

WHY POPULATION MATTERS TO **MATERNAL HEALTH**



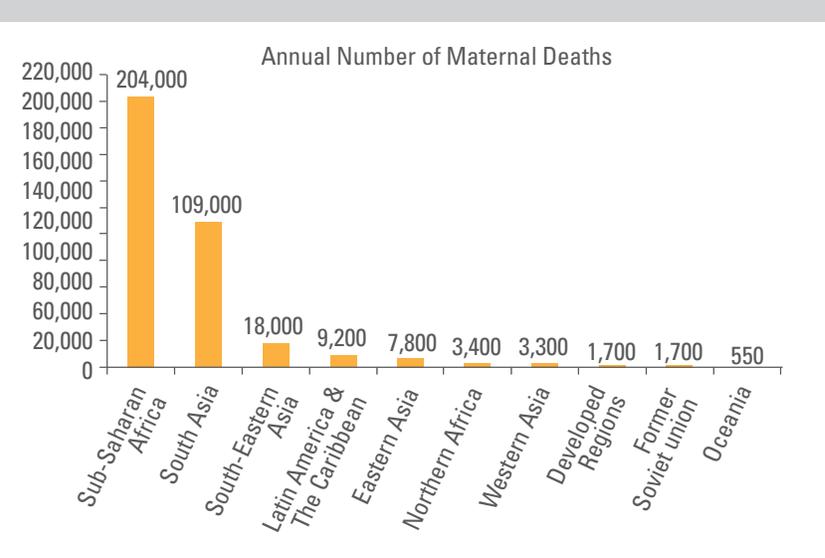
Unintended pregnancies are an important cause of maternal deaths. Pregnancies that occur too early, too late or too frequently can lead to illness during pregnancy and complications at the time of birth. Lowering fertility rates by increasing the use of family planning helps to reduce pregnancy-related deaths and population growth. In many countries with high maternal mortality, fertility rates would be lower if women had the number of children they desire.

The State of Maternal Health

Maternal mortality is a top cause of death among women of reproductive age in developing countries. Approximately 350,000 women die each year due to pregnancy-related causes, despite recent improvements and international commitments to reducing maternal mortality.¹ Women under the age of 18 and above 35 are more likely to die in pregnancy or childbirth, due to physical underdevelopment for young women and a higher risk of complications among older women.²

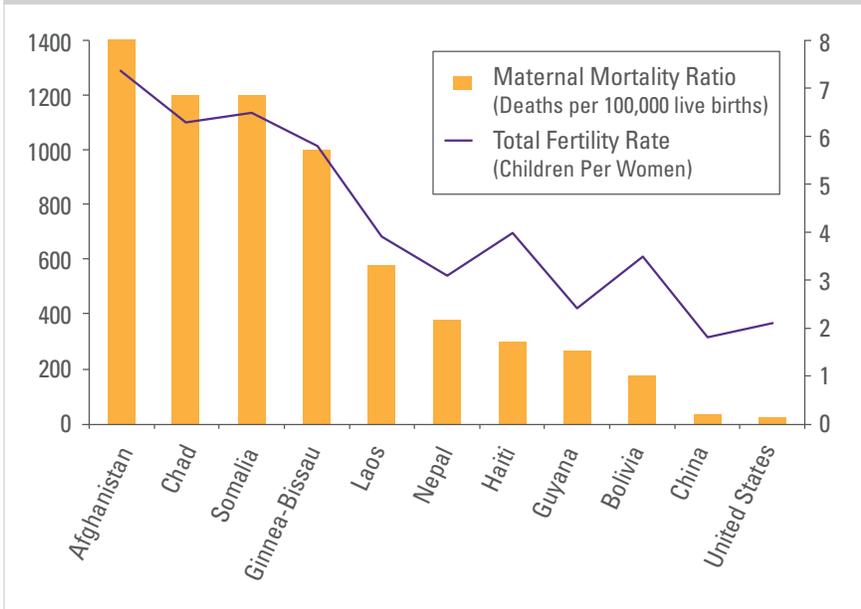
The risk of maternal deaths is not equal across regions (Figure 1). One out of 120 women in developing countries will die from pregnancy-related

FIGURE 1: Globally, Maternal Mortality is Highest in sub-Saharan Africa and South Asia



Sources: World Health Organization (WHO), World Bank, United Nations Children's Fund (UNICEF) and United Nations Population Fund (UNFPA). 2010. *Trends in Maternal Mortality: 1990 to 2008*. Geneva: WHO.

