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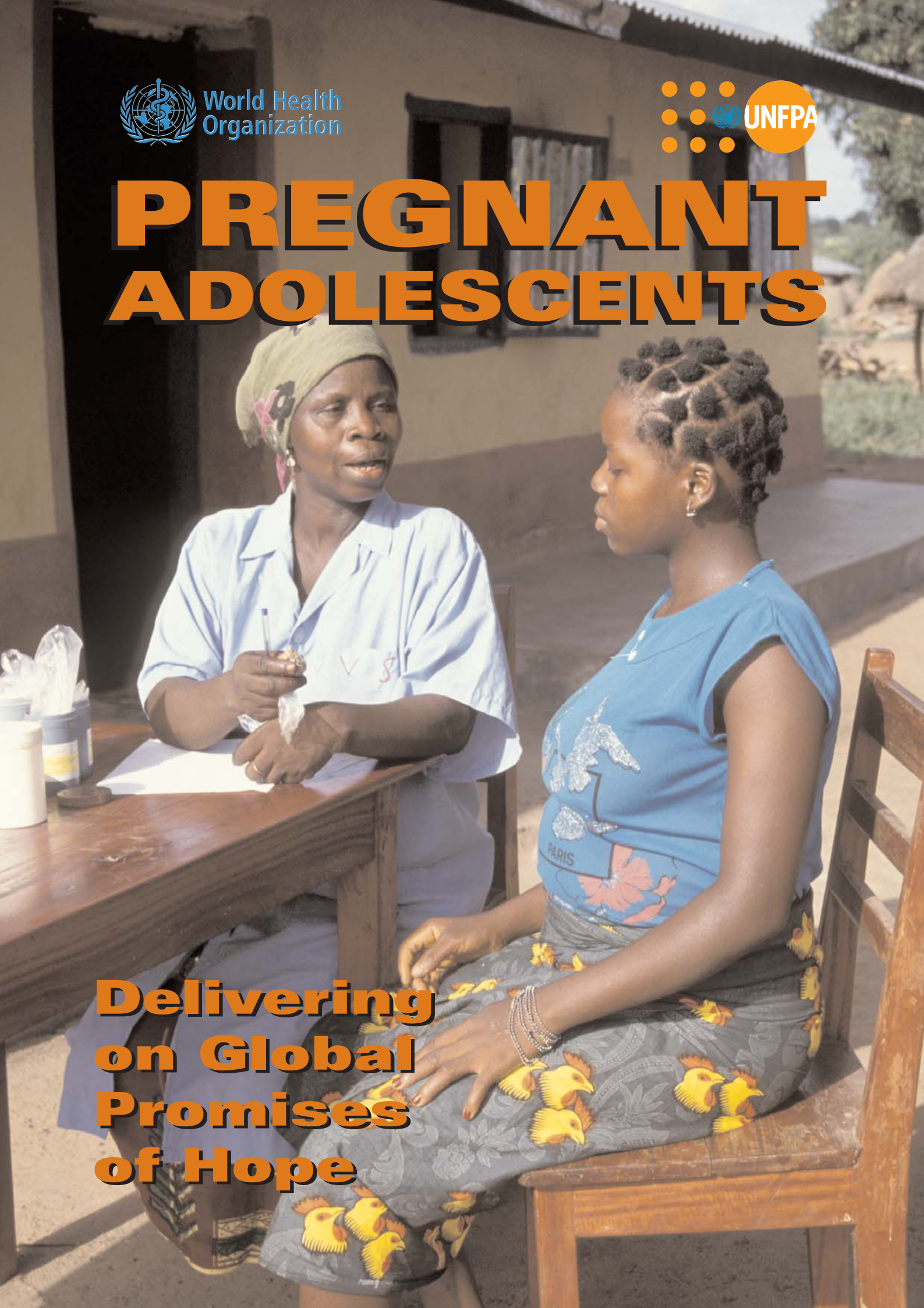
PREGNANT ADOLESCENTS



Delivering on Global Promises of Hope

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Pregnant Adolescents : Delivering on Global Promises of Hope

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Cover picture

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A pregnant adolescent receives medicine and advice at a rural health clinic in Benin.

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PREGNANT ADOLESCENTS

Delivering on Global Promises of Hope

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Fact and focus boxes

Preface

In a paddy field somewhere in Bangladesh, an adolescent wife is about to deliver her first baby. So is a lonely goat herder in the plains of East Africa infected with HIV by a passing truck driver. So is a terrified abductee of the Lords Resistance Army in Uganda and a street child in Ecuador, addicted to drugs or to glue sniffing.

During the period of a single hour, due to circumstances beyond their control or one careless moment's exposure to risk, over 1,600 adolescents will have given birth; many of them physically immature, with no exposure to antenatal care or access to labour, delivery services and emergency obstetric care.

Some will bear the scars of this trauma for life and give birth to children who, if they survive, will be caught in the same vicious trap. During the course of one day alone, 38,500 adolescents will give birth.

Pregnant adolescents are in a dark void of helplessness and hopelessness, waiting to be rescued. For some, their need dates back to their infancy, when their families were unable to give them access to education, nutrition and survival skills, even before they were denied access to care.

It is to restore these young adults' missing faith in humanity that you, the best and most dedicated defenders of safe motherhood, are called to action. Because you can make a difference to their lives. You can clearly delineate a path to securing the Millennium Development Goal targets for these young mothers and their offspring. You can create a world safe enough for them to live in by identifying and providing country level support that will deliver them back to their families and communities as human capital, ready to enhance the quality of life.

I am confident that the reduction of maternal and neonatal mortality and morbidity of expectant adolescent mothers will become a reality with your efforts.

> It is time to restore pregnant adolescents' faith in humanity

Joy Phumaphi,

WHO Assistant Director-General for Family and Community Health, opening the WHO Technical Working Group meeting: Meeting the Millennium Development Goals on maternal mortality reduction, Geneva

Executive summary and context

The World Health Organization defines adolescence as the decade from 10-19 years of age.

Between 14 and 15 million adolescent girls aged 15—19 give birth each year, accounting for more than ten per cent of births worldwide. For some young mothers this is a happy event; they are well supported and they give birth to a healthy daughter or son. But for millions, the pregnancy was unplanned, the birth is too early and the experience is one of fear and pain. Adolescent girls face health risks during pregnancy and childbirth accounting for 15% of the Global Burden of Disease for maternal conditions and 13% of all maternal deaths.[1] Adolescent mothers aged 15-19 are more likely than older mothers to die in childbirth, while very young mothers aged 14 and under are at highest risk.[2] A WHO review of adolescent pregnancy says that age alone may not be the cause—education, social status and use of health facilities are all contributing factors.[3] It is also difficult to separate risks related to age and the extra risks related to a first pregnancy. However, adolescent mothers are both young and mostly first time mothers. Many have dropped out of school, have low social status and do not access health services. For every young woman who dies in childbirth, 30-50 others are left with an injury, infection or disease.[4] Young mothers are more likely to have low birth-weight babies, at risk of malnourishment, poor development or death. Infant and child mortality is highest amongst children of adolescent mothers. Girls who give birth miss schooling and opportunities for employment. There is a risk of the cycle repeating itself.

Many adolescent pregnancies are not merely unplanned but also unwanted, as seen by the estimated 2.2 to 4 million adolescent girls who obtain abortions each year. Because they are less likely to have access to legal and safe abortion, adolescents are estimated to account for 14% of all unsafe abortions,[5] performed by people who lack the necessary skills in an environment lacking minimal medical standards.[6] Behind each statistic is a vulnerable, frightened girl, who may be shunned and who may even resort to suicide.

Although the *prevention* of unwanted adolescent pregnancies is seen as an important issue in many countries, the *care* of pregnant adolescents and their newborn is not given the same level of priority. Yet converging global policies underline the need to focus care, social support and education on young first time mothers.

Millennium Development Goals

The Millennium Development Goals (MDGs) set targets to measure progress in human development. Improving care for pregnant adolescents has a direct bearing on two of the eight goals in the Millennium Declaration of 2000.

1. WHO. 2000. *Global Programme on Evidence.*
2. UNICEF. 2001. *The Progress of Nations.*
3. WHO. 2004. *Adolescent Pregnancy, Issues in Adolescent Health and Development.*
4. Safe Motherhood Inter-Agency Group. 2002. *Skilled Care During Childbirth,* Policy Briefing.
5. WHO. 2003. *Adolescent Pregnancy: Unmet Needs and Undone Deeds.* Unpublished review of literature and programmes.
6. WHO. 1997. *Post-abortion family planning: a practical guide for programme managers.*

- **Goal 4** *reduce child mortality, and in particular to reduce the under-five mortality rate by two-thirds, by 2015.* Better care of pregnant adolescents and their newborns will result in healthier babies, better able to thrive and survive.
- **Goal 5** *improve maternal health and in particular reduce the maternal mortality ratio by three-quarters by 2015.* Pregnant adolescents run a disproportionate risk of dying in or after childbirth.

The maternal mortality ratio is the number of women who die from any cause related to pregnancy or childbirth or within 42 days of a termination, per 100,000 live births. The baseline is the 1990 figure.

