

IMPROVING MATERNAL HEALTH

Donna Vivio and Barbara Kinzie

Each day, some 14,000 women and girls—99 percent of them in developing countries—lose their lives to complications from pregnancy and childbirth. An organization known as JHPIEGO has contributed to maternal and newborn health and survival in numerous countries, notably through the development of the skilled attendant—an accredited health professional such as a midwife, physician, or nurse who is educated and trained to manage normal pregnancies and childbirth. Drawing on examples of JHPIEGO's work in Afghanistan, Nepal, Indonesia, and Burkina Faso, the authors describe the role of skilled attendants in caring for women, even in the most remote and medically underserved areas.

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Each year more than 500,000 women and girls—14,000 each day—lose their lives to complications from pregnancy and childbirth. Ninety-nine percent of these deaths occur in the developing world.

The U.S. Agency for International Development (USAID) is committed to improving the health and survival of women and children throughout the world through its investment in maternal and newborn health programs. Much of its work to ensure that women have access to the care they need during pregnancy and childbirth is implemented via nongovernmental organizations. JHPIEGO is an affiliate of Johns Hopkins University, and one of USAID's implementing partners in the effort to reduce maternal and newborn death and disability.

Since 1998, JHPIEGO has contributed to maternal and newborn health and survival in numerous countries through such USAID-funded global programs as the Access to Clinical and Community Maternal, Neonatal, and Women's Health Services (ACCESS) program and its

predecessor, the Maternal and Neonatal Health (MNH) program, as well as through bilateral programs in Afghanistan, Zambia, Haiti, and elsewhere.

Some of JHPIEGO's key contributions to improving maternal health have been through programs and projects that support the development of the skilled attendant—an accredited health professional, such as a midwife, physician, or nurse, who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth, and the immediate postpartum period, and in the identification, management, and referral of complications in women and newborns.

THE CREATION OF THE SKILLED ATTENDANT

High-quality education and training of skilled attendants fosters practical lifesaving knowledge and skills involving problem solving, critical thinking, and decision making, rather than simply the recall of facts. It also emphasizes the importance of respecting and responding to the needs of women and their families.

The basic components of a program that promotes such knowledge, skills, and attitudes include appropriate pre-service and in-service training curricula and systems that use a competency-based approach; learning materials that are comprehensive, evidence-based, and relevant to local settings; and skilled teachers and trainers who can guide students' learning experiences in the classroom, the health care facility, and the community.

Over the years, JHPIEGO has worked in more than 25 countries to strengthen and develop pre-service education programs for nurses, midwives, and doctors, thus equipping them to save women's lives. An example of one such program can be found in Afghanistan, where JHPIEGO has developed a cadre of midwives.

In great part due to the lack of access to skilled providers, birth complications claim the life of an Afghan woman every 30 minutes—more frequently than malnutrition and war. JHPIEGO, working through USAID's Rural Expansion of Afghanistan's Community-Based Health Care (REACH) program and its lead partners,



A mother and her infant visit a health nurse in West Africa.

Melissa May, Courtesy of Photoshare

BRINGING THE SKILLED ATTENDANT TO WOMEN

Increasing the proportion of births that take place with a skilled attendant is an internationally agreed goal. Yet lack of access to skilled care keeps coverage by skilled attendants low in many countries.

Nepal is a rugged land of difficult terrain and high maternal mortality (539 deaths per 100,000 births). In 2001, only 13 percent of Nepali women had a skilled attendant present during the delivery of a child. If women in rural areas, where most of Nepal's population lives, are to have the services of a skilled attendant, safe birthing services must be made available in these areas.

JHPIEGO, working as a partner in the USAID-funded Nepal Family Health Program (NFHP), is helping to develop the knowledge and skills of existing auxiliary nurse midwives so that they can provide lifesaving care to pregnant women and family planning services to all women. JHPIEGO is also working to develop the pre-service capacity of schools to produce more skilled attendants who can reach yet more women. The work of NFHP also extends to community health workers and female health workers to create a linkage between the community and the health care workers in "peripheral facilities," which may be district hospitals, health centers, health posts, or sub-health posts, thus making services more accessible to rural women.

SUPPORTING SKILLED ATTENDANTS

The production and competence of skilled birth attendants does not necessarily mean that they will be able to function effectively to save the lives of women. For skilled attendants to be able to reduce the incidence of maternal deaths, they need an environment that facilitates and supports their work. Critical factors in such an environment are supportive policies, laws, and regulations; effective health system infrastructure; professional associations; and quality education and supportive supervision systems. JHPIEGO has worked with partners around the globe to help create the environment needed by skilled providers.

Clinical guidelines for the management of complications in pregnancy and childbirth are prerequisite to the development of policy that helps create an enabling environment, as well as for the development of clinical protocols and job aids that equip the providers for their

Management Sciences for Health and Save the Children, has supported Afghanistan's Ministry of Health in developing a two-year midwifery curriculum and program that includes classroom studies and clinical work at area hospitals. To date, midwifery schools have been established in Herat, Mazar As-Shariif, Jalalabad, Kandahar, Kabul, Badakshan, Bamiyan, Jawzjan, Khost, and Takhar, and two classes have already graduated. This program will produce 299 new midwives in 2005, a 64 percent increase over the number of trained midwives in Afghanistan when the Taliban fell.

