

Healthy Timing and Spacing of Pregnancies: A Family Planning Investment Strategy for Improving the Health and Well-Being of Women and Girls

Healthy timing and spacing of pregnancies helps women bear children at the healthiest times in their lives. They are then more likely to survive and stay healthy.

A recent analysis found that, in one year, family planning prevented more than 272,000 maternal deaths, a 44 percent reduction. If all needs for family planning were met, an additional 104,000 maternal deaths per year could be prevented.¹ This brief recommends three key programmatic actions to strengthen family planning as an essential health and development intervention for women and girls.

1. Educate women, girls, and their families on family planning's role in ensuring that pregnancies are timed and spaced to occur at the healthiest times of a woman's life.

Healthy times for a pregnancy are:

- · Between the ages of 18 and 34 and
- At least 24 months after a live birth

Also, families should be advised that maternal mortality risks increase as women have more children.

When pregnancies occur before the age of 18, or after the age of 34, or when they are too closely spaced, or there are too many, they are considered high-risk pregnancies.



Figure 1: Maternal Mortality Ratios (MMRs): All Countries and Low and High MMR Groups by Age





Figure 2: High Prevalence of Births among Adolescents in Developing Countries

Behavior change communication and counseling can help couples understand that family planning can prevent high-risk pregnancies. Multiple studies show that when families recognize that family planning supports maternal, newborn, and child health, family planning use increases significantly.

Risks of High and Low Maternal Age Pregnancies:

For most countries, the mortality risk at age 35 and above is at least double that at ages 20–24 (see Figure 1).² Studies have also found that high maternal age pregnancies are associated with increased risk of stillbirth, miscarriage, and child illness. Pregnancies before age 18 are associated with risk of postpartum hemorrhage, pre-term birth, stillbirth, school dropout, and poverty. Adolescent pregnancies at age 15 or younger are especially dangerous as there is an increased chance of maternal death and anemia.⁴ Many countries have high percentages of adolescent pregnancies under the age of 18 (see Figure 2).⁵

Risk of Maternal Death by Number of Children

per Woman: A recent study found that the risk of maternal death increases as the number of children per woman rises from 2 to 6 or more. For 46 countries over 10 years, the study found that maternal deaths declined by 7–35 percent as the number of children per woman fell.² Figure 3 shows the maternal mortality ratio at 1–2 children, compared to 6 children or more, for four countries.

2. Expand the mix of available contraceptives, including long-acting reversible contraceptives and lactational amenorrhea method (LAM) to help couples effectively delay, time, space, and limit pregnancies to achieve their fertility intentions.

Figure 3: Maternal Mortality Ratio by Children Per Woman





Figure 4: Meeting Family Planning Needs and Improving Use Reduces Unintended Pregnancies, Abortions, and Miscarriages



Programs can make significant improvements in the health and well-being of women and girls by ensuring that they have access to a wide range of contraceptives that respond to their needs. High unmet need for family planning not only is associated with high maternal death rates, but it is also linked to high numbers of unintended pregnancies, induced abortions, and miscarriages, all of which take an extraordinary toll on women's lives, physical and mental health, well-being, and productivity. One study found that if needs were met and use of long-acting methods increased, unintended pregnancies in developing countries would drop by nearly 60 percent, and the numbers of unintended pregnancies, miscarriages, and abortions would drop from about 50 million to 20 million.⁶

3. Enact policies to support women's and girls' family planning, health, and education needs to maximize the benefits of the demographic dividend.

The demographic dividend is defined as the opportunity for rapid economic growth that is associated with a change in age structure (the increase in the working age population, the relative decline in dependents – children or the elderly) when coupled with economic policies that promote job growth. This window of opportunity begins to open when people start to live longer and have fewer children than previous generations, and jobs are available for the increasing number of workers. Investments made now in key family planning and maternal health interventions, including preventing adolescent pregnancy, will yield immediate health benefits. By coupling these investments with policies supporting child survival, girls' education and job creation, especially for women, countries can be positioned to realize substantial economic growth.

A 2011 World Bank study analyzed the economic costs of adolescent pregnancies as measured by foregone lifetime earnings due to early pregnancies. The study found that the lifetime opportunity cost related to adolescent pregnancy in developing countries ranges from 10 percent of annual GDP in Brazil to 30 percent of annual GDP in Uganda (see Figure 5).⁷ Preventing adolescent pregnancies by linking age-appropriate family planning education and services to education and job creation for youth should become a critical element of country strategies to reap the maximum benefits of the demographic dividend. These strategies will yield benefits that can then be further invested in women's and girls' health and education, thus enabling women and girls to survive and thrive.

Figure 5: The Lifetime Cost of Adolescent Pregnancy as Annual Percentage of GDP



To learn more and view studies referenced in this document, visit http://transition.usaid.gov/our_work/global_health/pop/techareas/htsp/index.html.

^{1.} Forthcoming. 1. Ahmed S., L Qingfeng, L. Liu, and A. Tsui. Maternal deaths averted by contraceptive use: an analysis of 172 countries. The Lancet. July 12, 2012. 2. Stover, J. and J. Ross. How increased contraceptive use has reduced maternal mortality. Matern Child Health J, 2010. 14:687-695. New analyses are underway on maternal deaths by the number of children per woman. Findings will be disseminated when they become available.

^{3.} Forthcoming. Blanc A., W. Winfrey, and J. Ross. New Findings for Maternal Mortality Age Patterns: Aggregated Results for 38 Countries, 2012.

^{4.} Conde-Agudelo, A., J. Belizan, and C. Lammers. Maternal-perinatal morbidity and mortality associated with adolescent pregnancy in Latin America: cross sectional study. Am J Obs Gyn. 2005. 192: 342-9.

^{5. &}quot;A Report Card on Adolescents," United Nations Children's Fund (UNICEF), April, 2012, accessed online June 29, 2012 at http://www.unicef.org/media/files/ PFC2012_A_report_card_on_adolescents.pdf.

^{6.} Cohen, S. The World at Seven Billion: Global Milestone a Reflection of Individual Needs. Guttmacher Policy Review. 2011. Vol.14, No. 3, accessed online June 29, 2012 at http://www.guttmacher.org/pubs/gpr/14/3/gpr140302.html.

^{7.} Chaaban, J. and W. Cunningham. Measuring the Economic Gain of Investing in Girls: The Girl Effect Dividend. The World Bank, August 2011, accessed online June 29 2012 at http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2011/08/08/000158349_20110808092702/Rendered/PDF/WPS5753.pdf.