Better support for pregnant adolescents will also impact on four other goals:

- **Goal 6** *combat HIV/AIDS, malaria and other diseases.* Adolescent girls who have sex with older sexually experienced men have a higher risk of contracting HIV. Knowledge and negotiating skills help them to protect themselves.
- **Goal 2** *achieve universal primary education.* Pregnancy often brings a girl's education to an end, sometimes before she finishes primary school.
- **Goal 3** *promote gender equality and empower women.* Many adolescents do not choose to become pregnant, and have little power to influence their own futures or those of their children.
- **Goal 1** *eradicate extreme poverty and hunger.* Improving the education, skills and prospects of pregnant adolescents enables them to earn income, prevent further unwanted pregnancies and to provide for their families.

The Convention on the Rights of the Child and UNGASS

The Convention on the Rights of the Child protects the health and rights of young people up to the age of 18, and seeks to protect children from sexual abuse and exploitation. Article 24 recognizes the right of a child to the highest attainable standard of health. The Convention urges States to take appropriate measures to:

- diminish infant and child mortality
- ensure appropriate antenatal, natal and postnatal health care for mothers
- ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of accidents
- develop preventive health care, guidance for parents and family planning

The United Nations General Assembly Special Session on Children in 2002 specified the need to improve care for pregnant adolescents, and set a goal to:

> "ensure that the reduction of maternal and neonatal morbidity and mortality is a health sector priority and that women, *in particular adolescent expectant mothers,* have ready and affordable access to essential obstetric care, well-equipped and adequately staffed maternal health care services, skilled attendance at delivery, emergency obstetric care, effective referral and transport to higher levels of care when necessary, postpartum care and family planning in order to, inter alia, promote safe motherhood."[1]

1. Resolution of the United Nations General Assembly. October 2002. *A world fit for children* arising out of the Special Session on Children 10 May 2002. Plan of Action, B: Goals Strategies and Actions 1. Promoting Healthy Lives, Paragraph 37:1. *Our emphasis.*

Pregnant adolescents have a right to services

The Committee on the Rights of the Child, at its 33rd session in 2003, ratified a general comment on adolescent health and development,[1] stating:

"Adolescent girls should have access to information on the negative impact of early marriage and early pregnancy and those who become pregnant should have access to health services that are sensitive to their particularities and rights. State Parties should take measures to reduce maternal morbidity and mortality in adolescent girls, particularly due to early pregnancy and unsafe abortion practices and to support adolescent mothers and fathers in their parenthood.

"Young mothers, especially in settings lacking support may be prone to depression and anxiety, compromising their ability to care for their child. The Committee urges States Parties to

(a) develop and implement programmes that ensure access to sexual and reproductive health services, including family planning, contraceptive methods and safe abortion services in circumstances where abortion is not against the law, adequate comprehensive obstetric care and counselling;

(b) foster positive and supportive attitudes towards adolescent parenthood, for mothers and fathers; and

(c) develop positive policies to ensure continued education of adolescent mothers"

Priorities for action

Adolescent mothers share many needs with other first time mothers, but also have needs related to their age. This is especially true for very young pregnant adolescents below the age of 16 years. Reforms to improve services and support for pregnant adolescents will have a broader impact on care for all first-time pregnant women, and represent an important step towards achieving the Millennium Development Goals. The most important reforms are:

- to provide social support to very young pregnant adolescents and mothers,
- to provide pregnant adolescents with information about services and how to access them,
- to improve access by pregnant adolescents to antenatal care,
- to ensure that adolescents have a skilled attendant present at childbirth,
- to provide access to emergency obstetric care in good time if required.

The situation of each pregnant adolescent varies with age, marital status, social class, education, her urban or rural setting and whether her pregnancy is wanted or unwanted. Countries do not necessarily need separate systems and facilities for adolescent mothers. However, systems need to be responsive to adolescent needs and to find ways to improve access to services. Contact with health services early in pregnancy can ensure that a pregnant girl receives adequate antenatal care and help her to make a birth plan, including contingency plans for emergency obstetric care.

1. Committee on the Rights of the Child. 2003. Thirty-third session, General Comment No. 4; *Adolescent health and development in the context of the Convention on the Rights of the Child*.

Pregnant adolescents

- Pregnant adolescents, especially those below the age of 15 years, are at greater risk of illness or dying in childbirth than older pregnant women.
- Pregnant adolescents often face stigma and social exclusion.
- They need a continuum of care: from self-care and antenatal care, to care in childbirth and postpartum care.
- Pregnant girls need a way back to education and social inclusion.
- Pregnant girls need support to prevent a subsequent unwanted pregnancy.

Although the clinical needs of a pregnant adolescent are similar to those of other first time mothers, youth and inexperience are special factors. She may lack community support, have little experience of health services and little possibility of accessing them. Health care needs may be marginalized at family and community level, or go unmet if services do not respond well to a pregnant girl, especially if unmarried,

The most significant improvement would be to ensure that a skilled attendant was present at all births. In developing countries, only 53% of births are assisted by a skilled person.[1] Postnatal care and support for mother and baby are also essential as complications often arise after birth.

Services should aim for a continuum from self-care at home, to antenatal care, care in childbirth and postnatal care, including counselling. Health and social support should be integrated so that young mothers and their babies remain healthy, are protected from stigma and do not sink into poverty. A route back to education and employment is required for young adolescent mothers. It is essential to ensure that adolescents know how to protect themselves from a second unwanted pregnancy and have the means and the support to prevent this.

In August 2003 a consensus statement from a WHO technical working group included five calls for action:[2]

- Make pregnancy, childbirth and post delivery services more accessible to adolescents and more responsive to their needs (adolescent friendly).
- Provide information about rights and choices for adolescents, including sexuality education for all adolescents.
- Provide social support for pregnant adolescents, especially those who are very young.
- Ensure universal education for girls so that pregnant adolescents return to school, and ensure that policies and legislation enable adolescent girls to give consent for tests and treatment.
- Offer life skills and livelihood skills to lift adolescents out of poverty. ■

1. UNICEF. 2001. *The Progress of Nations*. Most statistical data are based on information collected for women 15-49 years of age. This has not been further disaggregated by age.
2. For the consensus statements see pages 27 and 28.

Who are the pregnant adolescents?

More than 14 million adolescent girls give birth each year. Although these births occur in all societies, 12.8 million, more than 90%, are in developing countries.[1] In some societies girls marry and start their families before their own childhoods have ended. In other countries the majority of births to young mothers occur outside marriage where there is a high rate of sexual activity amongst adolescents, some of it coerced, or linked to poverty and social exclusion.

The highest levels of adolescent pregnancy are in Africa. There are also high rates in India, Bangladesh, Latin America and the Caribbean. More than half of women in Sub-Saharan Africa and about one third in Latin America and the Caribbean give birth before the age of 20.[2] Even within developed countries there is wide variation. The 15-19 year old birth rate in the USA, Ukraine, Georgia and Republic of Moldova is 14 times higher than in Japan, and twice as high as in Australia and Canada.[3]

Unwanted and early pregnancy, especially at a very young age, reflects a failure to provide a safe environment that supports young girls to reach adulthood with education, prospects and hope. However, most childbearing amongst adolescents is in the context of marriage or other forms of union and the highest birth rates to under 18-year-olds are in countries with a high rate of child marriage.

Early births around the world

Fewer than 10% of girls have a baby before the age of 18 in *(lowest first);* Japan, Germany, Poland, France, China, Tunisia, Sri Lanka, Great Britain, Morocco, Burundi, Philippines, Rwanda, United States of America, Thailand

10-20% of girls have a baby before the age of 18 in: Turkey, Peru, Trinidad, Tobago, Egypt, Indonesia, Paraguay, Brazil, Ecuador, Sudan, Pakistan, Dominican Republic, Colombia, Namibia, Bolivia, Zambia, Mexico

20%-30% of girls have a baby before the age of 18 in: Zimbabwe, Ghana, Botswana, Yemen, Kenya, Guatemala, India, United Republic of Tanzania, Togo

30%-40% of girls have a baby before the age of 18 in: Madagascar, Burkina Faso, Senegal, Nigeria, Malawi. Central African Republic, Uganda

40%-50% of girls have a baby before the age of 18 in: Côte D'Ivoire, Liberia, Mali, Cameroon, Bangladesh

More than 50% of girls have a baby by the age of 18 in Niger.

Sources: *Alan Guttmacher Institute. 1998. Into a New World: Young Women's Sexual and Reproductive Lives.*
UNICEF. 2001. Innocenti Report Card - A league Table of Teenage Births on Rich Nations. Innocenti Research Centre, Florence.

1. United Nations. 2002. *World Population Monitoring 2002 - Reproductive rights and reproductive health: selected aspects.*
2. Alan Guttmacher Institute. 1998. *Into a New World: Young Women's Sexual and Reproductive Lives.*
3. Singh, S. and Darroch, J. 2000. *Adolescent pregnancy and Childbearing: Levels and trends in developed countries.* Family Planning Perspectives, 32, 14-23.

"For too long, when an adolescent becomes pregnant, we have pointed the finger at her. It is time we pointed the finger at ourselves. If a girl gets pregnant that is because we have not provided her with the information, education, training and support she needs to prevent herself becoming pregnant."

