوجود آید. و یا زند خانم عرق سرد بوجود آید. و یا زنگ پریده شود.

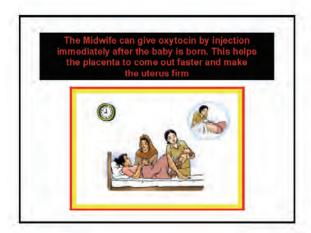
# **INDONESIA**









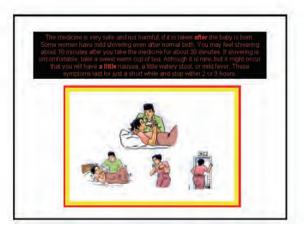










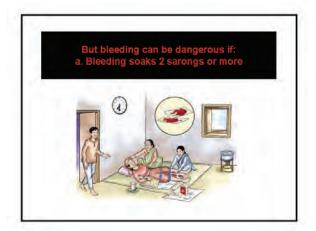




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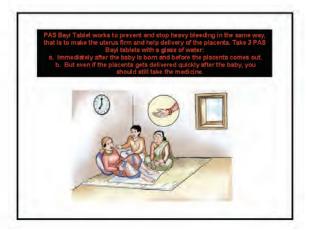






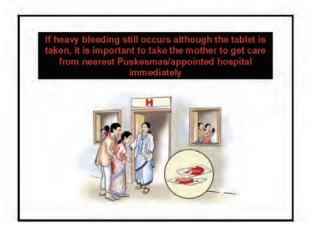
















# **REFERENCES**

Broekhuizen FF. 2000. Misoprostol, its use in obstetrics and gynecology, in *Current Problems in Obstetrics, Gynecology and Fertility*, pp. 198–220.

Carpenter JP. 2001. *Misoprostol for Prevention of Postpartum Hemorrhage: An Evidence Based Review by the U.S. Pharmacopeia*. U.S. Pharmacopeia, Global Assistance Initiative: Rockville, Maryland.

Central Bureau of Statistics (CBS) [Indonesia] et al. 1998. *Indonesia Demographic and Health Survey 1997*. CBS and Macro International: Calverton, Maryland.

Central Bureau of Statistics (CBS) [Indonesia]. 1997. 1995 Indonesia Demographic and Health Survey. State Ministry of Population and National Planning Coordination Board, Ministry of Health, Indonesia and Macro International Inc.: Calverton, Maryland.

Central Bureau of Statistics (CBS) [Indonesia]. 1995. 1994 Indonesia Demographic and Health Survey. State Ministry of Population and National Planning Coordination Board, Ministry of Health, Indonesia and Macro International Inc.: Calverton, Maryland.

Central Bureau of Statistics (CBS) [Indonesia]. 1991. *Household Health Survey (Survei Kesehatan Rumah Tannga)*. Badan Pusat Statistik, Departemen Kesehatan (BPS-Ministry of Health): Jakarta, Indonesia.

Darney PD. 2001. Commentary: Misoprostol: A boon to safe motherhood ... or not? *The Lancet* 38: 682–683.

El-Refaey H, O'Brien P, Abdalla M, Geary M, Walder J, and Rodeck C. 2000. The misoprostol third stage of labor study: A randomised controlled comparison trial between orally administered misoprostol and standard management. *British Journal of Obstetrics and Gynaecology* 107: 1104–1110.

El-Refaey H, O'Brien P, Morafa W, Walder J, and Rodeck C. 1997. Use of misoprostol in prevention of postpartum hemorrhage. *British Journal of Obstetrics and Gynaecology* 104: 336–339.

Enkin E, Kierse M, Neilson J, Crowther C, Duley L, Hodnett E, and Hofmeyer J. 2000. *A Guide to Effective Care in Pregnancy and Childbirth*, third edition. Oxford University Press: Oxford, England.

Goldberg AB, Greenberg MB, and Darney PD. 2001. Misoprostol and pregnancy. *New England Journal of Medicine* 344(1): 38–47.

Gülmezoglu AM, Villar J, Ngoc TNN, Piaggio G, Caroli G, Adetoro L, Abdel Aleem H, Cheng L, Hofmeyr J, Lumbiganon P, Unger C, Prendiville W, Pinol A, Elbourne D, El-Refaey H, and Schultz K. 2001. WHO multicentre randomized trial of misoprostol in the management of third stage of labour. *The Lancet* 358: 689–695.

Johnson R. 2001. Implementing global standards of maternal and neonatal healthcare at healthcare provider level: A strategy for disseminating and using guidelines. In *Implementing Global Maternal and Neonatal Health Standards of Care*. Workshop report. Jhpiego/Maternal and Neonatal Health Program: Baltimore, Maryland.

Lumbiganon P, Hofmeyer J, Gülmezoglu AM, Pinol A, and Villar J. Misoprostol dose related shivering and pyrexia in third stage of labour, WHO Collaborative Trial of Misoprostol in Management of Third Stage of labour. 1999. *British Journal of Obstetrics and Gynaecology* 106: 304–308.

Maternal and Neonatal Health (MNH) Program. 2003. *Preventing Postpartum Hemorrhage: Active Management of the Third Stage of Labor*. Best Practices Guide. Jhpiego/Maternal and Neonatal Health Program: Baltimore, Maryland.

McCormick ML, Sanghvi HCG, Kinzie B, and McIntosh N. 2002. Preventing postpartum hemorrhage in low resource settings. *International Journal of Obstetrics and Gynecology* 77(3): 267–275.

McIntosh N. 2004. Safe motherhood: Taking innovations to scale. Keynote speech by former President of Jhpiego at the 2004 Bangkok conference on "Preventing Postpartum Hemorrhage: Research to Practice."

Ng PS, Chan ASM, Sin WK, Tang LCH, Cheung KB, and Yuen PM. 2001. A multicentre randomized controlled trial of oral misoprostol and i.m. syntometrine in the management of the third stage of labour. *Human Reproduction* 16(1): 31–35.

PATH. 2005. Misoprostol use in obstetrics and gynecology. *Outlook* 21(4).

Pfitzer A and Sanghvi H. (eds). 2004. *Preventing Postpartum Hemorrhage:* From Research to Practice. Workshop report. Jhpiego/Maternal and Neonatal Health Program: Baltimore, Maryland.

Prata N, Mbaruku G, Campbell M, Potts M, and Vahidnia F. 2005. Controlling postpartum hemorrhage after home births in Tanzania. *International Journal of Gynecology and Obstetrics* 90: 51–55.

Prendiville WJ, Elbourne D, and McDonald S. 2001. Active versus expectant management of third stage of labour. *The Cochrane Library*, Issue 3.

Prendiville WJ, Harding JE, Elbourne DR, and Stirrat GM. 1988. The Bristol third stage trial: Active versus physiological management of third stage of labour. *British Medical Journal* 297(6659): 1295–1300.

Rogers EM 1995. *Diffusion of Innovations*, fourth edition The Free Press: New York.

Ryan B and Gross NC. 1943. The diffusion of hybrid seed corn in two Iowa communities. *Rural Sociology* 8(March): 15.

Statistics Indonesia (Badan Pusat Statistik) and ORC Macro. 2003. *Indonesia Demographic and Health Survey 2002–2003*. BPS and ORC Macro: Calverton, Maryland.

Villar J, Gülmezoglu AM, Hofmeyr GJ, and Forna F. 2002. Systematic review of randomized controlled trials of misoprostol to prevent postpartum hemorrhage. *Obstetrics and Gynecology* 100(6): 1301–1312.

