

# Shedding Light on

# Maternal Mortality

ike infant mortality, maternal mortality rates are basic indicators of a country's health status and well-being (Anachebe 2006; GIH 2008a). When one thinks of high rates of maternal mortality, images of countries far less developed than the United States come to mind; after all, approximately 99 percent of all maternal deaths are reported to occur in developing countries (Bingham et al. 2011). The United States, however, has the highest rate of almost all developed countries. For the most part, these are preventable deaths.

While most countries experienced reductions in maternal mortality between 1990 and 2008, the U.S. rate nearly doubled (Bingham et al. 2011). This trend is especially troubling because the United States spends the most on health care of any country, including nearly \$86 billion a year on pregnancy and childbirth-related services alone (Amnesty International 2010; Bingham et al. 2011).

This Issue Focus will discuss maternal mortality in the United States, its rising rate in recent years, and key disparities in the rate based on race/ethnicity and class. It will also offer strategies and examples for funders interested in supporting efforts to improve and promote the health of women and children before, during, and after pregnancy and childbirth.

# **BACKGROUND**

Mortality among women is classified as a maternal death if it occurs during or within 42 days after childbirth and is reported on death certificates as related to or aggravated by pregnancy or its management (HHS 2010). The rise in maternal deaths over recent decades follows on the heels of the lowest reported rates in 1987 – 6.6 deaths per 100,000 live births (Bingham et al. 2011). This decline was attributed to improvements in maternity/obstetric care, widespread availability of prenatal care services, development of antibiotics to fight infections, and the legalization of abortion (Anachebe 2006).

Between 2003 and 2007, the maternal mortality rate has more than doubled, ranging between 12 and 15 deaths per 100,000; this is in stark contrast to Healthy People 2010's goal of 3.3 maternal deaths per 100,000 live births (Anachebe 2006). To date, very few states have achieved this goal. Today, at least two American women die daily from pregnancy and childbirth complications (Amnesty International 2010). The proportion of women experiencing complications so severe that they nearly died in childbirth ("near misses") has also sharply increased over time, affecting approximately 34,000 women per year in 2005 (Bingham et al. 2011).

A portion of the rise in reported maternal deaths in recent years comes from increased case identification resulting from better data collection and reporting (Amnesty International 2010). But improvements in data collection and reporting explain only a portion of the rise in the maternal mortality rate; moreover, they do not reflect the full extent of the maternal morbidity and mortality crisis. The need for action is paramount because the majority of these deaths are considered preventable.

#### **CHALLENGES AND OPPORTUNITIES**

There are glaring health disparities in the rate of deaths and other negative maternal health outcomes across racial and ethnic groups, class distinctions, and geographic boundaries. The causes of these disparities are multifactorial and include social, economic, and environmental barriers, as well as individual health behaviors (Amnesty International 2010; Anachebe 2006).

Addressing the antecedents of disparities in maternal mortality and morbidity rates will become more pressing because of substantial demographic changes over the next few decades. With these population shifts, a greater number of vulnerable individuals may be affected (Anachebe 2006). For instance, black women are four times more likely to die during child-birth as white women, a statistic that has not improved in over 20 years (Amnesty International 2010; Bingham et al. 2011). Additionally, for many conditions, such as pre-eclampsia and risk for hemorrhage, women of color are two to three times more likely than white women to die (Anachebe 2006; Bingham et al. 2011).

Though overall good health can foster better health outcomes among pregnant women, it may not be sufficient to ensure a complication-free childbirth. Cumulative effects of inequities experienced throughout a woman's life can have adverse effects on pregnancy outcomes; conditions and factors that can negatively affect pregnancy may be present in a woman's life long before pregnancy occurs. This is especially true for vulnerable populations, such as lower-income individuals, the uninsured, those from communities of color, and persons in isolated rural areas.

Vulnerable groups of women may lack access to affordable, high-quality health care, including information, family planning resources, and prenatal services (Bingham et al. 2011). Thus, they may enter pregnancy in poorer health, including having unregulated chronic conditions. They may also experience delays obtaining prenatal care and preventive screenings

and treatments, which can further increase their risk for negative pregnancy and childbirth outcomes.

Lack of access and timely use of quality health care can contribute to complications that lead to maternal deaths (Anachebe 2006). Women receiving no prenatal care are three to four times more likely to experience and die from pregnancy-related complications than women who do (Bingham et al. 2011). Increases in morbidity among women in childbirth may also arise from overuse of medical procedures, such as inducing labor and elective cesarean sections, and from complications, such as postpartum hemorrhage and infection, that develop after women have delivered and gone home (Bingham et al. 2011).

Numerous provisions in the Affordable Care Act will significantly improve women's ability to get the timely health care they need. When fully implemented in 2014, almost all of working-age women who went without health insurance in 2010 (27 million) will gain access to affordable and comprehensive benefits (Robertson and Collins 2011). These benefits will include maternity health coverage, which few insurance plans currently offer, and consumer protections that ban insurance companies from using their health or gender to rate women and charge higher premium rates. Additional gains come through required free coverage of preventive care services, new affordable coverage options, small business tax credits, and other insurance market reforms.