DR PRAMILLA SENANAYAKE, FORMER ASSISTANT DIRECTOR, INTERNATIONAL PLANNED PARENTHOOD FEDERATION

Young mothers

- More than 90% of the 14 million births to adolescent girls are in developing countries.
- The highest adolescent birth rates are in countries with child marriage.
- There are also high rates in Africa the Caribbean and Latin America.
- Early childbirth is more common in rural areas where health services are often less than optimal.

More than half of girls are married by the age of 18 in Bangladesh, Burkina Faso, Chad, Mozambique and Nepal, with more than 40% married in Ethiopia, India, Malawi, Nigeria and the Yemen.[1] Very early childbirth below the age of 16 is also associated with child marriage. In Bangladesh, Cameroon, Liberia, Malawi, Mali, Niger and Nigeria, all countries where early marriage is common, 8-15% of girls have had a child by the age of 15.[2] In Bahrain 18-20% of adolescents begin childbearing under the age of 16.[3] In Kuwait 40% of mothers giving birth in hospital were less than 16-years-old.[4]

Adolescent girls in rural areas are much more likely to start childbearing during adolescence than those living in urban areas — 24% compared to 16% in developing countries generally.[5] This too is associated with early marriage.

Adolescent childbearing outside marriage is often inversely related to the rate of early marriage.[2] Having a child outside marriage is relatively common in many countries where child marriage is uncommon. Latin America, the Caribbean, parts of sub-Saharan Africa and developed countries have higher rates of adolescent pregnancy outside marriage compared with Asia, North Africa and the Middle East. In Nigeria, where early marriage is common, fewer than 10% of adolescent girls give birth outside marriage. In Kenya where early marriage is less common, more than half of unmarried girls give birth before the age of 20.

Early marriage is seen by parents as protecting a girl but the chosen husband is often a much older, sexually experienced man, and early marriage may put a girl at risk of STIs and HIV as well as too early pregnancy. Very early marriage and childbirth mark a premature transition to adulthood for girls, and usually bring an end to education and to prospects of training for employment. ■

1. Haberland N et al. 2003. *Married Adolescents: An Overview.* WHO Consultation on Married Adolescents. Geneva.
2. Singh, S. 1998. *Adolescent childbearing in developing countries: A global review.* Studies in Family Planning 29, 117-136.
3. WHO Eastern Mediterranean Region. 1996. *Inter-country consultation on the promotion of health of adolescent girls through maternal and child health programmes.*
4. Al-Sherhan W, Al-Madany A, El-Hussini G. 1996. *Comparative analysis of the outcome of pregnancy in young and old teenage primigravidae*. J Kuwait Med Assoc 29: 41-44.
5. US Bureau of the Census. 1996. *World Population Profile.*

Health problems associated with adolescent pregnancy

Health risks for mother and baby are strongly associated with childbirth at an early age. Many of these risks are also associated with giving birth for the first time (primiparity). Since adolescent mothers are usually also first time mothers, it is difficult to separate these risks. For whatever reason, adolescent death in childbirth is disproportionately high.

Adolescents are more likely to give birth early to preterm and low birthweight babies, who are at higher risk of neonatal and perinatal mortality.

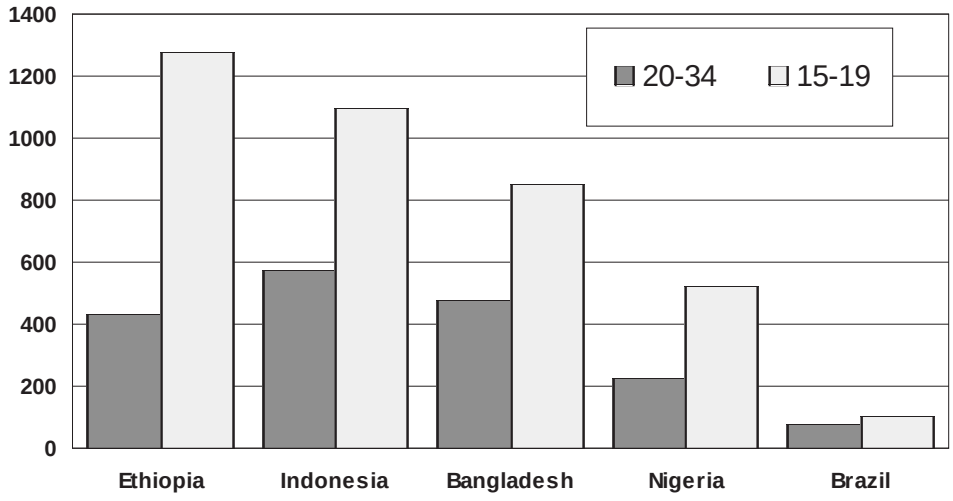
Maternal mortality

The risk of dying from pregnancy related causes is in many countries twice as high for adolescents aged 15-19 as for older women (Figure 1).

Risks to mother & baby

- Pregnant adolescents are more likely to have preterm or low birthweight babies. Girls under the age of 15 are at greatest risk.
- Young first-time mothers are more likely to die in childbirth.
- Babies born to adolescents have higher rates of neonatal mortality.

Figure 1: Maternal mortality per 100,000 women by age in selected countries



Source: Safe Motherhood Initiative Factsheet, 1998 Adolescent Sexuality and Childbearing.

Maternal mortality

Maternal mortality is the death of a woman while pregnant or within 42 days following pregnancy, related to or aggravated by the pregnancy or its management. Late maternal deaths occur up to one year after pregnancy. Direct obstetric deaths result from complications of pregnancy, labour or the puerperium (a period of about six weeks after childbirth) or from interventions, incorrect treatment or omissions. Indirect obstetric deaths result from disease aggravated by pregnancy. Pregnancy related deaths refer to all deaths in this period, regardless of cause.

Source: Maternal mortality in 2000: Estimates developed by WHO, UNICEF and UNFPA. WHO Department of Reproductive Health and Research, Monitoring and Evaluation.

This is due to a range of factors, including primiparity, poverty, low social status and lack of access to health services. Age may not be the decisive factor, although for very young adolescents below the age of 15, there are physical risks associated with the fact that the pregnant girl is not fully developed. Maternal mortality is associated with low rates of antenatal and obstetric care, lower social and economic status and low levels of education,[1] and is 4-6 times higher in rural areas.[2] These factors are influential in both developed and developing countries — a UK study of the 14 maternal deaths of adolescents between 1997 and 1999, showed that 13/14 were socially excluded, seven had reported domestic violence, seven had been poor attenders for antenatal care and four (three of them under the age of 16) were homeless.[3] However, 99% of the half a million maternal deaths each year occur in the developing world. In sub-Saharan Africa a woman has a 1 in 16 lifetime chance of dying in childbirth, odds that are 175 times worse than for women in developed regions.[4] Adolescent girls who live in poor communities in developing countries and who have little access to services or support may have the worst prospects of all.

Unplanned and unwanted pregnancies

There is a considerable variation in the extent to which adolescents plan to have babies. In Latin America and the Caribbean between a quarter and half of adolescent mothers said that their babies were unplanned, while in India, Indonesia and Pakistan only 10% to 16% were unplanned.[5] In the United States almost three-quarters of pregnant 15-19 year olds said that their pregnancies were unplanned. Married adolescents also have unplanned babies. In Ghana and Peru more than half of married adolescents, and in Botswana, Kenya, Malawi, Zimbabwe and Colombia more than a third, reported unplanned or unwanted babies.[6] In many countries 30%—60% of adolescent pregnancies end in abortion.[7] This figure is disproportionate considering that adolescent pregnancies make up just over 10% of pregnancies worldwide.

1. Bhatia J. 1993. *Levels and causes of maternal mortality in southern India. Studies in family planning, 24, 310-318.*
2. Villarreal M. 1998. *Adolescent fertility: Socio-cultural issues and programme implications.*
3. Confidential Enquiries into Maternal Deaths in the United Kingdom. 2001. *Why Mothers Die 1997-1999.* RCOG Press.
4. WHO. 2004. *Maternal mortality in 2000 : estimates developed by WHO, UNICEF and UNFPA.*
5. Alan Guttmacher Institute. 1997. Issues in Brief: *Risks and Realities of Early Childbearing Worldwide.*
6. Singh S. 1998. *Adolescent childbearing in developing countries: A global review.* Studies in Family Planning, 29, 117-136. Based on Demographic and Health Surveys.
7. WHO. 2004. *Adolescent pregnancy. Issues in adolescent health and development.*