World Health Organization (WHO). 2007. WHO Recommendations for the Prevention of Postpartum Haemorrhage. WHO: Geneva.

World Health Organization (WHO). 2002. Global Estimates of Maternal Mortality for 2000 for United Nations Millennium Development Goal Regions. WHO: Geneva. At:

http://www.who.int/mediacentre/releases/2004/wha2/en.

World Health Organization (WHO). 1995. Global estimates of maternal mortality for 1995 results of an in depth review, analysis and estimation strategy (Statement). WHO: Geneva.

World Health Organization (WHO). 1991. *Maternal Mortality: A Global Fact Book.* WHO: Geneva, pp 3–16.

World Health Organization (WHO). 1989. *Preventing Maternal Deaths*. WHO: Geneva, pp. 107–136.

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# SECTION II: RESOURCES FOR TRAINING COMMUNITY VOLUNTEERS

# INTRODUCTION

Postpartum means after the birth of a child.

Hemorrhage means too much bleeding. There is too much bleeding if:

- Blood soaks one cloth or pad in less than five minutes, or
- More than two cloths are soaked within 30 minutes of birth, and
- The woman is pale and feels faint and weak.

Postpartum hemorrhage means too much bleeding from the woman's womb after she has had a baby. Postpartum hemorrhage is known by its initials—

PostPartum Hemorrhage—PPH.

#### **Note for the Trainer**

Ask participants how their communities talk about postpartum hemorrhage. What are the words they use to describe or name postpartum hemorrhage?

Postpartum hemorrhage happens because:

- The woman's womb (uterus) remains soft and large after the baby is born.
- The afterbirth (placenta) does not come out completely.
- There are cuts on the opening of the woman's womb (cervix) or her birth canal (vagina).
- The womb tears open (ruptures).

When women die after childbirth, it is most often because of PPH. The women who die because of PPH are women you know, who live in your village or town.

#### **Note for the Trainer**

Ask participants if anyone knows a woman who has died after childbirth. What was the cause of the woman's death? What could have been done to prevent the woman's death?

The reason so many women die due to PPH is because it is hard to know when PPH will happen or to know which women will have PPH and which women will not. It is also hard to know when the normal bleeding after childbirth becomes too much bleeding. This is because bleeding may happen slowly over many hours, and the problem may not be recognized until the

woman has severe weakness or is unconscious (is in shock) and it is too late to get help. Also, the woman and family may not know how much bleeding there is because the blood may be mixed with birth fluids and urine, or is soaked up by clothes or towels, or spilled on the floor.

But these women do not have to die—PPH can be prevented. The best way to prevent PPH is for the woman to have a skilled provider attend her birth, either at home or at a health care facility. A skilled provider is a midwife, a doctor or another health care provider who has had training in midwifery skills.

One of the reasons that a skilled provider should attend the birth is because she will know if there is a problem with the labor or birth of the baby. The skilled provider can then either treat the problem, or help the woman get to a health care facility for care.

#### Note for the Trainer

Ask the participants how many women in their communities give birth with a skilled provider.

Why do women not use a skilled provider?

What would they say to a woman, her support persons and her family to convince her to use a skilled provider for childbirth?

The skilled provider can also stop a problem from happening. The way that the skilled provider can stop PPH from happening is to make sure that the womb gets smaller and that all of the afterbirth comes out. The skilled provider does this by performing several steps immediately after the birth of the baby. These steps are:

- The skilled provider gives the woman an injection of a drug called oxytocin.
- The skilled provider helps the afterbirth come out and makes sure that all
  of the afterbirth comes out.
- The skilled provider rubs the woman's stomach.

These steps are the best way to prevent PPH. However, there is another way to prevent PPH if the skilled provider does not have the drug oxytocin, or if the woman does not give birth with a skilled provider. This way to prevent PPH is for the woman to use a drug named **misoprostol**, which comes in the form of a tablet. The woman can take this drug in her home immediately after the baby is born, but before the afterbirth comes out. A skilled provider does not have to be with the woman when she takes the drug. Misoprostol is safe for the woman and baby when taken as directed.

Women can receive information about PPH and misoprostol from a community volunteer who has attended a training course to learn about PPH and misoprostol. If a woman decides that she wants to use the drug because she will give birth at home without a skilled provider, she can get the drug from the trained community volunteer.

A study was done in Indonesia about using misoprostol to prevent PPH. This study showed that women understood the information about PPH and misoprostol that was given to them by community volunteers. The women took the drug correctly after birth at home, without a skilled provider, and most said that they would use it again and recommend it to their friends. Most important, most of the women who used misoprostol did not have too much bleeding after birth.

# WHAT THE COMMUNITY VOLUNTEER DOES

The community volunteer is the person who will give information about PPH and how it can be prevented to pregnant women, their families and the community.

The community volunteer is the person who will:

- Find out which women in her community are pregnant.
- Register pregnant women by writing down information about the pregnant women on a registration form.
- Give pregnant women, their families and the community information about seeking care immediately if there is any problem with the pregnancy, labor or childbirth.
- Give information to pregnant women, their support persons, their families and the community about PPH and how it can be prevented.
- Give information to pregnant women and their support persons about misoprostol, including:
  - Where to store misoprostol
  - When to take misoprostol
  - When not to take misoprostol
  - What side effects to expect from taking misoprostol
  - What to do about these side effects
  - What to do if bleeding occurs after taking misoprostol
- Keep a supply of misoprostol in a safe place.

- Visit pregnant women in their homes when they are eight months pregnant to see if they want to use misoprostol.
- Give misoprostol to pregnant women when they are eight months pregnant if they want to use misoprostol.
- Visit the women after birth to check on their well-being.
- Write down information about their birth and use of misoprostol on the same form.
- Give information to the community midwife about women who are pregnant and using misoprostol.

#### Note for the Trainer

Ask the participants if anyone has worked as a volunteer in a health project in their community. What did they do? What did they learn from that experience that will help them be effective community volunteers to prevent PPH at home births?

The community volunteer will work together with the midwife at the local health center. The midwife will:

- Help and support the community volunteer as she provides information about PPH to pregnant women, their support persons, their families and the community and gives misoprostol to pregnant women who want to use it.
- Give the community volunteer a supply of misoprostol.

The community volunteer will give the midwife the forms she completes on pregnant women. The volunteer will also send women with questions or problems to the midwife. In this way, the community volunteer will help connect the community with the health care system. Therefore, it is important that the community volunteer get and keep the trust of the community.

The community volunteer also should talk to traditional birth attendants (TBAs) or other community birth assistants. She should:

- Give TBAs the same information that she gives to pregnant women about PPH and how it can be prevented, and how misoprostol is used.
- Explain that even if the woman plans on having the TBA or a skilled provider at birth, it is sometimes not possible to do so, and that is why the woman should have misoprostol at her home.
- Make sure the TBA knows that the community volunteer is not trying to stop the attendant from assisting the woman to give birth.
- Ask the TBA to help her talk to women about using misoprostol.

- Ask the TBA to help her identify pregnant women.
- Tell the TBA that she will let her know if any of the attendant's women agree to use misoprostol so that the volunteer and attendant can help them use the pill correctly.

#### Note for the Trainer

Ask participants if women in their community get advice and care on pregnancy and childbirth from the community midwife or a traditional birth attendant. How do the community midwife and TBA work together to help women?

### **HOW TO TALK WITH PREGNANT WOMEN**

The community volunteer may already know all of the women in her assigned area. She may see and talk to them every day. But when she talks to them about preventing PPH, the volunteer takes on a new role, one that is different from that of a neighbor or friend. In this new role of providing information that may save the woman's life, it is important that the community volunteer treat the woman with respect, keep the woman's personal information confidential and allow the woman to make her own decision about using misoprostol.

