

Emergency Obstetric and Newborn Care

Life-saving services for women and babies during childbirth

About 15 percent of women develop complications during pregnancy or after giving birth, leading to the deaths of 280,000 women¹ and 3 million newborns² each year. Millions more are disabled. The vast majority of these deaths and disabilities are avoidable. While most life-threatening complications during pregnancy and childbirth cannot be predicted or prevented, nearly all can be successfully treated with effective, timely emergency obstetric and newborn care (EmONC).

Women in high-income countries have had access to EmONC for decades. But in developing countries, where 99 percent of the world's maternal deaths occur,³ health systems are often too weak to provide such care. Basic EmONC includes the following seven, basic medical interventions:

- Antibiotics
- Anticonvulsants for treatment of eclampsia and preeclampsia
- Uterotonic drugs (e.g., oxytocics) for postpartum hemorrhage
- Manual removal of the placenta
- Assisted or instrumental vaginal delivery
- Removal of retained products
- Neonatal resuscitation

In addition to these basic interventions, blood transfusions and surgery (e.g., cesarean delivery) are included in the list of comprehensive EmONC services. These drugs and services must be backed by evidence-based policies, trained health professionals, and efficient referral procedures to create well-functioning EmONC systems.

EmONC treats the direct obstetric complications that cause about 75 percent of maternal deaths, including infection, unsafe abortion, eclampsia, obstructed labor, and severe bleeding. EmONC also addresses indirect maternal complications; for example, a doctor might perform a cesarean section or assisted vaginal delivery to minimize exertion in birth for a woman with chronic heart problems. When combined with access to family planning and skilled attendance at birth, EmONC

can dramatically reduce maternal morbidity and mortality. EmONC also saves millions of newborn lives, as the newborns receive proper medical attention – and resuscitation if needed – at birth. And, since newborns whose mothers die in childbirth are ten times more likely to die before the age of two,⁴ millions more newborns survive when their mothers survive childbirth. For these reasons, Columbia University's Averting Maternal Death and Disability (AMDD) Program made EmONC a centerpiece of its work from the beginning.

The Challenge

General agreement on the need for EmONC and what constitutes effective treatment now exists. But, in many countries, gaps in services hamper the delivery of reliable and equitable emergency care. Establishing a clear picture of what those gaps entail is a first step towards establishing better care.

Much of the data we have regarding EmONC is not sufficient for evidence-based planning. Maternal mortality—i.e., deaths—can sometimes go unreported by health facilities because they are misclassified by health facilities, or because they occur in transit to the hospital or after the woman leaves the hospital. Similarly, definitions of newborn deaths are not always consistent (e.g., stillbirths versus early neonatal deaths). Morbidity—i.e., the presence of disease or illness—can also be misclassified. For example, how does one diagnose postpartum hemorrhage if blood loss is not measured and it cannot be determined whether or not the criteria were met? Complications arising from abortions may not be recorded because of stigma related to abortion or because abortion is criminalized.



AMDD'S Contribution to EmONC

In its first phase (1999-2005), AMDD focused primarily on addressing EmONC at the facility and national policy levels to reduce maternal mortality. Through 18 major country projects covering approximately 270 million people, AMDD helped to cut case fatality rates in half and double the number of women who received treatment for obstetric complications.

AMDD's approach to EmONC is now focused on addressing systemic obstacles. In particular, AMDD has provided technical expertise to develop comprehensive EmONC needs assessment tools and methodologies. AMDD supports ministries of health and other government agencies, often in partnership with United Nations agencies, donors and nongovernmental organizations, to conduct needs assessments in countries with high maternal mortality. Needs assessments evaluate how well and to what extent the health system is providing EmONC.

They provide details about gaps or problems in the availability of EmONC services and newborn care. Qualitative and quantitative data are a first and critical step to improving equitable access to EmONC and to strengthening the overall health system, as they are the foundation of a rigorous planning process. This information enables ministries of health to identify low-functioning hospitals and strategic health centers that should be upgraded or re-positioned.

For example, in Ethiopia, a 2009 needs assessment revealed that an inadequate supply of water was a key limitation to the provision of EmONC. In response, Ethiopia developed a strategy to ensure all health facilities had access to running water.

Beyond working with countries to conduct comprehensive needs assessments, AMDD has helped to strengthen EmONC by addressing two specific health systems challenges: task allocation and referral systems.⁵ First, in collaboration with research and advocacy partners, AMDD has been instrumental in advancing the strategy of "task-shifting" emergency obstetric care to mid-level providers, including associate (non-physician) clinicians and midwives. Once thought to be a radical, stop-gap measure, task-shifting for EmONC is now

seen globally as a primary strategy for expanding access to emergency services.

Second, referral—i.e. the transfer of patients from one care provider to another provider or level of care—is under-addressed and under-studied, often narrowly conceptualized as a transportation issue. It can more effectively be addressed when understood as a systems issue that affects the continuum of home-to hospital care for mothers and newborns with life-threatening complications. AMDD has advocated new ways to think about the design of emergency referral systems (including emergencies beyond maternal and newborn health). For example, AMDD conducted in-depth research in Tanzania with the Ministry of Health and Social Welfare and the Ifakara Health Institute to assess infrastructure and systems for emergency referrals and to understand community and health workers' perceptions on pregnancy and delivery risks, obstetric emergencies, costs, and quality. AMDD has also developed geographic information systems (GIS) to demonstrate simulated options to strengthening the referral system. Innovative work in Ethiopia showed the extent to which reconfiguring referral networks and upgrading strategically located facilities could increase access to emergency services within a two-hour timeframe.

Ultimately, a better understanding of the challenges limiting access to EmONC on the ground—combined with strategic action—will enable more mothers and newborns to thrive. To promote this strategic action, AMDD is currently working with partners to develop guidance for ministries of health to translate the needs assessment data to coherent plans and then into action.

Notes

¹World Health Organization. (2012). "Trends in maternal mortality: 1990 to 2010 WHO, UNICEF, UNFPA and The World Bank estimates."

²World Health Organization. (2013). "Global Health Observatory: Infant Mortality Situation and Trends." WHO.<www.who.int/gho/child_health/mortality/neonatal_infant_text/en/index.html>

³World Health Organization. (2012). "Trends in maternal mortality: 1990 to 2010 WHO, UNICEF, UNFPA and The World Bank estimates."

⁴UNICEF. "Progress for Children: A Report Card on Maternal Mortality," 2008, p. 3. <www.unicef.org/publications/files/Progress_for_Children-No._7_Lo-Res_082008.pdf>

⁵For further information, see separate policy briefs on task-shifting and referral.