Abortions

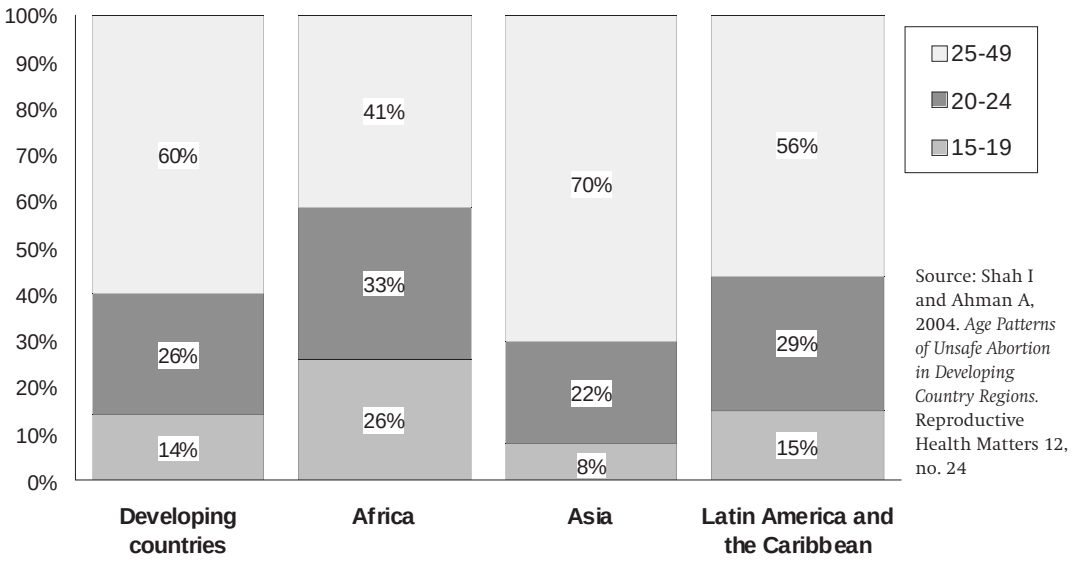
Of 19 million illegal abortions each year, 2.2 to 4 million are on adolescents,[1] who tend to seek abortion later in pregnancy and to delay seeking care in the event of complications. The later in pregnancy women undergo abortion, the greater the health risk. Where access to safe abortion is restricted, there is a greater likelihood that abortions are performed by unqualified persons in unhygienic circumstances.[2] In Africa and Asia, about 13% of maternal deaths are related to unsafe abortion.[3] The total number of unsafe abortions is highest in Asia. However, over 40% of abortion related deaths are in Africa.[3] A study in East and Central Africa found that 20% of maternal deaths were due to complications from abortion, and that most abortions were on young single women.[4]

Unsafe abortions

- Up to 4 million adolescents a year have unsafe abortions. If there are complications, they are more likely to delay seeking care.

Because of poor provision and for reasons of privacy, pregnant adolescents often seek abortions outside the public sector. In China and Laos young people need parental consent for an abortion in a state hospital.[5] Abortion is legal in India but a quarter of rural adolescents think it is illegal, a view shared by some providers, who refuse abortions to unmarried adolescents because they believe them to be only for married women.[6]

Figure 2: Percentage distribution of unsafe abortions, by age and region



Source: Shah I and Ahman A, 2004. *Age Patterns of Unsafe Abortion in Developing Country Regions.* Reproductive Health Matters 12, no. 24

1. Olukoya P et al. 2001. *Unsafe abortion in adolescents.* International Journal of Gynecology and Obstetrics, 75, 137-147.
2. Bott S. 2001. *Unwanted pregnancy and induced abortion among adolescent in developing countries: findings from WHO case studies* in Chander P. Puri and Paul F.A: Van Look (editors) *Sexual and Reproductive Health: recent advances, future directions,* New Delhi: New Age international Publishers.
3. World Health Organization. 2004. *Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2000,* 4th ed. Geneva.
4. Rogo K. 1993. *Induced abortion in sub-Saharan Africa.* East African Medical Journal, 70, 386-395.
5. UNFPA . 2000. Country Reports on ARH Issues. Bangkok.
6. Ganatra B and Hirve S. 2002. *Induced abortion among adolescent women in rural Maharashtra, India.* Reproductive Health Matters, 10, 76-85.

Preterm and low birth-weight babies

Adolescents are more likely than older women to give birth to preterm and low birth-weight (less than 2500 grams) or very low weight (less than 1500 grams) babies.[1] The youngest age groups run the highest risk.[2] Preterm babies are at extra risk of neonatal or perinatal mortality. Stress and lack of social support during pregnancy are also associated with preterm labour.

Perinatal, neonatal and infant mortality

Most deaths of babies during or soon after birth (perinatal or neonatal deaths) have several causes. However, hospital studies have found higher rates of neonatal mortality among babies born to adolescents. A study in the Netherlands showed increased risk of stillbirth in mothers aged 15-19 compared to women in their 20s.[3] These risks are even higher in babies born to girls aged 15 and below. A Swedish study found that babies born to 10-13 year olds were at greatest risk. The same trend has been observed in developing countries.[2]

Perinatal mortality includes stillbirths and deaths in the first week following birth. Neonatal deaths are deaths during the first 28 days following birth. Infant mortality is the death of a baby during the first year.

Hypertensive disease in pregnancy

A WHO review concluded that there probably is no special risk to adolescent mothers of hypertension associated with their young age.[4] However, hypertension is the most common complication of pregnancy amongst women having their first child and is therefore a common complication for many adolescent mothers.[5]

Anaemia

Approximately half of adolescent girls in the developing world are anaemic. Severe anaemia is an important indirect cause of maternal mortality. Nutritional deficiencies in folic acid or iron, and infectious diseases, such as malaria and intestinal parasites all contribute to adolescent anaemia. Iron deficient, anaemic adolescent mothers are more likely to give birth preterm to low birth-weight babies. The developing bodies of younger adolescents compete with the fetus for nourishment, exhausting iron and nutrition reserves. Anaemia can be treated by giving iron supplements. In Peru, schoolgirls who took iron supplements daily had lower rates of anaemia than girls who took them only two days a week.[6]

Problems in pregnancy

- Hypertension is a common complication of first pregnancies.
- Anaemia is an important cause of preterm and low birthweight babies.

1. WHO. 2004. *Adolescent Pregnancy*, *Issues in Adolescent Health and Development* cites 24 studies that found a greater risk of preterm births to adolescent mothers.
2. Otterblad Olausson P, Cnattingius S, Haglund B. 1999. *Teenage pregnancies and risk of late fetal death and infant mortality.* Br J Obstet Gynaecol 106: 116–121.
3. Buitendijk and Oosterhout R. 1993. *Obstetric data on teenage pregnancies in the Netherlands.* Ned Tijdschr Geneeskd, 137, 2536-2540.
4. WHO. 2004. *Adolescent Pregnancy*, *Issues in Adolescent Health and Development.*
5. UN briefing papers. 1998. *Human rights today : a United Nations priority.*
6. Gay J. et al. 2003. *What works: A policy and programme guide to the evidence on family planning, safe motherhood, and STI/HIV/AIDS interventions, module 1 - Safe Motherhood*. Policy Project, Futures Group, Washington.

Prolonged labour, obstructed labour and fistulae

A saying has been coined to underline the dangers of prolonged labour: 'The sun should not rise or set twice on a woman in labour'. This underlines the message that prolonged labour is dangerous, especially where a baby's progress is obstructed. Pregnant women experiencing prolonged or obstructed labour need emergency obstetric care, and may need delivery by Caesarean section. Adolescent mothers in poor, rural communities usually lack the means to seek emergency care.

Prolonged obstructed labour, usually the result of a small pelvis, or an awkwardly positioned baby, is more common in first time mothers, smaller women and girls below the age of 16 whose pelvis is immature.[1] Labour may continue for days without intervention. Pressure from the baby's head can cause necrosis, leading to a tear between the vagina and bladder (vesico-vaginal fistulae — VVF) or between the vagina and rectum (recto-vaginal fistulae). In nearly all cases the baby dies and the woman is left with a fistula that leaks urine or faeces. Obstetric fistula affects 50 000 to 100 000 women a year.[2] WHO estimates that 2 million women are living with unrepaired obstetric fistulae.[3] If a fistula is not promptly repaired, the disability can ruin a woman's life. Many are declared 'unclean' and deserted by husbands or families. Studies in Africa have shown that 58-80% of women with obstetric fistulae are under the age of 20, with the youngest aged only 12 or 13 years.[4] At Addis Ababa Fistulae Hospital the average age of fistulae patients was 17.8 years, and the average period of labour was 3.8 days.[5] In 2003, UNFPA launched a *Global Campaign to End Fistula* to end the silence on this hidden misery and stigma.[6] The campaign, active in Africa and south Asia, seeks to remove the causes of fistulae by delaying pregnancy and improving the quality of childbirth care.

Obstetric fistula leads to disability and stigma

- Prolonged and obstructed labour is more common in first time mothers and can lead to the death of mother and baby.
- Prolonged labour can also lead to obstetric fistula, a major cause of disability.
- UNFPA has launched a campaign to break the silence on fistula, to reduce the incidence, improve treatment, and end the stigma.