FIGURE 2: Countries with High Maternal Mortality also Have High Fertility Rates



Sources: World Health Organization (WHO), World Bank, United Nations Children's Fund (UNICEF) and United Nations Population Fund (UNFPA). 2010. *Trends in Maternal Mortality: 1990 to 2008*. Geneva: WHO; MEASURE Demographic and Health Surveys.

complications during her lifetime, compared to one in 4,300 women in developed countries.³ For women in Afghanistan, the risk is one in 11—the highest in the world. For those in sub-Saharan Africa, it is one in 31. Mortality is not the only consequence of poor maternal health care. Morbidity, which includes diseases and illnesses, has an even wider impact, with at least 20 cases of complications and disabilities experienced for each maternal death.⁴

The direct causes of maternal mortality and morbidity include hemorrhage, hypertensive disorders such as eclampsia, unsafe abortion, infections such as sepsis, and obstructed labor.⁶ These are generally preventable and treatable with basic supplies and inexpensive medicines, such as oxytocin to prevent hemorrhage and antibiotics to address infection. But significant barriers to improving maternal health remain, such as a shortage of trained health care providers and weak transportation networks that connect patients to services. Cultural barriers include

gender inequities and socio-cultural traditions that limit women's decision-making power.

In recent decades, increasing contraceptive use has helped reduce maternal mortality in many countries.⁷ A woman's risk of dying from pregnancy-related causes is directly linked to the average number of children she has during her lifetime.⁸ In an area in Bangladesh, for example, 30 percent of the reduction in maternal mortality achieved between 1979 and 2005 is attributable to a decrease in the average number of children per mother, falling from nearly five to fewer than three children per woman.⁹ Sub-Saharan Africa, which has the highest rate of maternal mortality and lowest rate of contraceptive use among all regions, also has the highest rate of unintended pregnancy.¹⁰ Unintended pregnancies are dangerous for both mother and baby. If all women in developing countries who wish to prevent pregnancy were using contraceptives and maternal and newborn health care was fully

available, 250,000 maternal deaths and 1.7 million newborn deaths would be prevented each year.¹¹

Links between Population and Maternal Health

Unintended pregnancies affect both demographic trends and people's health and well-being. Forty percent of all pregnancies in developing countries are unintended.¹² When these pregnancies result in births, they contribute to higher fertility rates and population growth. High rates of unintended pregnancy can diminish overall well-being when levels of maternal morbidity increase.

Countries with the highest rates of maternal mortality in their regions also tend to have high fertility rates (Figure 2). The number of pregnancy-related deaths and the overall risk of maternal mortality would decline if fertility decreased among adolescents and young women.¹³ To decrease an individual woman's risk of maternal mortality, other improvements, such as increased access to skilled birth attendants and emergency obstetric care, are needed.

About half of unintended pregnancies in developing countries result in abortion, and unsafe abortion is a leading cause of maternal death.¹⁴ Use of contraception could reduce the share of maternal mortality caused by unsafe abortion by up to 1.5 percent.¹⁵

Country in Focus: Maternal Health, Fertility and Unintended Pregnancies in Kenya

Many countries with the highest rates of maternal mortality are also challenged by high rates of unintended pregnancy and a large need for family planning. These factors generate a cycle in which high fertility, due in part to unintended pregnancies, contributes to poor maternal health.



Kenya has an estimated maternal mortality ratio of 530 deaths per 100,000 live births, slightly lower than the average of 640 for sub-Saharan Africa. Each year, an estimated 7,900 Kenyan women die during or after pregnancy.¹⁷ More than half of births occur at home, primarily because of distance from and lack of transportation to health facilities, as well as concerns about cost and beliefs that facility deliveries are unnecessary.¹⁸ Abortion is a major contributor to maternal mortality in Kenya: One study estimates that one-third of pregnancy-related deaths there are a consequence of abortion, which is illegal in most cases and typically unsafe.¹⁹

On average, a Kenyan woman has 4.6 children during her lifetime. If women could prevent unintended pregnancies and have the number of children they desire, this rate would decrease to 3.4 children per woman. According to household surveys, nearly one-fifth of births are unintended, and an additional 26 percent are mistimed. Twenty-six percent of married women want to prevent pregnancy, but lack modern contraception.²⁰

If Kenya's fertility rate remains unchanged, the population of women

of reproductive age will grow from 10 million in 2010 to 15 million in 2025.²¹ Clinics and hospitals are already too few and far between to meet existing needs, and its system will have to expand rapidly to serve a growing population.

Policy Considerations

The United Nations Millennium Development Goal (MDG) 5 aims to reduce the maternal mortality ratio by 75 percent between 1990 and 2015 and achieve universal access to reproductive health. At the 2010 U.N. MDG summit, \$40 billion was pledged to improve reproductive, maternal and child health over five years, with the goal of preventing 33 million unintended pregnancies and 740,000 maternal deaths. The U.N. Secretary-General also released the Global Strategy for Women's and Children's Health. These commitments represent increased political will, and recognition that progress toward improving maternal health has advanced much more slowly than many other development goals.