#### Note for the Trainer

Ask the participants how people in their communities show respect for the beliefs and practices of other community members. What are culturally appropriate ways in their communities to show people that you are interested in what they are saying? What are the local words that you would use to talk to a woman, her support persons, her family and the community about pregnancy and birth and how to prevent problems such as PPH?

# Treat the woman with respect

- Be sensitive and show respect for the traditional beliefs and practices of the woman and her family and the reasons for them.
- Speak to the woman and her family in their own language or arrange to have someone with you who can.
- Understand who makes the decisions in the life of the woman and include that person when giving information.
- Speak in a soft, gentle tone of voice.
- Be relaxed and comfortable. Sit facing the woman and use culturally appropriate gestures and body movements to show interest.
- Introduce yourself and explain the purpose of your visit when talking to the woman for the first time. If you are visiting the woman's house, enter her house only after she has invited you to do so.

- If at any time during the visit, the woman asks to stop the visit and does not wish to receive information about PPH and misoprostol, thank her for her time and leave her house, if visiting her home.
- Include her husband or support persons in the visits if she wishes.
- Use simple, clear words that the woman understands.
- Give the woman your full attention when talking to her. Do not act as if you are in a hurry or have many other women to talk to.
- Listen to everything the woman has to say and do not interrupt her when she is talking.
- Be sure that you understand what the woman has said, or a question she has asked, by repeating it to her using different words (for example, if the woman says, "I am afraid to take the misoprostol by myself" you can say "Are you worried that you will forget when to take the misoprostol, or will forget how many doses to take?"
- Encourage the woman to ask questions, and be prepared to answer them.
- Be honest with the woman and do not be afraid to admit when you do not know something.
- Allow the woman to make her own decision about use of skilled care for birth or misoprostol; do not criticize or scold her for the choice she makes.
- Always offer to get help from the community midwife if the woman has questions or concerns.
- Thank the woman for allowing you to give her this information.

The community volunteer should explain how important it is for the woman and her support persons to know about PPH and how to prevent it, but should not talk about it in a way that scares the woman.

# Keep the woman's personal information confidential

- Allow the woman to choose the part of the house in which she wants to have the visit.
- Ask family members to leave that part of the house unless the woman asks that they stay.
- Do not share with others any of the information that the woman provides for registration.
- Keep the completed registration forms in a safe place.

#### Allow the woman to make her own decision

- Give the woman and her support persons complete information on PPH and how it can be prevented, including:
  - Where to store misoprostol
  - When to take misoprostol
  - When not to take misoprostol
  - What side effects to expect from taking misoprostol
  - What to do about these side effects
  - What to do if bleeding occurs after taking misoprostol
- Ask the woman and her support persons to repeat this information in their own words to be sure that they understand all of the information.
- Listen carefully to the information that the woman and her support persons repeat back to you.
- Repeat any information that they do not say back to you or that they do not understand.
- Correct any wrong information that the woman and her support persons may have about PPH or use of misoprostol.
- Allow the woman adequate time to make a decision about using misoprostol.
- Allow the woman to ask her husband, support persons or other family members to help her make the decision.

The community volunteer should always tell the woman to visit the local health center if the woman has any questions or concerns about her pregnancy or if she is having problems with her pregnancy.

# What to do when speaking to a public group

The community volunteer may find places to talk to groups of women and their families about the prevention of PPH and use of misoprostol. The community volunteer may be able to talk to groups of people at the marketplace, community meetings, meetings with village elders and chiefs, waiting area of the health center and health outreach clinics such as well-baby or immunization clinics.

Information on the following topics can be given when speaking to a public group:

■ PPH—a description of the condition and its cause using local words

- The best way to prevent PPH: birth with a skilled provider
- Another way to prevent PPH by using misoprostol—what it is, how it works, safety and side effects
- The local activity for PPH prevention and what it involves (registration of pregnant women, home visits by community volunteers, and distribution of misoprostol by community volunteers under the supervision of the community midwife)

Talking to a group does not take the place of talking to a woman individually about preventing PPH and using misoprostol.

These tips will help the community volunteer be effective when talking to groups of people in the community:

- Ask a community leader or the community midwife to introduce you.
- To help people feel comfortable talking with you, share information about yourself that is appropriate (for instance, how many children you have). Explain briefly how you came to be involved in the local PPH prevention activity.
- Maintain eye contact with your audience.
- Speak loudly enough that everyone can hear.
- Use words that are easy to understand and remember—it is not necessary to use medical words to describe PPH and how to prevent it.
- Ask questions to find out what the group already knows about PPH and how to prevent it.
- Encourage people to ask questions and be sure to answer them fully. Always tell them that a woman should see the local midwife if she has any questions or concerns about her pregnancy, or is experiencing any problems.

### PROVIDING INFORMATION TO PREGNANT WOMEN

# What to do to find women in your community who are pregnant

There are many ways that a community volunteer can find out which women in her community are pregnant. She can:

- See a woman who is obviously pregnant and engage her in conversation.
- Listen to conversations at village meetings, outreach health clinics or the market.

Let community members know that she is providing information to pregnant women and that they should let her know about women who are pregnant.

In addition, the community midwife will let the volunteer know about women who are attending the antenatal care (ANC) clinic.

# What to do to register pregnant women and give them information on prevention of PPH

When the community volunteer identifies a pregnant woman, she should ask her if any other volunteer has told her about misoprostol or registered her for misoprostol. If the answer is "no," the community volunteer should set a time to visit the woman at her home in order to register her and give her information on preventing PPH.

First, the volunteer should obtain and write down the following information on the registration form:

- Name of woman, name of husband
- Age (year born)
- Address or house number
- Last monthly bleeding (menstrual period)
- Estimated month of childbirth

### **Tips for Recordkeeping**

- Use neat handwriting.
- Complete the form as you are talking to the woman.
- Keep the forms in a safe, dry place.
- Do not let anyone else read the information on the forms.
- Give the forms to the midwife at the local health center every time you obtain a new supply of misoprostol.

The community volunteer needs to know when the woman will be in her eighth, or next-to-last, month of pregnancy. To know this, she must first know the woman's estimated month of childbirth. This information may be obtained from the woman's ANC card if she has attended a clinic. If the woman has not attended the ANC clinic, the volunteer can figure out the estimated month of birth by counting nine months forward from the month of her last monthly bleeding, and then count back one month to find her eighth month of pregnancy.

| Estimating the month of child | dbirth and eighth month of pregnancy                                   |
|-------------------------------|--|
| Last monthly bleeding         | January  |
| Count forward nine months     | February, March, April, May, June, July,<br>August, September, October |
| Estimated month of childbirth | October  |
| Count back one month          | September will be her eighth month of pregnancy                        |

If the woman is in her eighth month of pregnancy at the time she is registered, the community volunteer should tell her about misoprostol and give her the pills if she is giving birth at home and wants to use misoprostol.

# What information to give to pregnant women and their families

The community volunteer should ask the woman who the support person or persons are who will be with her at birth. The volunteer should ask the woman if those persons are there and whether the woman would permit her support persons to be included in the conversation. The information should always be given in a private place, preferably in the woman's home.

