



Preventing Postpartum Hemorrhage

- **Postpartum hemorrhage (PPH) is the leading cause of maternal mortality in low-resource settings.**
- **In countries with high maternal mortality and limited resources, introducing safe, low-cost, evidence-based practices that prevent PPH can save women's lives.**

The Significance of PPH

Postpartum hemorrhage (PPH) is clinically defined as blood loss following delivery in excess of 500 ml. In developing countries, PPH is the single most important direct cause of maternal deaths, with an estimated 14 million women experiencing pregnancy-related hemorrhage each year. Nearly half of all postpartum deaths are due to immediate PPH—a woman may die from hemorrhage in as little as two hours of onset if she does not receive proper treatment. For millions of other women, the consequences of immediate PPH include acute or chronic disability. Even if a woman survives a PPH, she is likely to suffer from anemia and other health consequences.

Although some conditions may predispose a woman to hemorrhage, 90% of women have no risk factors for PPH. Therefore, PPH prevention is important for all women. Even healthy, non-anemic women can have catastrophic blood loss. An estimated 80% of immediate PPH is caused by uterine atony—failure of the uterus to contract properly after the infant is born. Other common causes include a retained placenta or placental fragments, and lacerations or tears of the cervix, vagina, or perineum. Less common is a ruptured uterus, which requires immediate surgery to save the mother's life.

Prevention Where There Is A Skilled Provider

Whether women give birth with a skilled provider at home or in a facility, up to two-thirds of PPH can be prevented using safe, low-cost, evidence-based practices. Every woman should be attended by a skilled provider who is able to prevent PPH by offering active management of the third stage of labor (AMTSL). A skilled provider must also vigilantly monitor the woman immediately following birth and intervene appropriately if PPH occurs.

During pregnancy, anemia should be treated with iron and folate supplementation. Although it will not prevent PPH, this treatment may help women survive a hemorrhage if it occurs. Early detection and rapid management of vaginal bleeding for any cause is crucial in reducing PPH-related deaths.

Preventing prolonged labor and dehydration can help reduce the likelihood of PPH. In addition, the use of forceps and episiotomy in labor should be restricted whenever possible, as these practices may cause cervical, vaginal, and perineal trauma, the second most significant cause of PPH. The birth of the baby should be slow and controlled to allow the vaginal and perineal tissue to stretch without tearing.



The third stage of labor begins with completion of the birth of the baby and ends with completion of the delivery of the placenta. If the uterus does not contract normally at this stage (called “uterine atony”), the blood vessels at the placental site are not constricted and hemorrhage occurs. AMTSL, performed by a skilled provider, has been shown to increase the ability of the uterus to contract, thus facilitating the delivery of the placenta and preventing uterine atony (see textbox to right). Once delivered, the placenta should be inspected for completeness, and the lower vagina and perineum for lacerations that may need repair to prevent further bleeding.

A woman is at greatest risk for PPH immediately after the birth; therefore, a woman should be vigilantly monitored during the first hours after delivery. This includes measuring her vital signs, massaging the uterus to ensure that it is contracted, and checking for excessive vaginal bleeding.

Prevention Where There is No Skilled Provider

Another important consideration is that 66% of births in the least developed countries occur in the home without a skilled provider, and AMTSL requires a skilled attendant at the birth. In these low-resource settings, use of misoprostol—an inexpensive, readily available, and easy to use drug—to prevent and treat PPH by an unskilled provider or the woman herself can be a life-saving intervention. Oral misoprostol given after the birth of the baby has been shown to be associated with significant reduction in mean blood loss and in the rates of acute PPH and acute severe PPH, as well as reducing the need for emergency transfer to a referral facility.¹

A joint statement of the International Confederation of Midwives (ICM) and the International Federation of Gynaecology and Obstetrics (FIGO) and a 2007 WHO recommendation for the prevention of PPH advocate the use of misoprostol in situations where no oxytocin is available or birth attendants’ skills are limited. Therefore, misoprostol may play an important part in a strategy to reduce PPH in countries where most births occur in the home.

Where To Get More Information:

“Active Management of the Third Stage of Labor: A Demonstration.” <http://accesstohealth.org/toolres/amtslweb/amtsl.html>
“Preventing Postpartum Hemorrhage.” http://accesstohealth.org/toolres/pdfs/ACCESSTechbrief_PPH.pdf
“Active Management of the Third Stage of Labor: A Simple Practice to Prevent Postpartum Hemorrhage.” Global Health Technical Brief #13. <http://www.maqweb.org/techbriefs/tb13activemgmt.pdf>

References:

¹ Derman RJ et al. 2006. Oral misoprostol in preventing postpartum haemorrhage in resource-poor communities: A randomised controlled trial. *Lancet* 368(9543): 1248-1253.

Other technical briefs can be found at: www.maqweb.org/techbriefs/

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AMTSL: An Effective PPH Prevention in Three Steps

1. Administration of a uterotonic drug, preferably oxytocin, within 1 minute of childbirth to cause the uterus to contract;
2. Controlled traction of the umbilical cord with counter-pressure to the uterus, which supports and stabilizes the uterus; and
3. Massage of the uterus through the abdomen after delivery of the placenta to keep the uterus well contracted and prevent further blood loss.



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