Between 1990 and 2008, the number of maternal deaths declined by one-third globally, but only 14 developing

countries are on track to achieve the maternal mortality target of MDG 5.²² Eight countries with already high rates of maternal death have seen maternal mortality increase since 1990.²³

Maternal health is the cornerstone to achieving other MDGs. Children who lose their mothers in pregnancy or childbirth are more likely to die themselves (MDG 4).²⁴ The premature death of mothers and their children causes billions of dollars in lost productivity to the global economy annually (MDG 1), while good health and lower fertility rates improve the likelihood of women entering the workforce (MDG 3) and educating their children (MDG 2).²⁵

The U.S. and other donors should work with developing country governments and non-governmental partners to meet the demand for family planning. Family planning has the dual benefit of saving women's lives by empowering them to delay and space their pregnancies and slowing population growth by lowering fertility rates. The prevention of unintended pregnancy through reproductive health care is necessary to ensure women have healthy pregnancies and safe deliveries.

Endnotes

1 World Health Organization (WHO), World Bank, United Nations Children's Fund (UNICEF) and United Nations Population Fund (UNFPA). 2010. Trends in Maternal Mortality: 1990 to 2008. Geneva: WHO; Hogan, M C, K J Foreman, M Naghavi, S Y Ahn, M Wang, S M Makela, A D Lopez, R Lozano and C J L Murray. 2010. "Maternal Mortality for 181 Countries, 1980-2008: A Systematic Analysis of Progress Towards Millennium Development Goal 5." *The Lancet* 375: 1609-1623.

2 Marston, C and J Cleland. 2004. *The Effects of Contraception on Obstetric Outcomes*. Geneva: World Health Organization.

3 WHO. 2010.

4 Singh, S, J E Darroch, L S Ashford and M Vlasoff. 2009. Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health. New York: Guttmacher Institute and United Nations Population Fund (UNFPA).

5 "Former Soviet Union" includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan and Uzbekistan.

6 Khan, K S, D Wojdyla, L Say, A Metin Gülmezoglu and P F A Van Look. 2006. "WHO Analysis of Causes of Maternal Death: A Systematic Review." *The Lancet* 367: 1066-1074.

7 WHO. 2010.

8 Hogan, Foreman, Naghavi, Ahn, Wang, Makela, Lopez, Lozano and Murray 2010.

9 Chowdhury, M E, A Ahmed, N Kalim and M Koblinsky. 2009. "Causes of Maternal Mortality Decline in Matlab, Bangladesh." *Journal of Health, Population and Nutrition* 27(2): 108-123.

10 WHO. 2010; Singh, Darroch, Ashford and Vlasoff. 2009.

11 Guttmacher Institute. 2010. "Facts on Investing in Family Planning and Maternal and Newborn Health." New York: Guttmacher Institute.

12 Guttmacher Institute and UNFPA. 2010.

13 Marston and Cleland. 2004.

14 Singh, S, D Wulf, R Hussain, A Bankole and G Sedgh. 2009. *Abortion Worldwide: A Decade of Uneven Process*. New York: Guttmacher Institute.

15 Tsui, A O, R McDonald-Mosley and A E Burke. 2010. "Family Planning and the Burden of Unintended Pregnancies." *Epidemiologic Reviews* 32:152-174.

16 MEASURE Demographic and Health Surveys. Most recent year available. <http://www.measuredhs.com/start.cfm>. Accessed 5 November 2010; United Nations Population Division 2010. "2010 Update for the MDGs Database: Unmet Need for Family Planning." <http://www.un.org/esa/population/unpop.htm>. Accessed 5 November 2010. Countries selected are the three with highest MWRs in three regions (Africa, Asia, Latin America/Caribbean), plus China and the United States.

17 WHO. 2010.

18 Kenya National Bureau of Statistics and ICF Macro. 2010. *Kenya Demographic and Health Survey 2008-09*. Calverton: Kenya National Bureau of Statistics and ICF Macro.

19 Center for Reproductive Rights. 2010. *In Harm's Way: The Impact of Kenya's Restrictive Abortion Law*. New York: Center for Reproductive Rights.

20 Kenya National Bureau of Statistics and ICF Macro. 2010.

21 United Nations Population Division. 2009. *World Population Prospects: The 2008 Revision*. New York: UN Population Division.

22 WHO, World Bank, UNICEF and UNFPA 2010. The 14 countries are Bhutan, Bolivia, China, Egypt, Equatorial Guinea, Eritrea, Estonia, Iran, Latvia, Maldives, Poland, Romania, Turkey and Vietnam.

23 WHO. 2010. These countries are Congo (Republic), Kenya, Lesotho, Somalia, South Africa, Swaziland, Zambia and Zimbabwe.

24 United Nations Children's Fund (UNICEF). 2008. *The State of the World's Children 2009: Maternal and Newborn Health*. New York: UNICEF; Katz, J, K P West Jr, S K Khatri, P Christian, S C LeClerq, E Kimbrough Pradhan and S Ram Shrestha. 2003. "Risk Factors for Early Infant Mortality in Sarlahi District, Nepal." *Bulletin of the World Health Organization* 81:717-725.

25 United Nations Secretary-General. 2010. *Global Strategy for Women's and Children's Health*. New York: United Nations; Greene, M E and T Merrick. 2005. *Poverty Reduction: Does Reproductive Health Matter?* Washington, DC: World Bank.