The community volunteer should give the following information to pregnant women and their support persons:

# ■ Attending ANC

Ask the woman if she has attended a clinic or skilled provider for ANC. If she has, the volunteer should encourage her to continue to attend ANC. If the woman has not, the volunteer should encourage her to visit a clinic or skilled provider for ANC as soon as she can. All women should attend ANC, even if they plan to give birth at home, because complications for the woman or her baby can occur even in a normal pregnancy. If a woman is having any problems with her pregnancy, she should seek ANC immediately.

- Being prepared for birth and ready if a complication occurs

  If the woman attends ANC, the midwife will help her and her family
  prepare a plan for what do for a normal birth, and what to do if there is a
  problem during pregnancy, labor or childbirth. The woman and her
  family should prepare for childbirth by doing the following:
  - Identify a skilled provider and a support person to be present at birth.
  - Attend ANC, either at the clinic or by visiting a skilled provider.
  - Gather items needed for a clean and safe birth, including soap, clean bed clothes, clean and unused razor blade, and clean strips of cloth to tie the cord.

- Have funds available to pay for care during a normal birth, or for emergency transportation and care if there is a problem.
- Have a plan for transportation to the nearest clinic or hospital if there is a problem.
- Know the danger signs of pregnancy. If any of these are present, the woman should seek skilled care immediately:
  - Vaginal bleeding
  - Difficulty breathing
  - Fever
  - Severe abdominal pain
  - Severe headache/blurred vision
  - Seizures, loss of consciousness
  - Foul-smelling discharge from the birth canal
  - Decreased or absent fetal movements
  - Leaking of green- or brown-colored fluid from the birth canal

# ■ Understanding PPH

- Postpartum hemorrhage is too much bleeding after the baby is born. It is the main reason why so many women die in childbirth. It is not possible to know ahead of time whether a woman will have PPH.
- Knowing the causes of PPH
  - The woman's womb remains soft and large after the baby is born.
  - The afterbirth does not come out completely.
  - There are cuts on the opening of the woman's womb (cervix) or her birth canal (vagina).
  - The womb tears open (ruptures).

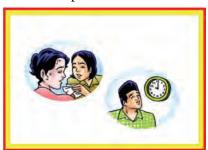
# **Danger Signs for Postpartum Hemorrhage**

■ Bleeding after childbirth in which blood soaks one cloth or pad in less than five minutes, or more than two cloths within 30 minutes of birth.





■ Woman is pale and feels faint and weak.





■ Woman has abdominal pain.

If any of these signs are present, the woman and her family should go to the local health center immediately. **Do not wait—delay can mean death for the woman.** 

# **Preventing PPH**

■ The best way to prevent PPH is to give birth with a skilled provider who can perform three steps after childbirth to stop the bleeding. The skilled provider gives the woman an injection of a drug called oxytocin, delivers the afterbirth and rubs her stomach to help it contract.





■ If a woman plans to give birth at home without a skilled provider, there is a drug called misoprostol that she can take as soon as the baby is born but before the placenta comes out. Misoprostol will help her womb get

smaller and prevent too much bleeding. Misoprostol has been tested in Indonesia and is safe for the woman and baby.

# Using misoprostol:

• The woman should store the misoprostol in a safe and locked place in her home. She should be sure that her support persons know where the misoprostol is stored and how to unlock the storage place.





• The woman should take the pills as soon as the baby is born, but before the placenta comes out. If the placenta comes out with the baby, she should still take the tablets.





• If the woman is giving birth at the clinic or hospital, she should take the misoprostol with her and tell the skilled provider that she has the pills. The skilled provider will decide whether to use misoprostol. Or, if the woman arrives at the clinic or hospital and the skilled provider is not in attendance, the woman should take the misoprostol as directed.

The woman should not take misoprostol before the baby is born because it will harm the mother and the baby.





■ Knowing the side effects of misoprostol.

After childbirth, it is normal for a woman to have some shivering. After taking misoprostol, the woman may have shivering for about 30 minutes. If she is uncomfortable, she should drink a cup of warm, sweet tea. The woman may have some other side effects from misoprostol, including:

- She may feel like vomiting.
- She may have a watery stool.
- She may have a low fever.

These side effects do not happen often but if they do, they will last for only two to three hours.





### **Note to the Trainer**

Ask participants what words are used in their communities to identify vomiting, watery stool and low fever.

If the bleeding does not stop after she takes misoprostol, the woman should immediately go to the nearest clinic or hospital.





# What to do when visiting pregnant women who are eight months pregnant

The community volunteer should visit all pregnant women when they are eight months pregnant to see if they are still planning to give birth at home and if they want to use misoprostol.

Do not give misoprostol to a woman who has not been provided with all of the information about PPH and how to use misoprostol. Before giving any woman misoprostol, be sure that she can repeat back to you all of the information on how to store and use misoprostol correctly.

- The community volunteer should give the woman and her support persons, if present, all of the information that she gave to them on her first visit to the home. The volunteer should ask the woman and her support persons to repeat the information to her in their own words.
- The volunteer should give the woman and her support persons any additional information that the woman did not remember, and correct any misinformation in the same way that she did at the first visit.
- If the woman agrees to use misoprostol, the volunteer should record the date of the visit and the woman's agreement on the registration form.
- If the woman agrees to use misoprostol, the volunteer will give her the misoprostol and information on how to store it and when to take the tablets.
- The volunteer should make sure that the woman and her support persons understand this information, especially when to take the misoprostol. The volunteer should ask the woman and her support persons to repeat this information. The volunteer will give the woman the misoprostol only if she and her support persons can repeat the information completely and correctly.

# The volunteer will know that the woman understands the information about PPH and misoprostol if the woman can tell her:

- The danger signs for PPH
- The causes of PPH
- How to store the misoprostol tablets
- When to take the misoprostol tablets
- Side effects and what to do if any occur
- What to do if bleeding doesn't stop after taking the misoprostol
- The volunteer should make sure that the woman or her support persons understand that they should not give the misoprostol to any other pregnant woman for her to use. If the woman does not use the misoprostol, she should return it to the community volunteer when she visits after the baby is born.
- If the woman does not want to use misoprostol, the volunteer should record the date of the visit and the reason why the woman did not wish to use the drug.
- If the woman is no longer pregnant, record the date of the visit and note on the appropriate form the reason, if known (for example, spontaneous

- abortion, premature childbirth, incorrect calculation of estimated date of childbirth and she has already given birth).
- If the woman who was registered is not at her original address, the community volunteer should talk to other community members and elders to find out where she is living.
- If she has moved to another village or homestead within the volunteer's area, the volunteer should visit her at her new address and write down her new information.
- If the woman has moved to a village or homestead that is not within her area, the volunteer should inform the midwife of her new location.
- If during home visits to other registered women, the volunteer meets a pregnant woman who is new to the community, the volunteer should ask the woman if she received information or misoprostol in another village or homestead.
- If the woman has not received information, the volunteer should register her, provide her with all of the information about PPH and misoprostol, and give her misoprostol if she wishes to use it.
- If the woman has received only information, the volunteer should ask her to repeat the information, give her any additional information needed, correct any misinformation and give her misoprostol if she wishes to use it. The volunteer should add the woman to her registration form.
- If the woman has received misoprostol from another volunteer or the midwife, the community volunteer should ask her to repeat the information, give her any additional information needed and correct any misinformation. The volunteer should add the woman to her registration form.