1. WHO. 2004. *Adolescent Pregnancy, Issues in Adolescent Health and Development.*
2. UNFPA and EngenderHealth 2003. *Obstetric Fistula Needs Assessment Report: Findings from Nine African Countries.*
3. WHO. 2005. *The World health report : 2005 : make every mother and child count.* Box 4.1, Chapter 4.
4. Ministry of Health, Kenya, and UNFPA. 2004. *Needs assessment of obstetric fistulain Kenya. Final Report.*
5. Muleta M. 2002. *Socio-Demographic Determinant of Obstetric Fistula in Ethiopia.* 25th International Congress of the Medical Women's International Association.
6. *Campaign to End Fistula.* http://www.unfpa.org/fistula/

The End Fistula campaign promotes prompt treatment for fistula, and a greater understanding and acceptance of the women who are affected. UNFPA is funding surveys in African countries to identify the size of the problem and to build the capacity and skills of health services to repair fistulae.[1] In Bangladesh, where 70,000 women live with fistula, UNFPA and the Bangladeshi government are establishing a Fistula Repair Centre as a training centre for South Asia.[2]

Puerperal sepsis

Mothers who experience complicated childbirth without access to hygienic health services are prone to infection after childbirth. Puerperal sepsis is one of the main causes of maternal mortality among adolescents.[3] The risk of puerperal sepsis or postpartum infection increased in cases of long or obstructed labour.

Malaria

Women who are pregnant for the first time are more vulnerable to malaria parasites. In one Mozambique study, more than quarter of adolescent girls who died in or after childbirth died from malaria — their mortality rate from this disease was double that of older women.[4] Adolescent first time mothers who are infected with HIV are at even greater risk. The control of malaria in pregnancy is based on a three-pronged strategy that includes case management, insecticide treated bed-nets (ITNs) and Intermittent Preventive Treatment (IPT).[5] IPT involves the administration of curative treatment doses of an effective antimalarial drug at predefined intervals during pregnancy, The Roll Back Malaria (RBM) Partnership also calls for ITNs to be promoted among pregnant women in all areas where malaria is endemic. Studies in Kenya and Thailand show that ITNs can reduce malarial infection in pregnant women and reduce anaemia. However, adolescents were least likely to continue to use the bed-nets throughout their pregnancy.[6]

HIV and AIDS

In parts of south east and central Africa, 20-30% of pregnant girls and women are infected with HIV, which is also spreading rapidly in south east Asia. A pregnant woman who knows her HIV status can take extra care of herself, receive appropriate support, and take steps to prevent transmission to her baby. As access to counselling and testing and to anti-retroviral (ARV) treatment becomes available, pregnant girls and women will be a priority. It is important to ensure that adolescent mothers are included in counselling and testing programmes and that infected pregnant adolescents and mothers are included in ARV regimes and given appropriate advice on infant feeding options to reduce mother-to-child transmission. ■

1. UNFPA and EngenderHealth. 2003. *Obstetric Fistula. Needs Assessment Report. Findings from Nine African Countries.*
2. UNFPA. 2003. Obstetric Fistula:Factsheet: *Obstetric Fistula —Moving Beyond the Silence.*
3. WHO. 2004. *Adolescent Pregnancy*, Issues in Adolescent Health and Development.
4. Granja A et al. 1998. *Malaria-related maternal mortality in urban Mozambique.* Ann Trop Med Parasitol 92: 257-263.
5. Roll Back Malaria Partnership. 2005. *Roll Back Malaria. Global Strategic Plan* 2005-2015.
6. WHO. 2004. *Adolescent Pregnancy*, *Issues in Adolescent Health and Development.*

Social and economic factors — a circle of exclusion

Adolescent and unwanted pregnancies are linked with social deprivation. Being poor and disadvantaged can be a cause and a consequence of pregnancy. For unmarried girls in some countries, early childbirth can bring stigma and an end to education. An adolescent who is turned out of her home may not be able to support herself and her baby. The social and economic consequences of adolescent pregnancy are profound for the adolescents themselves, for their babies and for society. They are of great significance for policy makers. These issues are dealt with only briefly here, as this document focuses on health issues.

Loss of education and the road to poverty

Pregnant adolescent girls may leave school because of social expectations, stigma, or because they are expelled when their pregnancy becomes known. Even where countries have policies to keep pregnant girls in school, social pressure may force them to leave. In Chile the Ministry of Education recommends that pregnant adolescents stay in school, but many are pressured into leaving.[1] In Kenya as many as 10 000 girls a year leave school because of pregnancy.[2]

Repeat pregnancies and poverty

An adolescent girl who has one unintended pregnancy is vulnerable to subsequent unwanted pregnancies. Studies in Latin America showed that younger adolescent mothers had a shorter interval until their next pregnancy, and had more future births than older adolescent mothers.[3] Adolescent motherhood was associated with poor socioeconomic conditions. In Mexico 26% of adolescent mothers lived in poverty, compared with only 4% of older mothers. Young mothers from poor families were especially affected. Early childbearing can entrench a vicious circle of poverty. Adolescents are also vulnerable to abuse. It is estimated that one in five pregnant adolescents experiences physical abuse.[4]

Social exclusion

- Adolescent pregnancy is linked with social deprivation and stigma.
- Pregnant adolescents are likely to be excluded from education.
- Many are at risk of violence.

1. The Center for Reproductive Law and Policy. 1999. *Women's Rights in Chile:* Shadow Report 14.
2. Pathfinder International. 2002. *Adolescents - Overview and facts. A comprehensive training course: Reproductive health services for adolescents.* Vol 16.
3. Buvinic M. *The costs of adolescent childbearing: evidence from Chile, Barbados, Guatemala, and Mexico.* Studies in Family Planning 1998; 29: 201-209.
4. Parker, B., McFarlane, J. and Soeken, K. 1994. *Abuse during pregnancy: Effects of maternal complications and birth weight in adult and teenage women.* Obstetrics and Gynecology, 84, 323-328.

How health services fail to meet needs of pregnant adolescents

Timely antenatal care, care in childbirth and postnatal care are all critical for safe motherhood. The lives of pregnant girls or women and their babies are put at risk by one or more of 'the three delays':[1]

- a delay in recognizing complications and seeking care
- a delay in reaching an appropriate health care facility
- a delay in receiving good quality care at the facility

Delay in seeking care

A delay in seeking care can be due to lack of knowledge, poverty, lack of power to take decisions, lack of money, or cultural factors including local concepts of illness.[2] In general, adolescents seek care later, and receive less. A young adolescent may not know she is pregnant, and is less likely to identify vaginal bleeding in early pregnancy as a danger signal.[3] Pregnant girls lack knowledge about what services exist, when care should be sought and how to find care at the right time. Unmarried pregnant girls may be embarrassed to seek help from judgmental or critical service providers. For married adolescents, a decision to seek, or not to seek, antenatal care may be taken by the husband, mother-in-law or other members of her husband's family.

Health services often do not meet the needs of pregnant adolescents. Care may unavailable in the places where pregnant girls live or be otherwise inaccessible. Cost may inhibit adolescents from seeking care. Pregnant girls have little money of their own and usually depend on support from others.

Adolescent mothers less likely to receive skilled care

Family Health International looked at data from 15 developing countries to see which mothers did and did not receive care. This demonstrated:

- in 7 of 15 countries, adolescents below the age of 19 were significantly less likely than women aged 19-23 to receive skilled antenatal care;
- in 7 of 15 countries, adolescents below the age of 19 were significantly less likely than women aged 19-23 to receive skilled childbirth care;
- in 5 of 15 countries, babies born to adolescents below the age of 19 were significantly less likely to be immunized, than babies born to older women.

Source: Family Health International 2003. Reynolds, Wong, Harcum, Toms, Thapa *Adolescents' Use of Maternal and Child Health Services in Developing Countries. Report used* Demographic and Health Surveys (FDHC) data from 15 countries.

1. WHO. 2003. *Maternal deaths disproportionately high in developing countries.* Press release.
2. WHO. 2002. *A framework to assist countries in the development and strengthening of national and district health plans and programmes in reproductive health.*
3. Stevens-Simon C, Roghmann K and McAnarney E. 1991. *Early vaginal bleeding, late prenatal care, and misdating in adolescent pregnancies.* Pediatrics, 87, 838-840.

Girls who are poor,[1] still at school or under 18,[2] are less likely to attend a health facility. Rural unmarried adolescents are the least likely to receive antenatal care.

- In Nepal, married adolescents in urban areas were four times more likely to receive antenatal care than those in rural areas.[3]
- In parts of Nigeria, unmarried adolescent girls were less likely to seek pregnancy care.[4]
- In Kenya one in three pregnant girls attending school received no antenatal care.[5]
- In Egypt adolescents received less antenatal care and received it later than older women.[6]

A pregnant girl receives immunization as part of her antenatal care. *AP Photo/Ron Heflin*

Delay in reaching a facility,

Use of health care is a learned behaviour. Girls who miss antenatal care are less likely to be prepared for an emergency before, during or after childbirth. Rural women may be several kilometres walk from the nearest health care facility. A pregnant adolescent is unlikely to have cash for transport and care, and her mobility may be restricted by social conventions about travelling unescorted. Unmarried adolescents may fear being stigmatised if they visit a nearby clinic.

Delay in obtaining care

Delays in obstetric care may result from a shortage of trained staff, equipment or supplies. Staff may lack skills or be unwilling to provide services to unmarried adolescents . Staff need to be sensitized to focus on adolescents in a non-judgmental manner, and can be trained to provide clear explanations using appropriate language and to deliver high-quality treatment.[7] Fees often remain a barrier to adolescents with no income.