### **ROLES FOR FUNDERS**

Substantial public-sector programming and funding have been geared toward women, children, and youth. For many years, health foundations have also supported efforts to both improve women's access to preconception and prenatal health care and to enhance the quality of those services. In part, these efforts have been geared toward fostering innovation and shoring up systems-level change. They provide examples of roles funders can play, including:

- supporting research, education, and dissemination of information and best practices on prenatal/obstetric care and on the influence of the broader social determinants of health on both pregnancy and women's overall health outcomes;
- strengthening existing community health centers, which
  often provide prenatal services to the underserved, including
  women of color and low-income populations, and supporting establishment of new centers; and
- supporting development and implementation of active data and surveillance systems in states to assess maternal mortality, including routine linkage of fetal birth and death records with death records of reproductive-age women (Anachebe 2006).

In 2011, Aetna and the Aetna Foundation provided \$730,000 in grants for research to help African-American women have

healthier pregnancies and babies, thereby improving pregnant women's health equity and driving down infant mortality rates (Aetna Foundation 2011). Funded projects will focus on: 1) analyzing best practices in the March of Dimes' CenteringPregnancy® program, which provides prenatal workshops aimed at reducing premature deliveries and improving infant and maternal health; 2) exploring the underlying factors contributing to higher primary cesarean delivery rates among African-American women in California through the University of California-San Francisco; and 3) analysis of racial and ethnic disparities in Medicaid-paid obstetrics and pediatric care via the Center for Health Care Strategies.

The Claude Worthington Benedum Foundation provided \$150,000 in 2009 for the Statewide West Virginia Perinatal Telehealth Project. The project seeks to improve birth outcomes by providing connectivity and access to high-risk maternal and fetal medical consultations by tertiary care centers and rural health organizations across the state (GIH 2009). For individuals who are unable to travel long distances to access high-risk specialists, telemedicine utilizing interactive video and audioconference technology connects them with providers for real-time consultations. Specialized ultrasound equipment is also available to digitally relay sonogram images for further assessments.

In 2008, Kaiser Permanente provided \$150,000 over two years to support Maternal and Child Health Access (MCHA). This agency works to improve the health of low-income women and families in Los Angeles through direct services, education, training, and advocacy (GIH 2008b). In addition to assisting individual women obtain quality health care and achieve healthy pregnancies, MCHA provides information, support, and technical assistance to local health and social services organizations. It is also active in educating policymakers and the general public about how improving health and the social services systems serving low-income women and families benefits the entire community.

## CONCLUSION

Access to high-quality, culturally appropriate prenatal, delivery, and postnatal care is critical in efforts to improve the health and health outcomes of women in this country. Systems change through vehicles such as health reform may be particularly instrumental in fostering more uniform high-quality, accessible health care.

In addition to addressing health care issues, however, there is a need to recognize and intervene in the myriad social, economic, and environmental factors that can contribute negative health outcomes even before women become pregnant. Doing so can position women – particularly those from vulnerable populations – to enter pregnancy healthier and more equipped with the knowledge and resources to seek timely and appropriate care for themselves and their unborn child.

#### **SOURCES**

Aetna Foundation, "News Release: Aetna and the Aetna Foundation to Fund \$730,000 in Research to Health African-American Women Have Healthier Pregnancies and Healthier Babies," <a href="http://www.aetna-foundation.org/foundation/news/2011/0404\_Aetna\_and\_AetnaFoundation\_Fund\_Research\_Addressing\_RacialDisparities\_Infant\_Mortality.html">http://www.aetna-foundation\_gracialDisparities\_Infant\_Mortality.html</a>, April 4, 2011.

Amnesty International, *Deadly Delivery: The Maternal Health Care Crisis in the USA*, <a href="http://www.amnestyusa.org/sites/default/files/pdfs/deadlydelivery.pdf">http://www.amnestyusa.org/sites/default/files/pdfs/deadlydelivery.pdf</a>, 2010.

Anachebe, Ngozi, "Racial and Ethnic Disparities in Infant and Maternal Mortality," *Ethnicity and Disease*, 16(Supplement 3):S3-71–S3-76, Spring 2006.

Bingham, Debra, Nan Strauss, and Francine Coeytaux, "Maternal Mortality in the United States: A Human Rights Failure," *Contraception*, 83:189-193, 2011.

Grantmakers In Health (GIH), "Infant Mortality: Racial and Regional Disparities," Issue Focus, *GIH Bulletin*, August 18, 2008a.

Grantmakers In Health (GIH), GIH Bulletin, August 18, 2008b.

Grantmakers In Health (GIH), GIH Bulletin, March 9, 2009.

Robertson, Ruth, and Sarah R. Collins, Women at Risk: Why Increasing Numbers of Women Are Failing to Get the Health Care They Need and How the Affordable Care Act Will Help (New York, NY: The Commonwealth Fund, 2011).

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau (HHS), *Women's Health USA 2010* (Rockville, MD:2010).