# What to do when visiting the woman after childbirth

The volunteer should visit the woman within four weeks after childbirth. The purpose of this visit is to see if the woman used the misoprostol correctly, and to take back the misoprostol if she did not use it. The volunteer should record the following information on the follow-up interview form:

- Date of the visit
- Date of childbirth
- Place of childbirth
- Whether the woman was attended by a skilled provider

- When the woman took the misoprostol (before birth, after birth of the baby but before delivery of the placenta, after birth of the baby and delivery of the placenta)
- Any side effects the woman had
- Whether the woman thought she had more bleeding than normal
- Whether the woman went to a health center or hospital after birth, and why
- If the woman did not take the misoprostol pills, the volunteer should record this and take back the misoprostol. The volunteer should keep all returned misoprostol separate from her other misoprostol so that it can be returned to the community midwife.

# **OBTAINING MISOPROSTOL AND REPORTING REQUIREMENTS**

The midwife at the local health center will give the community volunteer 20 doses of misoprostol. The volunteer should keep the pills in a safe, locked, dry place in her home where there is no possibility of the pills being damaged or stolen.

When the volunteer has five doses of misoprostol remaining, she should give her record form to the midwife at the local health center. The midwife will give her 15 doses of misoprostol. If the volunteer has fewer than five doses of misoprostol remaining, the midwife will give her enough doses to total 20 doses.

The community volunteer should give the midwife any misoprostol that is returned to the midwife by pregnant women. The midwife will inspect the misoprostol to see if the pills are broken, discolored or wet. If they are, the midwife will destroy the misoprostol. If the misoprostol is in its original packaging and is not damaged in any way, the midwife may return it to her inventory.

# **COURSE SYLLABUS**

#### **COURSE DESCRIPTION**

This three-day course is designed to prepare community volunteers to give information to women, their families and their community members on the causes and prevention of postpartum hemorrhage (PPH). The course will focus on the use of misoprostol to prevent PPH at home birth and will provide community volunteers with the attitudes, knowledge and skills needed to provide misoprostol to pregnant women in their communities.

# **COURSE GOALS**

To provide the participants with the knowledge and skills needed to talk to women, their support persons, their families and their community about how to recognize PPH and what actions to take to prevent PPH.

#### PARTICIPANT SELECTION CRITERIA

Participants for this course should be married, middle-aged women who have at least an eighth grade education and are able to read and write. They should be women who are living in the communities in which they will work, accepted in their communities and respected by community elders. Participants should have worked as volunteers in other health projects in the community.

To be accepted for training, the participant must complete in her own handwriting an application form giving the following information:

- Name
- Date of birth
- Age
- Full address
- Number of children
- Previous health-related community work (list)

# **EVALUATION**

The trainer will assess participants' knowledge through a written assessment (questionnaire) at the end of the course. The trainer will use a checklist to observe and assess participants' skills in talking with women and giving information using the flip book.

Participants must score 85% on the knowledge assessment and perform all steps/tasks on the checklist correctly in order to successfully complete the course.

#### PARTICIPANT LEARNING OBJECTIVES

By the end of this training course, the participants will be able to:

- Explain the main causes of PPH and how it can be prevented
- Describe why women should be attended by a skilled provider for childbirth
- Explain what a skilled provider can do to prevent PPH
- Describe the danger signs of pregnancy and childbirth
- Describe how misoprostol is used to prevent PPH at home birth
- Describe the role and responsibilities of the community volunteer in helping prevent PPH through the use of misoprostol
- Use interpersonal and communication skills to give information to women, their support persons, their families and their community
- Find out which women in their community are pregnant
- Register pregnant women in the community and record specific information about them and their pregnancy
- Provide information to pregnant women on ANC, how to be prepared for birth and ready if a complication occurs, use of a skilled provider for birth, how to recognize PPH, how to prevent PPH, and how to store and use misoprostol
- Provide misoprostol to women when they are in the eighth month of their pregnancy
- Conduct follow-up visits to women's homes after birth and record information on the use of misoprostol
- Report information about registered women and their use of misoprostol to the midwife at the health center on a regular basis

#### TRAINING/LEARNING METHODS

- Illustrated lectures and group discussions
- Role plays

### TRAINING MATERIALS

- Prevention of Postpartum Hemorrhage at Home Birth: Resources for Training Community Volunteers (one for each trainer)
- Prevention of Postpartum Hemorrhage at Home Birth: Flip Book in local language (one for each participant)

# **COURSE DURATION**

Six sessions in a three-day sequence

# SUGGESTED COURSE COMPOSITION

- Up to 30 community volunteers
- Four midwife trainers

| COURSE SCHEDULE: PREV   | COURSE SCHEDULE: PREVENTION OF POSTPARTUM HEMORRHAGE AT HOME BIRTH<br>3 days, 6 sessions                                  |   |
|---|---|---|
| Day 1   | Day 2   | Day 3   |
| 0830-1230   | 0830-1230   | 0830-1230   |
| Opening  Welcome  | Review of day's scheduled activities  | Review of day's scheduled activities  |
| <ul> <li>Participants' expectations</li> </ul>  | <b>Discussion</b> : Interpersonal and communication skills  | Demonstration/Bole Plav:  |
| Overview of course     Goals and objectives   | <b>Demonstration/Role Play/Discussion</b> : Using effective interpersonal skills to talk to women about PPH               | Provide information on PPH and its prevention to anyone in the  |
| Setting norms   | Discussion: Identify and register pregnant women  |   |
| <b>Discussion/Demonstration</b> : Main causes of PPH, how it can be prevented, why women should be attended by a skilled provider for birth, how, a skilled provider can prevent DPH. | Exercise: Estimating month of childbirth  | <b>Discussion:</b> Report information about registered women and their use of misoprostol to midwife at |
| of Billit, 100% a shilled provider can proven the   | Exercise: Using effective interpersonal skills to interview and   | health center   |
|   | register pregnant wonen   | Role Play/Assessment: Use   |
|   | <b>Demonstration//Role Play:</b> Provide information to pregnant women on ANC. birth preparedness/complication readiness. | effective interpersonal skills to register pregnant women, provide                                      |
|   | preventing PPH, using misoprostol   | information on ANC, birth   |
|   |   | preparedness/complication   |
|   |   | PPH and how to use misoprostol  |
|   |   | Post-Course Questionnaire   |
| Lunch   | <b>Lunch</b>  | Lunch   |
| 1330-1630   | 1330-1630   | 1330-1630   |
| Discussion: Danger signs of pregnancy and childbirth  | <b>Demonstration/Role Play</b> : Provide information to pregnant women on ANC hirth preparedness/complication readiness   | <b>Discussion</b> : Course  |
| <b>Discussion</b> : How misoprostol is used to prevent PPH at home  | preventing PPH, using misoprostol   | objectives  |
| Discussion: Role and responsibilities of community volunteer in helping prevent PPH at home birth through the use of  | <b>Demonstration/Role Play</b> : Provide misoprostol to women when they are in the eighth month of their pregnancy        | <b>Discussion</b> : How participants will begin their work as community                                 |
| misoprostol   | Demonstration/Role Play: Conduct follow-up visits to  |   |
|   | women s nomes after birth and record information on meir use of misoprostol   | Course Evaluation by<br>Participants  |
| Review of the day's activities  | Review of the day's activities  | Closing   |