1. Morris D et al. 1993. *Comparison of adolescent pregnancy outcomes by prenatal care source.* The Journal of Reproductive Medicine, 38, 375-380.
2. LeGrand T and Mbacke S. 1993. *Teenage pregnancy and child health in urban Sahel.* Studies in Family Planning, 24, 137-149.
3. Mathur S, Malhotra A and Mehta M. 2001. *Adolescents girls' life aspirations and reproductive health in Nepal.* Reproductive Health matters, 9, 91-100.
4. Olukoya P. 1996. *Provision of reproductive health services for adolescents - report of a study in the local governments' areas of Nigeria.* Early Childhood Development and Care, 120, 95-117.
5. Zabin L and Kiragu K. 1998. *The health consequences of adolescent sexual and fertility behaviour in sub-Saharan Africa.* Studies in family planning, 29, 210-232.
6. Galal S. 1999. *A comparison between adolescents (15-19 years) and 20-24 years old mothers in Egypt and Sudan.* League of Arab States - Population Research Unit. Arab Conference on Maternal and Child Health.1999.
7. WHO. 2003. *Adolescent Friendly Health Services: An Agenda for Change.*

What health care do pregnant adolescents need?

For a safe pregnancy, childbirth and postnatal experience, mothers and babies need a continuum of care that starts in the household and community and extends into health care system, including emergency treatment if a birth is prolonged or obstructed. Special attention may be necessary for this continuum to function for adolescent girls and their babies.

Self-care

Pregnant girls and women need to be well informed about protecting their own health and that of their babies-to-be. For self-care to be effective, a pregnant adolescent needs relevant knowledge and the skills, means and support to use it. Adolescents require support from family members who often make decisions about how food is shared and how health care is sought, and the community, where a local health care worker or traditional birth attendant may teach pregnant women about warning signs in pregnancy. Important lifestyle factors include good diet and nutrition, giving up smoking, avoiding smoky environments and not using alcohol. All adolescents, but especially those who are pregnant, need support to achieve this. A pregnant adolescent also requires opportunities to learn about immunization, hygiene, infant feeding and neonatal care and about the prevention of sexually transmitted infections (STIs) and HIV and AIDS. A pregnant adolescent should know how, where and when to seek care, and should make a birth plan (see antenatal care below). Information is also important for her family who can ensure that she is protected from heavy work, obtains enough to eat, seeks care at the right time and is protected from domestic violence. Adolescents who have an unplanned pregnancy have probably not linked into the community social networks that can underpin self-care for older women.

The community needs information to tackle dangerous cultural misconceptions, for example, that unassisted childbirth is 'natural', or that a woman shows courage by enduring a long labour without intervention.

Antenatal care

- Pregnant adolescents need a continuum of care from self-care to care at a health facility.
- Adolescents need information and support to make a birth plan.
- Families and communities also need information so they can support pregnant adolescents.

Antenatal care

Antenatal care provides an opportunity to monitor the health of mother and baby, to detect hypertension, anaemia or malaria, and offer tetanus toxoid immunization and iron and nutrition supplements as appropriate. Tests for STIs and HIV should be offered with counselling and appropriate treatment, including appropriate support and action to prevent mother-to-child transmission.

WHO recommends that pregnant women should develop a birth plan[1] to include the presence of a skilled attendant at the birth, care in the home following childbirth and an emergency plan for referral in case of complications. The plan addresses questions such as how transport costs will be met and who will travel with a pregnant woman. A pregnant adolescent requires support from family or community so that she owns, understands and is committed to acting on this plan.

An adolescent aged over 16 years, who is happy about her pregnancy, has social support, a skilled birth attendant and a birth plan that covers emergencies, is at no extra risk and does not need different antenatal care from older pregnant women.[2] A study in India showed that married adolescent first time mothers who returned to their parental homes during pregnancy and childbirth, experienced no greater difficulties than older mothers.[3]

Pregnant adolescents who lack good information, are unprepared for the birth and out of touch with services are the most likely to need support. Unmarried adolescents less than 18 years old who have an unwanted pregnancy, are less likely to have social support. A married adolescent may also lack access to care.

Childbirth

One in four maternal deaths in developing countries occurs during labour or delivery.[4] WHO recommends assistance from a skilled birth attendant, such as a midwife, doctor or nurse, who has been trained to manage pregnancies, childbirth and the immediate postnatal period, and to identify, manage and refer women with complications and their newborns.[5]

The most appropriate attendant is a woman with midwifery skills who lives close to the community, is qualified to provide preventive care, detect abnormal conditions in mothers and infants, assist women through labour and birth and is able to prescribe

Skilled attendants needed

- More than one in four maternal deaths in developing countries occurs during labour or childbirth.
- Skilled attendants can arrange prompt transfer to emergency obstetric care.
- Pregnant adolescents in rural areas are least likely to have a skilled attendant present at the birth.

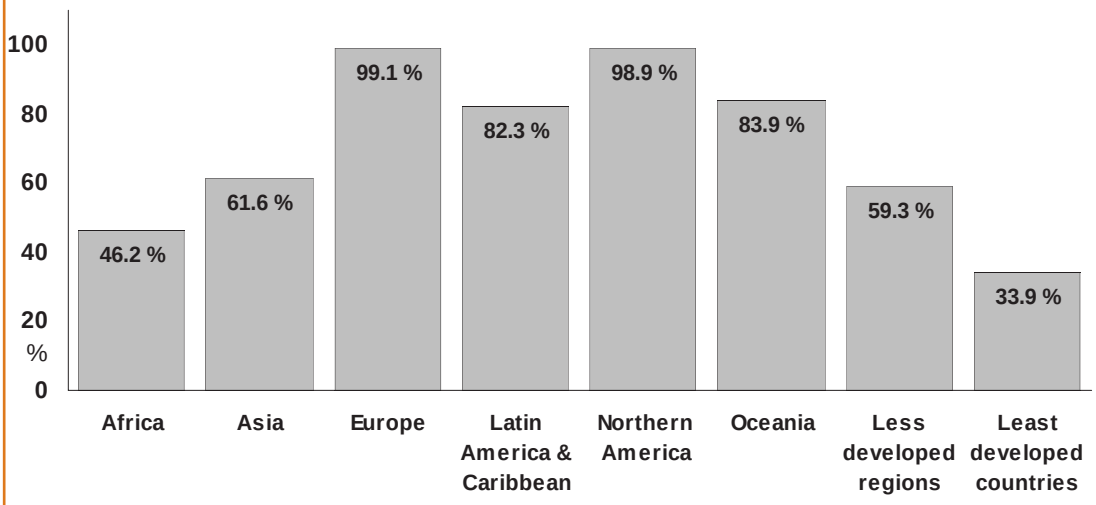
1. WHO. 2003. *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice.*
2. World Health Organization. 2004. *Adolescent Pregnancy*. Issues in Adolescent Health and Development.
3. Sundari T. 1993. *Can health education improve pregnancy outcome?* Report of a grassroots action-education campaign. Journal of Family Welfare, 39, 1-12.
4. Koblinsky M et al. 2000. *Issues in Programming for Safe Motherhood.* MotherCare Arlington.
5. WHO. 2004. *Making pregnancy safer: the critical role of the skilled attendant.* A joint statement by WHO, ICM and FIGO.

essential drugs.[1] When complications arise, those providing midwifery care need to be able to carry out emergency measures, get medical assistance or refer women to an appropriate health facility. For a number of reasons, traditional birth attendants (TBAs) are not defined as skilled attendants by WHO, the International Confederation of Midwives (ICM) or the International Federation of Gynaecologists and Obstetrics (FIGO).[2] Research indicates that extra training for TBAs has not contributed to a reduction in maternal mortality.[3] However, it is recognized that TBAs are the only source of care available to some women during pregnancy, and that many women turn to TBAs if they cannot access or afford care from doctors or midwives. Within the skilled attendant strategy,[4] TBAs can act as advocates, encouraging women to seek care from skilled attendants, giving social support as a companion during and after childbirth and offering moral and emotional support, especially to very young women who are ill-prepared and afraid.

Adolescents are not usually at extra risk during childbirth if a pregnancy is uneventful and appropriate preventive measures have been taken. Attempts to predict which mothers will have difficult births show low accuracy. Rather than trying to predict problems, the critical need is to recognize signs of distress and to effect a rapid transfer to specialist obstetric care.

In the developing world as a whole, only six in ten women giving birth are assisted by a skilled attendant (Figure 3 shows that the average for less developed regions is 59.3% of births). This falls to fewer than half of women giving birth in Africa (46.2% of births) and to one in three women giving birth in the least developed countries (33.9% of births).

Figure 3: Proportion of births where a skilled attendant is present for women 15-49 years by region— 2005 estimates



Source: WHO 2005 Skilled attendant at birth - 2005 global estimates, WHO Monitoring and evaluation

1. WHO. 1998. World Health Day, Safe Motherhood. *Ensure Skilled Attendance at Delivery* (WHD 98.6).
2. WHO. 2004. *Making pregnancy safer: the critical role of the skilled attendant* A joint statement by WHO, ICM and FIGO.
3. Sibley L and Snipe T. 2004. *What can meta-analysis tell us about traditional birth attendant training and pregnancy outcomes?* Midwifery; 20:51-60.
4. WHO. 2004. *Global action for skilled attendants for pregnant women.*

Where are the adolescents who give birth without a skilled attendant?