While some of these midwifery schools are academic schools connected to urban hospitals, five of them are community midwifery programs established so that even women in remote areas will have access to skilled care. By the conclusion of the REACH program in May 2006, 830 new midwives will have been trained. But this is only the beginning. Afghanistan will eventually need more than 5,000 midwives to meet the basic need for a skilled attendant at every birth.

The JHPIEGO program does not just aim to educate a few hundred midwives but is fostering a fundamental shift in the way midwives are selected, educated, deployed, and supported as key players in maternal mortality reduction. The midwives who have already graduated have demonstrated tremendous motivation and commitment to the profession of midwifery and to the many women in Afghanistan who need their help. In fact, in May 2005, the newly formed Afghan Midwives Association held its first meeting, adopting a constitution and electing officers, and receiving recognition from the International Confederation of Midwives.



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A Guinean mother and child.

jobs. Working with various organizations, donors, and technical bodies, JHPIEGO, through the Maternal and Neonatal Health program, was a key contributor in the development of the World Health Organization manual *Managing Complications in Pregnancy and Childbirth*. This document has been translated into 16 languages—including Spanish, French, Laotian, Bahasa, and Mandarin—and is now standard text in 40 medical schools. It has been used to inform policy dialogue and contribute to the development of national standards across Africa, Asia, and Latin America. Thus, governments around the world have a guide to evidence-based lifesaving practices, and health care providers have a manual that tells them how to manage the complications that arise in pregnancy and childbirth.

Professional associations provide support to skilled attendants to maintain the high standards of their profession. In Indonesia, for example, in addition to the MNH program's support of the Indonesian Midwives Association through professional and training activities, the program recently mobilized midwives to respond to the needs of women in Aceh following the tsunami in late 2004. Even

with their own families washed away or killed, midwives in Aceh responded to the needs of women giving birth. They used shelters, closets, or any remaining structures to deliver babies and provide lifesaving care to women in need.

Many of Aceh's midwives themselves were killed in the tsunami, and many others were left without the basic equipment, supplies, and facilities needed to provide safe care. JHPIEGO, with funding from USAID's Office of Foreign Disaster Assistance and other sources, is supporting the Indonesian Midwives Association in mobilizing midwives from other areas in Indonesia to train new midwives in Aceh in lifesaving delivery skills. Already, almost 100 midwives have gone to Aceh, and many more have been equipped with the skills necessary to function as skilled attendants.

LINKING SKILLED ATTENDANTS AND COMMUNITIES

One example of a program that effected change in bringing women in contact with skilled attendants is that of the Maternal and Neonatal Health program in Koupelela District, Burkina Faso. In Burkina Faso, as reported by United Nations agencies, 498 women die for every 100,000 babies born, primarily from hemorrhage and infection. The MNH program worked with a variety of partners, including the United Nations Children's Fund, Plan Burkina, Family Care International, the United Nations Population Fund, and the U.S. nonprofit Mwangaza, to strengthen the health care delivery system while empowering communities to demand and utilize services that save women's lives.

The MNH program worked with the Division of Family and Reproductive Health in Burkina Faso to implement a safe motherhood policy that serves as a foundation for all other program activities. Job aids were created for service providers using evidence-based policies, norms, and protocols for safe motherhood. The program incorporated aspects of clinical care and community participation by working with district Ministry of Health committees, health care providers, and the community to establish health care standards and to improve services and performance to achieve these standards. Traditional birth attendants were also brought into the process to ensure that services were culturally appropriate and acceptable to women and families. By 2004, the fifth year of the project, the percentage of women with at least four prenatal care visits had increased from 21 percent to 44 percent, and the rate of births assisted by a skilled attendant had increased from 39 percent to 58 percent.

THE ULTIMATE GOAL

Around the year 1870, more than 600 women died for every 100,000 births in industrialized countries. By 1900, the maternal mortality ratio had dropped by half in Sweden and by almost 25 percent in England, Wales, and other parts of the Western world. This was before the advent of modern obstetrics—that is, before the development of antibiotics, blood transfusions, and Caesarean deliveries. Factors crucial to these reductions in maternal deaths were an increased awareness of the problem, adoption of legislation promoting skilled care at childbirth, national programs that trained and deployed adequate numbers of skilled attendants, and the development and enforcement of standards for care by skilled attendants.

U.S. government agencies such as USAID partner with nongovernmental organizations and other groups to build upon the programs and progress made in the past and being made in the present. In the future, thanks to the efforts of these organizations, more women will survive childbirth and have the opportunity to mother the children of the world. ■

The opinions expressed in this article do not necessarily reflect the views or policies of the U.S. government.