|                         | COURSE OUTLINE: PREVENTION (   | OF POSTPARTUM HEMORRHAGE AT HOME BIRTH (3 days, 6 sessions)   | essions)   |
|-------------------------|--|---|--|
| TIME                    | OBJECTIVES/ACTIVITIES  | TRAINING/LEARNING METHODS   | RESOURCES NEEDED   |
| Day 1, AM (240 MINUTES) | MINUTES)   |   |  |
| 30 minutes              | Welcome and participant introductions  | The trainers should welcome participants to the course.   | Resources for Training<br>Community Volunteers: "Tips for  |
|                         |  | Trainers should select an activity from the "Tips for Training Community Volunteers" section to introduce participants to one another. Trainers should participate in the introduction activity.            | Training Community Volunteers" section   |
| 45 minutes              | Participants' expectations   | Trainers should select an activity from the "Tips for Training Community Volunteers" section to obtain information about the expectations that participants have about what they will learn in this course. | Resources for Training<br>Community Volunteers: "Tips for<br>Training Community Volunteers"<br>section |
| 15 minutes              | <b>Objective</b> : Explain course goals and objectives.  | Trainers use prepared flip chart listing course goal and participant learning objectives. The trainers should also describe how the course is organized, how participants will be assessed                  | Resources for Training Community Volunteers: "Tips for Training Community Volunteers"                  |
|                         | <b>Objective</b> : Set norms for how participants and trainers will work together during the course. | on Day 3, and any logistical information, such as lunch and tea breaks, etc. (See "Tips for Training Community Volunteers" section.) Allow time for participants' questions and discussion.                 | section<br>Flip chart, markers   |
| 15 minutes              | Break  | Trainers should have any participant who has not done so complete the application form in her own handwriting.  |  |

|                    | COURSE OUTLINE: PREVENTION O   | <b>JF POSTPARTUM HEMORRHAGE AT HOME BIRTH (3 days, 6 sessions)</b>  | essions)   |
|--------------------|--|---|--|
| TIME               | OBJECTIVES/ACTIVITIES  | TRAINING/LEARNING METHODS   | RESOURCES NEEDED   |
| Day 1, AM (240     | Day 1, AM (240 MINUTES) <i>(continued)</i>   |   |  |
| 135 minutes        | <b>Objective</b> : Explain the main causes of PPH and how it can be prevented.   | <b>Discussion</b> : Trainer presents content from the <i>Resources for Training Community Volunteers</i> using prepared overhead transparencies or flip chart pages. Trainer should include | Resources for Training<br>Community Volunteers<br>Overhead projector and |
|                    | <b>Objective</b> : Describe why women should be attended by a skilled provider for birth.                              | country-specific information on the maternal death rate, incidence of PPH, etc.   | transparencies<br>Flip chart and markers<br>Anatomic model               |
|                    | <b>Objective</b> : Explain what a skilled provider can do to prevent PPH.  | <ul> <li>Discussion Questions:</li> <li>What are your experiences with birth and PPH?</li> <li>Do you know of a woman who has died after childbirth? What</li> </ul>                        |  |
|                    | <b>Objective</b> : Demonstrate normal birth with steps to prevent PPH (active management of the third stage of labor). | <ul><li>caused her death?</li><li>What do you think could have been done to prevent the woman's death?</li></ul>  |  |
|                    |  | <ul> <li>How many women in your community give birth with a skilled<br/>provider?</li> </ul>  |  |
|                    |  | <ul> <li>Why do women in your community use/not use a skilled<br/>provider at birth?</li> </ul>   |  |
|                    |  | <ul> <li>What would you say to a woman and her family to convince<br/>her to use a skilled provider?</li> </ul>   |  |
|                    |  | <ul> <li>Ask participants how their communities recognize and talk<br/>about PPH. What words do they use to describe or name<br/>PPH?</li> </ul>  |  |
|                    |  | Trainer uses an anatomic model to demonstrate normal birth and the steps to prevent PPH.  |  |
| LUNCH (60 minutes) | iutes)   |   |  |

|                         | COURSE OUTLINE: PREVENTION C                                   | COURSE OUTLINE: PREVENTION OF POSTPARTUM HEMORRHAGE AT HOME BIRTH (3 days, 6 sessions)   | essions)   |
|-------------------------|--|--|--|
| TIME                    | OBJECTIVES/ACTIVITIES  | TRAINING/LEARNING METHODS  | RESOURCES NEEDED   |
| DAY 2, AM (240 MINUTES) | ) MINUTES)   |  |  |
| 15 minutes              | <b>Objective</b> : Review day's activities.                    | Warm-Up Exercise   |  |
| 60 minutes              | <b>Objective</b> : Use interpersonal and communication skills. | <b>Discussion (20 minutes)</b> : Trainer presents content from the Resources for Training Community Volunteers using prepared overhead transparencies or flip chart pages. Trainer should encourage participants to discuss their experiences in talking with community members about a health topic.      | Resources for Training<br>Community Volunteers<br>Overhead projector and<br>transparencies<br>Flip chart and markers |
|                         |  | <b>Demonstration (10 minutes)</b> : Two trainers will demonstrate a role play showing effective interpersonal skills. One trainer will be a pregnant woman and one trainer will be a community volunteer who is asking the woman if she is pregnant and where she is planning to give birth.               |  |
|                         |  | Role play (10 minutes): Ask for two volunteers to perform a role play showing effective interpersonal skills. One participant will be a pregnant woman and one participant will be a community volunteer who wants to tell the woman about PPH and the importance of giving birth with a skilled provider. |  |
|                         |  | <ul> <li>Discussion questions (20 minutes):</li> <li>Ask participants how people in their communities show respect for the beliefs and practices of other community members.</li> </ul>  |  |
|                         |  | <ul> <li>What are culturally appropriate ways in their communities<br/>to show people that they are interested in what they are<br/>saying?</li> </ul>   |  |
|                         |  | <ul> <li>What are the local words that you would use to talk to<br/>women, their support persons, families and the community<br/>about pregnancy and birth and how to prevent problems<br/>such as PPH?</li> </ul>   |  |
|                         |  | <ul> <li>How did the community volunteer show that she respected<br/>the woman and her beliefs and practices?</li> </ul>   |  |
|                         |  | <ul> <li>How did the community volunteer encourage the woman to ask questions?</li> </ul>  |  |
|                         |  | <ul> <li>Would you have done anything differently? If so, what?</li> <li>Why would you have done it differently?</li> </ul>  |  |

|                         | COURSE OUTLINE: PREVENTION (   | COURSE OUTLINE: PREVENTION OF POSTPARTUM HEMORRHAGE AT HOME BIRTH (3 days, 6 sessions)   | ssions)   |
|-------------------------|--|--|---|
| TIME                    | OBJECTIVES/ACTIVITIES  | TRAINING/LEARNING METHODS  | RESOURCES NEEDED  |
| DAY 2, PM (180 MINUTES) | MINUTES)   |  |   |
| 20 minutes              | <b>Objective</b> : Provide information to pregnant women on being prepared for birth and being ready if a complication occurs, PPH, how to prevent PPH and how to use misoprostol. | Role play practice continues.  |   |
| 90 minutes              | <b>Objective</b> : Provide misoprostol to women when they are in the eighth month of their pregnancy.  | <b>Demonstration (20 minutes):</b> Trainer demonstrates how to provide misoprostol to women when they are in the eighth month of their pregnancy using the flip book.  | Resources for Training Community Volunteers Flip book for participants Record forms (previously |
|                         |  | Role play (70 minutes): Divide participants into groups of three. Each group will perform a role play of a community volunteer visiting a woman in her eighth month of pregnancy. One participant will be the woman, one will be her support person and one will be the community volunteer.   | completed in role play above)   |
|                         |  | Participants playing the role of the pregnant woman and support person will be given the roles they are to play by the trainer (see instructions in Role Play section).  |   |
|                         |  | Participants will switch roles until each participant has played the role of the community volunteer.  |   |
|                         |  | Trainers circulate among the groups to check content and answer any questions.   |   |
| 15 minutes              | Break  |  |   |
| 40 minutes              | <b>Objective</b> : Conduct follow-up visits to women's homes after birth and record information on their use of misoprostol.   | <b>Demonstration (10 minutes)</b> : Trainer demonstrates conducting a follow-up visit after birth to record information on use of misoprostol using flip book.   | Resources for Training Community Volunteers Flip book for participants Becord form (previously  |
|                         |  | Role play: Divide participants into groups of three. Each group will perform a role play of conducting follow-up visits after birth and recording information on use of misoprostol. One participant will be the woman, one will be the support person and one will be the community volunteer. Participants playing the roles of the pregnant woman and support person will be given the roles they are to play by the trainer (see instructions in Role Play section). | completed)  |
| 15 minutes              | Review day's activities.   | Trainer summarizes day's activities and answers participants' questions.   | Flip chart, markers   |