Adolescent mothers are less likely to have a skilled attendant present at the birth, but differences between countries are more significant than age differences. In 1998-99 in India, 31% of adolescents and 35% of older women gave birth at a recognised facility.[1] In Bangladesh the figures were 6.7% for adolescents and 8.9% for older women.[1] In Nepal, rural and urban differences are more significant than age differences alone — 13% of rural adolescents give birth in a hospital or institution, compared to 70% of urban adolescents. However, age also remains a significant factor. In Egypt, only 11% of women aged 20-24, but 73% of adolescents, gave birth at home.[2] In Egypt, TBAs deliver 39% of babies born to women aged 20-24 years, but 60% of babies born to adolescents.[3]

1. Jejeebhoy S. Unpublished data cited in WHO. 2003. *Adolescent Pregnancy: Unmet Needs and Undone Deeds.*
2. ICRW and EngenderHealth. 2001. *Adolescent reproductive health in Nepal: Using participatory methods to define and respond to needs.*
3. Galal S. 1999. *A comparison between adolescents (15-19 years) and 20-24 years old mothers in Egypt and Sudan.* League of Arab States - Population Research Unit.

Care after childbirth

Many maternal deaths occur because the mother suffers uncontrolled bleeding after giving birth (postpartum haemorrhage). Nearly a quarter of all obstetric deaths are due to haemorrhage.[1] Postpartum haemorrhage is often an associated factor in deaths officially listed as from other causes. Half of maternal deaths occur within 24 hours of childbirth and 70% occur within a week. Postpartum care is needed to diagnose and treat complications, and can be an opportunity for counselling on issues such as contraception and infant feeding. However, postpartum care is even less well developed than antenatal care. What data is available does not suggest that adolescent mothers receive postpartum care at a lesser rate than older first time mothers, but it does indicate the need for all round improvement. In Zimbabwe 43% and in Ghana 56% of adolescent mothers receive postpartum care, but this figure falls to around 33% in the Sudan, 24% in Egypt, 18% in India and 16% in Colombia.[2] Studies in developed countries show that parenting programmes can improve mother-infant interaction, language development, and parental attitudes and knowledge.[3] However, there is little or no formal support for new adolescent mothers in developing countries, especially for those who are unmarried.

1. WHO. 1996. *Mother-baby package: Implementing safe motherhood in countries.* Chapter 5.
2. Jejeebhoy S. 2000. Unpublished data based on IIPS and ORC Macro. Cited in WHO. 2003. *Adolescent Pregnancy: Unmet Needs and Undone Deeds.* (Unpublished).
3. Coren E, Barlow J. 2002. *Individual and group-based parenting programmes for improving psychosocial outcomes for teenage parents and their children.* The Cochrane Library, Issue 2, 2002. Oxford: Update Software.

What kind of programmes offer a way forward?

There is an urgent need for programmes that address the safety, health and social needs of adolescent girls who become pregnant. Pregnant adolescents are vulnerable to serious health risks, social exclusion and loss of opportunities. Negative factors can contribute to poor nutrition and poor health for their babies and to a cycle of deprivation from one generation to the next. Adolescent girls, at the beginnings of adult life, have a special need for protection. A comprehensive response will include a continuum of care, as outlined in the WHO Making Pregnancy Safer initiative.[1] This strategy for improving maternal and newborn health seeks to build political commitment and partnerships to expand the reach of the health system. It calls for human resources to be developed so that, even in remote areas, women give birth with a skilled attendant present.

Adolescent girls and their communities need programmes to enable them to learn about and practise self-care, and access to maternal and child health services. In addition, pregnant adolescents may need:

- financial support for health care and diet
- advice and help with breastfeeding
- help to return to school or training
- shelter and services if excluded from home,
- contraceptive advice and supplies
- support to stop smoking
- counselling over options for adoption, or termination, where legal.

There has been little research into programmes designed to improve care for pregnant adolescents. There is also a lack of evidence to say whether special clinics lead to improved outcomes. Adolescents who attended a young women's and teenage pregnancy clinic in the USA missed fewer antenatal appointments, underwent fewer Caesarean sections and delivered heavier babies. They received more follow up care and were more likely to breastfeed and, subsequently, to use contraceptives.[2]

A hospital based programme in Portugal offered pregnant adolescents antenatal care,[3] continuity of care and advice on nutrition, hygiene and preventing sexually transmitted diseases. Adolescents on this programme had a reduced need for care in a high-risk newborn unit, and gave birth to heavier babies.

The Resource Mother for Pregnant Teens Program in the USA selected women with warmth and experience to provide social support through home visits to 1,900 primiparous adolescents.[4] The focus was on antenatal care and on reducing risk factors

1. WHO. 2004. *Action for Making Pregnancy Safer.*
2. Bensussen-Walls W and Saewyc E. 2001. *Teen-focused care versus adult-focused care for the high-risk pregnant adolescent: An outcomes evaluation.* Public Health Nursing, 18, 424-435.
3. Silva M, Cabral H and Zuckerman B. 1993. *Adolescent pregnancy in Portugal: Effectiveness of continuity of care by an obstetrician.* Obstetrics and Gynecology, 81, 142-146.
4. Rogers M, Peoples M and Suchindran C. 1996. *Impact of a social support program on teenage prenatal care use and pregnancy outcome.* Journal of Adolescent Health, 19, 132-140.

(smoking, drug use and poor nutrition) and facilitated referrals to community and health services. Girls received better antenatal care, earlier.

Adolescent friendly

- Few programmes are targeted on pregnant adolescents.
- Mainstream services need to become more adolescent friendly.

National policies

National policies, advocacy, education programmes and laws set a framework to protect young people against too early sex, sexually transmitted infections or unwanted pregnancies. National laws govern the extent to which pregnant adolescents can continue with education, make choices about adoption or termination, and consent to medical treatment. National initiatives can reduce stigma, encourage adolescent mothers to enhance their prospects and choices, and fathers to remain involved with a baby's upbringing. National or regional polices define adolescent entitlement to antenatal care, care in childbirth and postnatal care.

- The Costa Rica Code of Childhood and Adolescents,[1] guarantees antenatal and postpartum care, child health and HIV/AIDS related care to pregnant adolescents.
- Adolescent Reproductive Health Policy in Ghana recognizes the right of adolescents to sexual and reproductive health information and services, including protection against unsafe abortions.[2]
- The Minor's Code in Bolivia guarantees antenatal and postpartum care for pregnant adolescents, and free childbirth services in state hospitals.[3]
- Catamarca province in Argentina offers free antenatal care for pregnant adolescents without health insurance and covers the cost of birth[3].

Outreach programmes

Services for pregnant adolescents in rural areas should link clinic based and community services at village level. Outreach teams should identify pregnant adolescents and put them in touch with services. Advocacy work is needed to educate husbands and families who act as gatekeepers to services for adolescent girls. ■

Bangladesh — newly-wed outreach programme

The Pathfinder Rural Services Delivery Program (RSDP) in Bangladesh identifies newly-wed couples and informs adolescent wives who are pregnant about antenatal care, nutrition and breastfeeding. A higher proportion of these young women had a health professional present at the birth.

Source: Barkat A et al. 1999. *The RSDP/Pathfinder Bangladesh Newlywed Strategy: Results of an Assessment.* Pathfinder-Focus on Young Adults.

1. The Costa Rica Code of Childhood and Adolescents and the General Law on the Protection of Adolescent Mothers can be found at http://annualreview.law.harvard.edu/population/children/childrenlaws.htm
2. Center for Reproductive Law and Policy. 2001. *Women of the World: Laws and Policies Affecting their Reproductive Lives. Anglophone Africa*.
3. Center for Reproductive Law and Policy. 2001. *Women of the World: Laws and Policies Affecting their Reproductive Lives. Latin America and the Caribbean*.

Financial support in pregnancy

- In Bo, Sierra Leone, communities raised levies with the support of the local chief.[1] The number of pregnant women with complications who went to Bo Government Hospital rose. Half the women paid back their loans in full, and a third in part.
- In Ekpoma, Nigeria, 12 clans launched loan funds for transport, drugs, blood and hospital fees.[2] In the first year, 93% of the 380 loans were repaid in full.
- In rural Uttar Pradesh, India, PRIME II and NGO Shramik Bharti introduced Community Partnerships for Safe Motherhood in 40 communities near Kanpur.[3] Community health committees registered pregnant women, facilitated access to care, identified transport and established emergency loan mechanisms.

1. Fofana P et al. 1997. *Promoting the use of obstetric services through community loan funds, Bo, Sierra Leone.* International Journal of Gynaecology & Obstetrics 59, Suppl 2, S225-S230.
2. Chiwuzie J et al. 1997. *Emergency loan funds to improve access to obstetric care in Ekpoma, Nigeria.* International Journal of Gynaecology & Obstetrics 59, Suppl 2, S231-S236.
3. PRIME Voices 20, 2003. *India: Involving Men in Partnerships for Safe Motherhood.*

Linking health care, social care and education

- The Centro de Pesquisad das Doenças Materno-infantis de Campinas (CEMICAMP) in Santa Barbara D'Oeste, Brazil, offers social support and antenatal care.[1] Adolescents join a support group to prepare for birth and learn how to care for their babies. The number of girls attending antenatal care rose by a third.
- The Asociación Mexicana de Educación Sexual (AMES), in Mexico offered family planning information and counselling during pregnancy and after the birth.[2] Adolescents who attended antenatal education or received counselling were more likely to space subsequent births than those who did not attend (86% to 64%) .

