Adolescent Pregnancy

Adolescent girls who give birth each year have a much higher risk of dying from maternal causes compared to women in their 20s and 30s. These risks increase greatly as maternal age decreases, with adolescents under 16 facing four times the risk of maternal death as women over 20. Moreover, babies born to adolescents also face a significantly higher risk of death compared to babies born to older women.

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How prevalent is adolescent pregnancy?

About 16 million adolescent girls aged 15-19 give birth each year, roughly 11% of all births worldwide.

- Almost 95% of these births occur in developing countries.
- They range from about 2% in China to 18% in Latin America and the Caribbean.
- Half of all adolescent births occur in just seven countries: Bangladesh, Brazil, the Democratic Republic of Congo, Ethiopia, Nigeria, India and the United States (Population Division 2008).
- The adolescent fertility rate worldwide was estimated to be 55.3 per thousand for the 2000-2005 period, meaning that on average about 5.5% of adolescents give birth each year.
- Adolescent birth rates in the less developed countries are more than twice as high compared to rates in more developed countries and these range from less than 1% per year in places like Japan and the Republic of Korea, to over 20% per year in the Democratic Republic of Congo, Liberia and Niger.

In what context do adolescents become pregnant?

In developing countries, about 90% of births to adolescents occur within marriage. The proportion is close to 100% in Western Asia/Northern Africa, Central Asia, and South-Central and South-Eastern Asia, while between 70-80% in South America and in sub-Saharan Africa.

- A small but significant percentage of adolescent pregnancies result from nonconsensual sex. Recent studies of coerced first sex report rates between 10% and 45% of girls who first had sex before age 15.
- Age at first marriage is increasing in many countries, as are rates of contraceptive use among both married and unmarried adolescents.
- Educational levels for girls, which are closely associated with early childbearing, have also risen in most countries, and job opportunities have expanded.

Is adolescent pregnancy a problem?

Despite the downward trend, adolescent pregnancy remains very prevalent, particularly in the poorest countries. Adolescent childbearing has a negative impact on these three dimensions: health of the adolescents and their infants; individual social and economic effects; and societal level impacts.

Health impact on mother and newborn

A study in Latin America found that maternal death rates for adolescents under 16 are 4 times greater than for women in their 20s. Although some of this risk can be attributed to factors other than young age – e.g. giving birth for the first time, lack of access to care, or socioeconomic status - there appears to be an independent effect of young maternal age on pregnancy risk to the mother.
• Conditions associating adolescent childbearing and maternal health problems include obesity, anemia, malaria, STIs, mental illness, unsafe abortion complications, and obstetric fistula.
• Accounting for about 11% of all births worldwide, maternal conditions in adolescents cause 13% of all deaths and 23% of all disability adjusted life years.

Too-early childbearing also negatively impacts the survival of newborns

• Studies have shown rates of newborn death to average about 50% higher to adolescent mothers versus mothers in their 20s (Macro International 2008).
• As with health risks to the mothers, a combination of physical and socioeconomic factors place babies of youngest mothers at higher risk of dying.
• Studies have shown an independent adverse effect of early pregnancy on newborn health, even after controlling for a range of other factors (Conde-Agudelo et al 2005; WHO 2007).
• A large U.S. study found a 55% higher risk of neonatal death to babies of mothers aged 10-15, a 19% higher risk in babies of 16-17 year-olds, and a 6% higher risk in babies of 18-19 year-olds.
• The adverse impact of poor newborn health due to adolescent pregnancies can have inter-generational effects and also long term effects leading to adulthood disease (Fetal Origins of Adulthood Diseases).

Societal impact
Studies have shown that delaying adolescent births could significantly lower population growth rates, potentially generating broad economic and social benefits.

How can adolescent pregnancy be made safer?

Mothers and babies need care in pregnancy, for childbirth and after birth. It must be delivered as a continuum of care that starts in the household and community and extends into the healthcare system, including care for complications.

Individual, Family, and Community Care
Adolescent mothers often lack knowledge, education, experience, income, and power relative to older mothers. Thus, programs should emphasize several approaches to overcome these relative disadvantages.

• Improving the involvement of boys and men and the community at large, and including “mothers-in-law” in societies where they are the main decision-makers both at household and community level, would ensure their support and acceptance in utilization of services.
• Ensuring good pregnancy outcomes start with home-based care practices that support the mother and her newborn before, during, and after the pregnancy.

Relative Risk of Adverse Outcomes by Maternal Age, Latin America

Socioeconomic impact
Numerous studies have shown an association between adolescent pregnancy, and negative social and economic effects on both the mother and her child. However, recent reviews have found the evidence inconclusive about whether adolescent pregnancy is the cause or consequence of adverse socioeconomic factors.
Outpatient and Clinical Care

Skilled health workers provide a range of services in outpatient or clinical settings that help save the lives of pregnant mothers and their newborns. With a few important exceptions, the content of such clinical and outreach interventions should be the same for adolescent mothers as for other women.

- It is important to provide adolescents with an early start to antenatal care and to options for continuing or terminating pregnancy, particularly because adolescents tend to delay seeking abortion, resort to the use of less skilled providers, use more dangerous methods, and delay seeking care for complications. They are, therefore, more likely to suffer serious complications and even death.
- Since adolescents are especially susceptible to anemia in pregnancy, it is important for programs to make a special effort to diagnose and treat for anemia.
- Adverse outcomes such as low birth weight can be reduced by improving the nutritional status of adolescents before pregnancy and preventing sexually transmitted infections before and during pregnancy.
- Pregnant adolescents especially first time mothers are particularly susceptible to malaria, a major factor in maternal deaths in some countries. Priority should be given in treatment and management of malaria in pregnancy.
- Special attention should be given to adolescents under 16 during obstetric care because they and their infants are at especially high risk of complications and death.

- Discussion of the “Plan for Birth and Complications,” including the place of birth, availability of transportation, companion of choice, and costs involved, is essential, particularly for adolescents in light of the higher incidence of complications both for the mother and her newborn.
- Health workers should prioritize adolescents’ access to services to prevent mother-to-child transmission of HIV, given the high concentration of infection rates in young women.
- It is important that adolescent mothers be counseled and provided with post partum family planning methods of their choice to avoid future adolescent pregnancy.

Health Systems Features

In addition to the special interventions that would enhance the continuum of care for adolescents and their babies, countries can incorporate features into their health systems that can improve adolescents’ access to quality care including that for contraception and, ultimately, health outcomes.

- A crucial area of focus is in human resources, where evidence shows the importance of developing health worker competencies in dealing with the special information and psychosocial needs of adolescent mothers.
- A more conducive legal and policy environment that enhances access to care for adolescents including contraceptive services is needed.

Conclusion

Making pregnancy safer for the youngest mothers and their babies is a priority for countries as they strive to meet targets for improving basic health care. Maternal and newborn health programs have a clear role in better serving the needs of the youngest mothers. However, more and better research is needed to expand the evidence base on effective interventions for pregnant adolescents and to translate knowledge into action at the country level. As part of a broader effort being undertaken by various WHO Departments, WHO’s MPS Department hopes to contribute to this effort by publishing a Position Paper on Adolescent Pregnancy later in 2008. The position paper will lay out an action plan for WHO and partners to address adolescent pregnancy using the framework of the Making Pregnancy Safer Approach to Improving Maternal and Newborn Survival.