|                         | COURSE OUTLINE: PREVENTION (   | OF POSTPARTUM HEMORRHAGE AT HOME BIRTH (3 days, 6 sessions)   | essions)   |
|-------------------------|--|---|--|
| TIME                    | OBJECTIVES/ACTIVITIES  | TRAINING/LEARNING METHODS   | RESOURCES NEEDED   |
| DAY 3, AM (240 MINUTES) | MINUTES)   |   |  |
| 15 minutes              | Review day's activities.   | Warm-up Exercise  |  |
| 30 minutes              | Objective: Provide information on PPH and how it can be prevented, including use of misoprostol, to anyone in the community.   | <b>Demonstration/Discussion (10 minutes)</b> : Trainer presents content from <i>Resources for Training Community Volunteers</i> using the flip book. Encourage participants to discuss their experience giving presentations to community groups.   | Resources for Training<br>Community Volunteers<br>Flip book for participants   |
|                         |  | Role play (20 minutes): Trainer asks for two volunteers to present a role play on providing information to a community member. One participant will be the community member and one will be the community volunteer.  |  |
| 30 minutes              | <b>Objective</b> : Report information about registered women and their use of misoprostol to the health center midwife.  | <b>Lecture/Discussion</b> : Trainer presents content from the Resources for Training Community Volunteers using prepared overhead transparencies or flip chart pages.   | Resources for Training<br>Community Volunteers<br>Overhead projector and<br>transparencies<br>Flip chart and markers |
| 135 minutes             | Objective: Identify and register pregnant woman and provide information on ANC, being prepared for birth and being ready if a complication occurs, PPH, how to prevent PPH and how to use misoprostol.  Objective: Provide misoprostol to women when they are in the eighth month of their pregnancy.  Objective: Conduct follow-up visits to women's homes after birth and record information on their use of misoprostol | Role play: Divide participants into groups of three. Each group will perform a role play of a community volunteer interviewing and registering a pregnant woman and providing information on ANC, being prepared for birth and being ready if a complication occurs, PPH, how to prevent PPH, how to use misoprostol, providing misoprostol to women in their eighth month of pregnancy and conducting follow-up visits after birth. One participant will be the woman, one will be her support person and one will be the community volunteer.  Participants playing the role of the pregnant woman and support person will be given the roles they are to play by the trainer (see instructions in Role Play section) | Flip book for participants<br>Checklist for Interpersonal Skills<br>and Provision of Information                     |
|                         | Objective: Assess participants' skills in interpersonal communication and providing information.   | Participants will switch roles until each participant has played the role of the community volunteer.  Trainers circulate among the groups to assess skills of each participant.  |  |
| 30 minutes              | Objective: Assess participants' knowledge.   | Post-Course Questionnaire: Distribute post-course questionnaires for participants to complete. Trainers will review and score questionnaires during lunch and use results to guide discussion in the afternoon session.   | Post-course Questionnaire and<br>Answer Sheet (one copy for each<br>participant)                                     |
| 60 minutes              | Lunch  |   |  |

|                         | COURSE OUTLINE: PREVENTION (   | OF POSTPARTUM HEMORRHAGE AT HOME BIRTH (3 days, 6 sessions)  | essions)   |
|-------------------------|--|--|--|
| TIME                    | OBJECTIVES/ACTIVITIES  | TRAINING/LEARNING METHODS  | RESOURCES NEEDED   |
| DAY 3, PM (165 MINUTES) | MINUTES)   |  |  |
| 90 minutes              | <b>Objective</b> : Review course content based on results of questionnaire.  | Discussion: Trainers should return completed and scored duestionnaires to participants and lead discussion to elaborate on course content, paying special attention to those content areas in which the majority of participants did not do well. Encourage transparent participants to ask questions.   | Resources for Training Community Volunteers Overhead projector and transparencies Flip chart and markers |
| 60 minutes              | Objective: Review how participants will begin their work as community volunteers to help prevent PPH at home births. | <b>Discussion</b> : Trainer leads discussion of how the PPH prevention initiative will be implemented in their communities. The community midwives or their supervisors who will be working with the community volunteers should attend this discussion.  Explain that community volunteers will receive an official identification card at a later date. They will then be introduced to their respective communities during a community event. | Flip chart and markers   |
| 15 minutes              | Closing  |  |  |

### **ROLE PLAY SCENARIOS**

Each role play exercise will be performed by groups of four participants. One participant will play the community volunteer, one participant will play the pregnant woman, one participant will play the support person and one participant will observe using the Checklist for Interpersonal Skills and Provision of Information (if there are five participants in a group, there will be two observers). Participants will switch roles until each participant has played the community volunteer.

Participants playing the pregnant woman and support person will be given the roles they are to play. The participant playing the community volunteer will not know the specific roles of the pregnant woman and support person in advance. This helps to ensure that the community volunteer applies new knowledge and skills learned during the course. As participants switch roles, the trainer will tell them which new role they will play.

For each role play, the trainer should write each role on a separate piece of paper. The trainer may either give participants the pieces of paper according to the roles they are playing or let participants draw roles from boxes labeled "pregnant woman" and "support person."

Before beginning the role plays, give participants a few minutes to prepare for their roles. Encourage participants to draw on their past experiences as health volunteers when performing role plays.

## ROLE PLAY 1: REGISTERING PREGNANT WOMEN AND GIVING INFORMATION TO PREGNANT WOMAN AND SUPPORT PERSONS

| Role for Pregnant Woman   | Role for Support Person   |  |  |
|---|---|--|--|
| Pregnant woman doesn't want to hear about PPH and misoprostol.  | Support person wants to hear about misoprostol.   |  |  |
| Pregnant woman wants to hear about PPH and misoprostol.   | Support person interrupts discussion, gives misinformation and rumors.                                  |  |  |
| Pregnant woman has much misinformation and rumors about ANC, birth preparedness/complication readiness. | Support person has much misinformation and rumors about ANC, birth preparedness/complication readiness. |  |  |
| Pregnant woman complains of problems with present pregnancy, is not attending ANC.                      | Support person thinks problems are minor and woman doesn't need to attend ANC.                          |  |  |
| Woman wants to use misoprostol.   | Support person is traditional birth attendant who is going to attend woman's birth.                     |  |  |

# ROLE PLAY 2: VISITING THE PREGNANT WOMAN IN THE EIGHTH MONTH OF PREGNANCY

| Role for Pregnant Woman                             | Role for Support Person                                 |
|---|---|
| Woman is no longer pregnant.                        | None  |
| Woman has moved.                                    | None  |
| Woman has changed her mind about using misoprostol. | Support person has influenced woman to change her mind. |
| Woman still wants to use misoprostol.               | Support person still has misinformation and rumors.     |

### **ROLE PLAY 3: CONDUCTING FOLLOW-UP VISIT AFTER BIRTH**

| Role for Pregnant Woman                                  | Role for Support Person   |
|--|---|
| Woman used misoprostol correctly and had no problems.    | Support person is traditional birth attendant who attended woman's birth. |
| Woman used misoprostol correctly but continued to bleed. | Support person arranged for transportation to health facility.            |
| Woman did not use misoprostol.                           | Support person does not know why the woman did not use misoprostol.       |
| Woman has moved.   | None  |

# CHECKLIST FOR INTERPERSONAL SKILLS AND PROVISION OF INFORMATION

#### **INSTRUCTIONS**

On Day 1 of the course, the trainers should tell the participants that their skills in talking with women and giving information using the flip book will be assessed on Day 3 of the course.

