YouthNet

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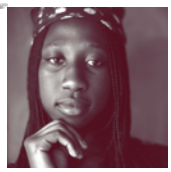
YouthLens

on Reproductive Health and HIV/AIDS

Maternal Health Care among Adolescents



Pregnant adolescents need appropriate services to prevent death and disability.

The use of health care services by pregnant adolescents has the potential to reduce death and disability. Maternal death and disability represent an enormous public health problem in the developing world. For every 100,000 live births, women in the developing world are 22 times more likely than those in developed countries to die during or after pregnancy.[1]

Compared with women in their twenties, adolescents ages 15 to 19 are two times more likely to die during childbirth, and those ages 14 years and younger are five times more likely.[2] Moreover, more than half of women in sub-Saharan Africa and one-third in Latin America and the Caribbean deliver their first child before age 20.[3] For every maternal death, an estimated 30 women experience complications such as vaginal tears, fistulae, or excessive bleeding.[4]

Skilled obstetric care critical for youth

The direct causes of maternal mortality – hemorrhage, obstructed labor, infection, hypertensive disorders, and complications of unsafe abortion – usually can be prevented or managed with timely and appropriate care, which includes access to a skilled attendant at birth and emergency obstetric care.[5] Skilled attendance is particularly important during first births because of the lack of birth history, increased likelihood of complications among first births, and potential lack of awareness of danger signs. Access to emergency obstetric care is critical if the mother experiences obstructed labor, pregnancy-induced hypertension, eclampsia, hemorrhage, or abortion complications.

The pelvic bones and birth canals of adolescents, especially very young ones, are still growing, which increases their risk of complications during vaginal birth. Therefore, adolescents are more at risk of prolonged or obstructed labor and should have skilled care in a setting where labor augmentation, cesarean section, and operative vaginal delivery with vacuum or forceps extraction can be performed. Obstructed or prolonged labor is one of the more serious complications that can cause mortality or potentially long-term injuries, including obstetric fistulae.[6]

Care during and soon after childbirth is critical for reducing levels of maternal mortality. Because adolescents have a higher risk of difficult labor than do older women, they may be at increased risk for postpartum infections.[7] More than a quarter of maternal deaths in developing countries occur during labor, delivery, and in the first day after delivery.[8] About one-half of maternal deaths occur within the following week, mainly from hemorrhage. Care during the first postpartum days provides an opportunity for surveillance and support, treatment should problems arise, and help in developing new parenting skills.

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Other important pregnancy-related services

Some prenatal interventions have been found to detect, treat, and prevent illnesses that could result in maternal death and disability.[9] Prenatal care can help to identify and treat pregnancy-induced hypertension, a leading health risk among adolescents having a first baby. Pregnancy-induced hypertension may progress from mild disease to more dangerous disorders such as pre-eclampsia or eclampsia, the latter of which involves seizures and can cause fatal maternal brain hemorrhage and failure of the heart, kidneys, and liver if untreated.

Prenatal care can also help prevent, identify, and treat iron deficiency and anemia in adolescents. There is evidence linking severe anemia and maternal mortality.[10] In developing countries, most anemia is due to nutritional iron deficiency, although some other causes include malaria and parasitic infections. Adolescents are at increased risk of iron deficiency because they are still growing and at the onset of menstruation. Pregnancy further increases their iron, folic acid, and other micronutrient requirements.

Women in their first pregnancies, typical for pregnant adolescents, are more susceptible to malarial parasitic infection.[11] Primary prevention of malaria through use of bed nets, chemoprophylaxis, or prompt recognition and treatment is particularly important for a pregnant adolescent.

Pregnant adolescents are more likely to experience spontaneous abortion or to seek unsafe induced abortion than adult women.[12] Moreover, since adolescents are more likely to delay seeking an abortion, they experience more abortion-related complications. With access to postabortion care, adolescents get treatment for abortion complications and receive contraception to avoid repeat abortions. Making family planning services available to all adolescents can prevent unintended pregnancy that may result in death, disability, or unsafe induced abortion.

Care during pregnancy can also provide an entry into the health system. A meta-analysis of research on obstetric complications associated with poor outcomes of adolescent pregnancy found that adolescents who receive prenatal care are more likely to return for further care.[13] However, many of the same factors that prevent adolescents from seeking prenatal care will affect their ability to seek delivery or postpartum care.

Adolescent use of maternal health care

In several countries, adolescents are less likely to seek prenatal and delivery care from a skilled provider, which may explain some of their increased risk of maternal mortality compared to older women.