1. Díaz M. 2000. *Evaluating the Project Stage III: Researching the utilization and dissemination of findings from a project on the improvement of contraceptive choice within the context of reproductive health.* CEMICAMP.
2. Corona E et al. 1988. *A Study to Evaluate the Quality of Care in a Comprehensive Model of Service Delivery to Adolescent Mothers in a Mexico City Hospital.* Asociación Mexicana de Educación Sexual

Post abortion care

- KA HIgh Risk Clinic at Kenyatta National Hospital in Nairobi, Kenya, supports adolescents who have given birth or had an abortion with counselling about STIs, HIV and AIDS and contraception.[1] The clinic has links with schools and communities and a telephone hotline for follow-up care.
- Adolescents who have an abortion at the Escola Assis Chateaubriand Maternity Hospital in Fortaleza, Brazil, are referred to an adolescent centre for counselling from staff trained in adolescent needs.[2] Of those who had an induced abortion, 56% continued contraceptive use for at least a year.

1. Herrick. J. 2002. *Postabortion Care (PAC) Programs for Adolescents.* FOCUS on Young Adults, YARH Briefs No. 5.
2. WHO. 2003. *Adolescent Pregnancy: Unmet Needs and Undone Deeds.*

Women's Centre of Jamaica — adolescent mothers return to school

Adolescent girls in school at a WCJF centre.

In 1978, the Women's Centre Programme for Adolescent Mothers was established in Jamaica, in response to a high level of adolescent pregnancy. The programme focused on 12-17 year-old girls who had dropped out of school due to pregnancy. The Centre helped them to continue their education, and encouraged them to return to school after the birth of their babies and to delay a second pregnancy.

In 1991 the programme became the Women's Centre of Jamaica Foundation (WCJF), operating under the auspices of a government ministry. The WCJF focuses on education, training and developmental counselling, improving levels of employment and productivity and delaying further pregnancies. By April 2004 more than 30 000 girls had been assisted at seven WCJF centres and six outreach stations. Girls deepen their understanding of reproductive health and learn how to care for themselves and their babies. After two terms most return to school.

A 1996 study showed that half the girls who had been through the programme had only one child. The average spacing to a second child was 5.5 years. A 1997 evaluation found that the programme had reached 51% of girls who gave birth under the age of 16. School-age children of girls who had been through WCJF were all in school and, of the daughters who themselves had reached adolescence, none had become pregnant.

> 'The programme helps the adolescent to delay the second pregnancy. It provides day care nurseries where mothers can leave their children while they continue with school or occupational activities.'
>
> DR SHEILA CAMPBELL-FORRESTER, WESTERN HEALTH AUTHORITY, JAMAICA

The Jamaica Education Code has been changed to allow pregnant and parenting adolescents to continue their education. The centre prepares final year girls for their school examinations and has been approved by the Ministry of Education as an examination centre. Girls say that WCJF taught them to value themselves and their babies. One said: "The Women's Centre really changed my life. (It) taught me to think You are a woman. You have a child. You have a goal."

Sources: McNeil P. 1998. *Preventing second adolescent pregnancies by supporting young mothers*.
Dr Sheila Forrester, Regional Director, Western Health Authority, Montego Bay. 2003. Personal interview.
Family Health International 1996 *Case Study of the Women's Center of Jamaica Foundation.*
Mrs Beryl Weir, Executive Director, Women's Centre of Jamaica Foundation. 2004. Personal correspondence.

Conclusions and consensus statements

A WHO Technical Working Group in 2003 considered the role of health care, communities and other sectors in meeting the needs of pregnant adolescents and their babies. Experts drew up consensus statements outlining important principles in addressing needs and filling gaps in research.

Legal and policy framework

- Modify laws and policies to enable adolescents to carry and care for their babies without compromising education or work opportunities.
- Modify adoption laws to facilitate the adoption of newly born babies of adolescents, especially very young adolescents, who do not wish to keep them.
- Ensure that the birth registration system encourages very young adolescents and those who are unmarried to register their babies.
- Modify family law to recognise the rights and responsibilities of adolescent fathers and ensure that children of unmarried adolescents do not lose their rights to inheritance etc.
- Discourage the sale of tobacco and alcohol to adolescents.

Health Care Systems

- Most interventions are appropriate for all women, particularly from a bio-medical perspective, but special approaches or modes of care are necessary to address the social and cultural context of adolescent pregnancy. A health care system that is responsive to the needs of adolescents, will be responsive to the needs of all women.
- Very young adolescents aged 15 years or less need to be managed differently by the health care system, irrespective of other demographic factors, such as marriage. Take measures to ensure that health services are in contact with all pregnant very young adolescents.

Non-health formal and informal sectors

- Adolescent pregnancy is a societal responsibility, requiring a multi-sectoral, collaborative approach. The role played by non-health sectors[1] must be recognized and resources allocated accordingly.
- The link between adolescent pregnancy and poverty needs to be recognized.
- Pregnancy in adolescence should be recognized as a male and female issue.
- Pregnant adolescents need protection from discrimination and abuse.
- Protective and supportive interventions from non-health institutions and services should be targeted at pregnant adolescents.

1. Non-health sectors include education, social welfare, legislative bodies, the judiciary, other government ministries (children, youth and families, sport, recreation and culture) the media, religious, workplace and labour organizations, political parties, NGOs, CBOs and other groups within civil society.

Mother and baby

- Interventions that benefit adolescent mothers usually benefit their new-born babies as well.
- The rights of the pregnant adolescent and the new born baby need to be protected. Appropriate policy interventions to address social, cultural and religious barriers within the community need support from other formal sectors. as well as the health care system.

Family and community

- A pregnant adolescent needs to be empowered for self-care to preserve her health and that of her newborn.
- It is important to involve communities and families in planning, implementing and evaluating activities to reduce maternal mortality in adolescents.
- Families and community can be supportive or obstructive; community involvement is crucial to the viability of support for pregnant adolescents.

Adolescent participation

- Young people themselves are part of the community and should be involved in defining and providing services.
- The quality of information provided is very important. Deciding on the content of information and skills packages requires the involvement of young people.

Research gaps in relation to pregnant adolescents

The Technical Working Group identified a need for better data on:

- Adolescents and their psychological state, especially very young adolescents,
- Adolescent maternal illness and mortality,
- What pregnant adolescents want and need by way of support,
- What adolescents think about early marriage and pregnancy,
- How pregnant adolescents are offered choices between having their babies, abortion and adoption, and how they make such choices.

There was also a need to:

- Evaluate the effectiveness of programmes in developing countries,
- Evaluate social care models that target pregnant adolescents,
- Assemble evidence about intersectoral approaches to programming,
- Clarify how to make services ‘pregnant adolescent friendly’,
- Document a rights based approach to reducing maternal mortality,
- Learn how to reduce sexual violence and abuse of pregnant adolescents,
- Learn what programmes are effective in delaying the first or second birth,
- Assess whether school health services are cost effective,
- Develop better ways of reaching out of school youth,
- Find a route to male involvement and assess whether it makes a difference,
- Identify whether and how the role of the media can become more positive.

The unmet needs of pregnant adolescents

Between 14 million and 15 million girls and young women give birth each year, accounting for more than 10% of births worldwide. Because of concern at high levels of unwanted pregnancy amongst adolescents, and of sexually transmitted infections and HIV and AIDS, many countries have introduced programmes to delay early sexual debut and reduce high levels of adolescent pregnancy.

However, adolescent pregnancies are still common, and WHO identified the care of pregnant adolescents and the safe delivery and care of their babies as an area of need which was not being adequately addressed. Adolescents account for 15% of the global burden of disability for maternal conditions, and 13% of all maternal deaths.

On 5-6 August 2003 the World Health Organization, with the support of the United Nations Population Fund (UNFPA) convened a Technical Working Group of experts in Geneva to seek ways of contributing to the Millennium Development target to reduce maternal mortality, through specific interventions for pregnant adolescents, and babies born to adolescents. The expert group discussed key messages, best practices and effective strategies, and identified gaps in research that need to be filled.

A working paper summarizing and reviewing research and programme information from around the world, *Adolescent Pregnancy: Unmet Needs and Undone Deeds,* and a subsequent WHO document, *Adolescent Pregnancy : Issues in Adolescent Health and Development* (2004. WHO Discussion Papers on Adolescence) can be found on WHO website at http://www.who.int/child-adolescent-health/publications/publist.htm

This document is designed to draw the attention of policy makers and programme managers to the need to improve care for pregnant adolescents, both inside and outside the health care system. In doing so, they can contribute to the Millennium Development Goals, connect services better with adolescents, and take steps that will improve maternal health for women of all ages.

World Health Organization

UNFPA

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