Participants will practice interpersonal skills and provision of information using the flip book beginning on Day 2 of the course. Each participant should have the opportunity to practice at least two or three times.

On Day 3, the trainers will observe each participant as she or he role plays talking with women and giving information using the flip book, and assess their skills using the checklist. If a step or task is not done correctly, the trainer should discuss it with the participant and provide coaching in how to perform it correctly. Participants should practice with the trainer coaching them until they can perform all of the steps/tasks correctly.

#### **CHECKLIST FOR INTERPERSONAL SKILLS AND PROVISION OF INFORMATION**

The midwife trainer should observe each participant performing a role play of providing information on PPH and how it can be prevented. Place a  $\sqrt{}$  in the right hand column if the step is performed satisfactorily, or an  $\mathbf{X}$  if the step is not performed satisfactorily.

| Partici  | pant's N | ame |  |  |      |
|----------|----------|-----|--|--|------|
| 1 artici | pant s r | amc |  |  | <br> |

|     | Step/Task   | How Performed |
|-----|---|---------------|
| 1.  | Greet woman respectfully and with kindness.   |               |
| 2.  | Ask the woman if she thinks she is pregnant.  |               |
| 3.  | If the woman is pregnant, ask for and record basic identifying information, including estimated month of childbirth.  |               |
| 4.  | Give the woman and her support persons information about PPH and how it can be prevented.   |               |
| 5.  | Explain to the woman and her support persons that the best way to prevent PPH is to give birth with a skilled provider.   |               |
| 6.  | Give information on the danger signs of pregnancy and childbirth.   |               |
| 7.  | Give information on being prepared for birth and how to be ready if a complication occurs.  |               |
| 8.  | Use the flip book to give information on how misoprostol can be used to prevent PPH if the woman is giving birth at home without a skilled provider.  |               |
| 9.  | Allow the woman to make her own decision about using misoprostol.   |               |
| 10. | If the woman agrees to use misoprostol, give her information about:  Where to store misoprostol  When to take misoprostol  What side effects to expect  What to do about side effects  What to do if bleeding occurs after taking misoprostol |               |
| 11. | Ask the woman and her support persons to repeat the information in their own words.   |               |
| 12. | Correct any misinformation and repeat back any information they did not repeat.   |               |
| 13. | Tell the woman and her support persons that she should go to the community midwife if she has any questions, concerns or problems regarding her pregnancy.  |               |

## POST-COURSE QUESTIONNAIRE

#### **INSTRUCTIONS**

The trainer should give the post-course questionnaire by reading the statements aloud to the participants.

Give each participant a piece of paper. Each participant should write her name at the top of the paper and write the numbers 1 through 10 on the left side of the page. After the trainer reads each statement, the participants will mark a  $\checkmark$  next to the number of the statement if they think it is true or an  $\ast$  next to the number of the statement if they think it is false.

Participants must answer eight statements correctly.

The trainers should discuss incorrect answers individually with each participant. The trainers should ask the participant general questions to determine whether she is weak in a specific topic or in the overall content of the course.

Participants who do not respond correctly to eight statements will be given additional True/False statements (written by the trainer) until they have eight correct responses.

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#### TRUE-FALSE STATEMENTS

- 1. It is easy to know which woman will bleed too much after giving birth. (False)
- 2. The best way to prevent postpartum hemorrhage is for the woman to give birth with a skilled provider. (True)
- 3. Only a professional midwife or doctor can give an injection of oxytocin to stop bleeding after birth. (True)
- 4. The community volunteer should give information about PPH and how to prevent it only to the pregnant woman, and not allow her support persons or family to hear. (False)
- 5. Community volunteers can give misoprostol to a woman at any time in her pregnancy, or even if she is not yet pregnant. (False)
- 6. A danger sign that the woman is having too much bleeding after childbirth is that her bleeding soaks one cloth or pad in less than five minutes. (True)
- 7. The pregnant woman should take misoprostol immediately after the baby is born, but before the afterbirth comes out. (True)
- 8. A side effect of misoprostol is shivering for a short period of time. (True)
- 9. If the woman takes misoprostol but has heavy bleeding, she should go immediately to the community midwife. (True)
- 10. If the woman does not use her misoprostol, she can keep it until the next time she is pregnant, or give it to a friend who is pregnant. (False)

# TIPS FOR TRAINING COMMUNITY HEALTH VOLUNTEERS

- Use creative, participatory learning techniques:
  - Include stories, songs, pictures, role plays and games.
  - For example, using a folk song that is familiar to the participants will help them remember the content being taught.
- Use personalized and relevant icebreakers. These may include dividing the participants into pairs, and asking them to interview each other and then present their partner to the group, or playing memory games to help them learn the other participants' names.
- Do not conduct the training only indoors. Be outdoors often.
- Try to avoid conducting the training in classrooms.
- Match the training setting to the setting where the community health volunteers live. For example, if they live in a rural setting conduct the training in a rural rather than an urban setting.
- Provide local, relevant examples. Learners can retain information better if they can connect it to other knowledge. Also, try to bring in local women for real counseling. The more practice the volunteers have during the training, the more confident they will feel when they begin working in their communities.
- Use exercises that do not rely on written information to help the trainees remember what they are learning:
  - Flip charts with pictures can be given to participants to aid in recall of the training materials.
- It is important to discuss how to approach clients. Ask the members of the group when they last spoke with a pregnant woman. How were they able to start a conversation with her? Advise them to be polite and also to ask permission to speak with the woman.
- Provide plenty of opportunity for discussion of the material. Break up into small groups so the participants can discuss what is being taught and help each other figure out the material.
- Provide ample opportunity for role playing.
- Use praise and positive reinforcement to encourage learning.
- Do not write on the board to emphasize points. Instead, use visual cues such as films or drawings.

- Use local dialect(s) or slang to aid in the understanding of the material.
- Be creative when assessing knowledge. Do not use written tests. Use verbal assessments of knowledge. Another approach is to evaluate the participants' knowledge by asking yes and no questions. The participants can use stickers to answer (smile face for yes, frown for no) or a plus sign for yes and a check mark for no.
- Have the community volunteers summarize the information being taught. Emphasize that they will need to retain the information being taught throughout the day and may be called upon to recall the information.
- When the training is completed, award certificates or have a commencement celebration to recognize the community health volunteers' accomplishments. Invite community leaders and other members of the community to the celebration.
- Make learning fun!



The ACCESS Program is the U.S. Agency for International Development's global program to improve maternal and newborn health. The ACCESS Program works to expand coverage, access and use of key maternal and newborn health services across a continuum of care from the household to the hospital—with the aim of making quality health services accessible as close to the home as possible. Jhpiego implements the program in partnership with Save the Children, Constella Futures, the Academy for Educational Development, the American College of Nurse-Midwives and IMA World Health.