In a recent study of Demographic and Health Survey (DHS) data from 15 developing countries, researchers analyzed data on nearly 100,000 births among women under age 30. In Bangladesh, Brazil, Cambodia, India, Indonesia, Nepal, and Peru, researchers noted important differences in use of prenatal and delivery care with a skilled provider for adolescents under age 17 compared to women ages 19 to 23. In a multivariable analysis controlling for education, parity, residence, marital status, wealth, ethnicity, and other factors, those under age 19 were significantly less likely to use either service compared to the older group in only four countries – Bangladesh, Brazil, India, and Indonesia.[14] (The analysis grouped all those under age 19 together because of sample sizes.)

Earlier studies have found similar results. In previous bivariable analyses, DHS data from 1985 to 1990 demonstrated that adolescents younger than 18 years were less likely than women ages 18 to 34 years to seek prenatal care from a skilled provider in 18 of 26 countries. The younger group also was less likely to seek delivery care from a

skilled provider in 16 of 28 countries.[15] An earlier analysis of DHS data showed that in four of seven countries studied, mothers younger than 20 years were less likely than those ages 20 to 29 years to use maternal and child health services.[16]

Many factors influence the use of maternal health care. Delays in recognizing complications, deciding to seek care, reaching adequate health facilities, and receiving appropriate care at facilities are well-known barriers to receiving care for all women.[17] These factors may be more pronounced for adolescents. In some places, rural Bangladesh for example, women who are pregnant for the first time may be constrained in making decisions about their use of medical care, as mother-in-laws often expect adolescents to give birth at home with traditional birth attendants, and the young women have little or no influence on the decision.[18] Unmarried adolescents may be even less likely to use services. In rural Nigeria, a study found that unmarried, pregnant adolescents are less likely to receive prenatal care than are their married counterparts.[19]

Programs designed to target adolescents may improve their use of maternal health care services. One study in India found that adolescents who participated in an empowerment and development program were significantly more likely to use prenatal, delivery, and postpartum care compared to matched controls drawn from different sites.[20] However, more rigorous study designs are needed to ensure comparable study groups and to better measure the effectiveness of such programs.

Even if adolescents seek health care, the services often do not meet their needs. In particular, adolescents may have concerns about judgmental and negative providers and about whether their confidentiality will be respected. Some reproductive health programs have begun to address social and cultural biases against youth in clinical settings, including examination of provider attitudes, policies, and logistical issues. A review of a handful of prenatal and postnatal care programs that include youth-friendly components suggest improvements can be made in certain indicators such as prenatal care use, breastfeeding rates, and nutrition.[21] Lessons learned from the reproductive health field suggest that community support for youth services appears to be a key factor associated with increased service use.[22]

More research is needed to identify and evaluate programmatic approaches that increase adolescents' use of maternal health services and reduce risks faced by pregnant adolescents. Distinguishing

WHO TECHNICAL MEETING RECOMMENDS ACTIONS

To reduce maternal mortality globally, international advocacy efforts have identified adolescents as a key target group. In 2002, the United Nations Special Session on Children declared that reducing maternal and neonatal morbidity and mortality among adolescent expectant mothers is a high priority.

In August 2003, the World Health Organization (WHO) Department of Child and Adolescent Health and Development held an international working group meeting with about 40 international experts to achieve consensus on key issues, best practices, research gaps, and recommendations for actions to meet the United Nations Millennium Development Goals of reducing maternal mortality and morbidity among adolescents. The recommended priority actions from the meeting were to:

- Make existing safe motherhood activities more responsive and accessible to pregnant adolescents, including services for pregnancy prevention, pregnancy, emergency obstetric care, newborns, and abortion (where not against the law)
- Provide information about rights and choices for adolescents, including sexuality education
- Provide social support for pregnant adolescents, especially the very young adolescents
- Advocate for and, if possible, ensure the enactment of policies and actions for:
  - universal education, including retaining/returning to school by pregnant adolescents
  - sexuality education to help prevent unintended pregnancy
  - access to information and services for adolescents consistent with the evolving capacity of the adolescent
  - subsidy for care for pregnant adolescents, especially the very young

WHO is preparing a package of advocacy and program guidance on this effort. For more information, please contact Dr. Adepeju Olukoya, WHO, Department of Child and Adolescent Health and Development, Geneva, Switzerland.

among younger and older adolescents, despite methodological challenges relating to sample size and other factors, can help address how various program interventions can help different ages of young women.

The increasing number of adolescents who are HIV-infected will further complicate the issue of identifying effective adolescent pregnancy programs. Particularly in high prevalence settings, HIV increases the number of prenatal services adolescents need, including HIV tests, anti-retroviral prophylaxis, and contraception to prevent any future unintended pregnancies. Research findings can help guide efforts to facilitate the use of maternal health services by adolescents, which should improve adolescent maternal outcomes.

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