Reducing Stress, Improving Services

Preventing Postpartum Hemorrhage with Active Management of the Third Stage of Labor

Replacing existing practices for delivery of the placenta with an evidence-based new protocol, PRIME II has trained providers in three African countries in prevention of postpartum hemorrhage (PPH) through active management of the third stage of labor (AMTSL). Providers working at all levels of the health care systems in Benin, Ethiopia and Mali are demonstrating their ability to perform AMTSL. In addition to its value in averting maternal death and morbidity, providers have found AMTSL to be safer, cleaner, faster and often less expensive than previous practices for both the client and the facility.

Background

Postpartum hemorrhage is the single most significant cause of maternal mortality worldwide, accounting for half of all maternal deaths that occur after childbirth and 24% of maternal deaths overall, approximately 130,000 women each year. Half of the women who suffer from PPH have no risk factors, and 99% of women who die from PPH are in developing countries. If a woman survives PPH she may be left severely anemic or with other ongoing health problems. Most cases of PPH occur during the third stage of labor after the baby has been delivered. Recommended by WHO as a best practice for all vaginal deliveries, AMTSL has three main components: 1) administration of an uterotonic drug (like oxytocin) within one minute of birth of the newborn to induce a strong contraction, 2) controlled cord traction of the umbilical cord, which is clamped and cut early, with counter-traction to the uterus, and 3) massage of the uterine fundus through the abdomen. AMTSL shortens the time it takes to deliver the placenta and leads to a decrease in uterine relaxation, which is associated with 90% of PPH.

Intervention

In collaboration with ministries of health and professional associations, PRIME began implementing the PPPH special initiative in 2003 in partnership with the American College of Nurse-Midwives, Management Sciences for Health/Rapid Pharmaceutical Management Plus and JHPIEGO. The project is under way at seven pilot sites in Benin, 24 in Ethiopia (located in five regions), and 8 in Mali, with more than 250 providers trained in AMTSL and related areas including patient counseling, infection prevention and oxytocics storage.
Results
Monitoring data from Ethiopia and Mali show promising results. At the 24 sites in Ethiopia, AMTSL has been applied to 4,138 of the 4,586 vaginal births since training. Few complications have been reported in women who received AMSTL (41, or about 1%) and no maternal deaths, with only one case of PPH serious enough to warrant a transfusion. In Mali, 3,190 women have received AMTSL out of 3,933 vaginal births. Three complications have been reported, including one death, which was not attributed to AMTSL. While data from Benin are not yet available, a clear improvement has been noted at the community health center in Akassato, where the head midwife states with pride that they have had no cases of PPH in the four months since AMTSL training as compared to nine cases of PPH, including two resulting in death, in the six months prior to training.

Qualitative data from providers indicate that they are being exposed to less blood (thus reducing risk of HIV infection), do not have as many bloodstained materials to throw away or clean, are using less oxytocin and other supplies than would be required by a case of PPH, and do not have to spend as much time waiting for delivery of the placenta—leaving them more time to attend to the newborn and other clients, and for the mother to rest and hold her baby immediately after the birth.

Because of such positive results, the Benin Department of Family Health has already indicated its interest in scaling-up the program nationally, even before final evaluation results are available in early 2004. Both the Ethiopian Society of Obstetricians and Gynecologists and the Ethiopian Midwives Association have highlighted PPH prevention and AMTSL in their annual meetings. In addition, USAID/Mali has included PPH prevention as a high-impact service in its new bilateral projects.