

# Maternal mortality

## Evidence brief

*To improve maternal health, barriers that limit access to quality maternal health services must be identified and addressed at all levels of the health system.*



### Key facts

- ▶ In 2015, approximately 830 women die from preventable causes related to pregnancy and childbirth.
- ▶ 95% of all maternal deaths occur in low and lower-middle income countries.
- ▶ Young adolescents (aged 10-14) face a higher risk of complications and death as a result of pregnancy than older women.
- ▶ Appropriate care provided by skilled health professionals competent in sexual and reproductive health care, before, during and after childbirth can save the lives of women and newborn babies.
- ▶ Between 1990 and 2015 maternal mortality worldwide dropped by almost 44%.

Maternal mortality is unacceptably high. About 830 women die from pregnancy- or childbirth-related complications around the world every day. In 2015, 303 000 women died during and following pregnancy and childbirth.<sup>1</sup> Almost all of these deaths occurred in low-resource settings, and most could have been prevented.

### Progress towards achieving the Sustainable Development Goals

Improving maternal health is one of the seventeen Sustainable Development Goals (SDGs) adopted by the international community in 2015. Under SDG3.1.1, countries committed to ending preventable maternal mortality and to reach a global maternal mortality ratio of less than 70. To reach this goal, most countries should decrease their maternal mortality by two-thirds and no country should have a MMR in 2030 more than twice the global average.

This is an ambitious but achievable goal. Historically between 1990 to 2015, maternal deaths were reduced globally declined at a rate of 2.3% annually, but some countries achieved rates of decline of over 7%. (1)

### Where do maternal deaths occur?

The high number of maternal deaths in some areas of the world reflects inequities in access to health services, and highlights the gap between rich and poor. Almost all maternal deaths (95%) occurred in low-income and lower-middle-income countries, and almost two thirds (65%) occurred in the World Health Organization (WHO) African Region. (1)

The maternal mortality ratio in developing countries is 239 per 100 000 births versus 12 per 100 000 in developed countries. There are large disparities between countries, with some countries having

extremely high maternal mortality ratios of 500 or more per 100 000 live births. (1)

The risk of maternal mortality is highest for adolescent girls under 15 years old. (2) Complications in pregnancy and childbirth are the leading cause of death among adolescent girls aged 15-19 in most developing countries. (3)

Women in low and lower middle-income countries have on average many more pregnancies than women in developed countries, and their lifetime risk of death due to pregnancy is higher. (4) A woman's lifetime risk of maternal death – the probability that a 15-year-old woman will eventually die from a maternal cause – is 1 in 3300 in high income countries, versus 1 in 41 in low income countries. (1)

## Why do women die?

Women die as a result of complications during pregnancy, childbirth and post-partum. Most of these complications develop during pregnancy. Other complications may exist before pregnancy but are worsened during pregnancy. The major complications that account for 80% of all maternal deaths are (5):

- severe bleeding (mostly bleeding after childbirth)
- infections (usually after childbirth)
- high blood pressure during pregnancy (pre-eclampsia and eclampsia)
- unsafe abortion.

The remainder are caused by or associated with complications (such as malaria or pre-existing or non-communicable disease such as diabetes and heart disease) malaria HIV during pregnancy.

Maternal health and newborn health are closely linked. Nearly 2.5 million children die in the 1st month of life every year, and an additional 2.6 million babies are stillborn. (6,7).

## How can women's lives be saved?

Most maternal deaths are avoidable, as the health-care solutions to prevent or manage complications are well known. All women need access to high quality care provided by competent skilled health professionals during pregnancy (antenatal care), during childbirth (intrapartum care), and care and support in the weeks after childbirth (postnatal or postpartum care). It is particularly important that all births are attended by skilled health professionals, as timely management

and treatment can make the difference between life and death.

**Severe bleeding** after birth can kill a healthy woman within two hours if she is unattended. Injecting oxytocin immediately after childbirth effectively reduces the risk of bleeding.

**Infection** after childbirth can be eliminated if good hygiene is practiced and if early signs of infection are recognized and treated in a timely manner.

**Pre-eclampsia** should be detected and appropriately managed before the onset of convulsions (eclampsia) and other life-threatening complications. Administering drugs such as magnesium sulfate for pre-eclampsia can lower a woman's risk of developing eclampsia. To avoid maternal deaths, it is also vital to prevent unwanted and too-early pregnancies. All women, including adolescents, need access to family planning, safe abortion services to the full extent of the law, and quality post-abortion care.

## Why do women not get the care they need?

Poor women in remote areas are the least likely to receive adequate health care. This is especially true for regions with low numbers of skilled health professionals, such as sub-Saharan Africa and South Asia. While levels of antenatal care have increased in many parts of the world during the past decade, just over 50% of women in low-income countries benefit from care by a skilled health professional during childbirth. (8) This means that millions of births are not assisted by a midwife, a doctor or a nurse with specific competencies to manage labor and delivery.

In high-income countries, virtually all women have at least four antenatal care visits, are attended by a skilled health worker during childbirth and receive postpartum care. Coverage of deliveries by a skilled birth attendant ranges from 59% in the WHO African Region to over 90% in the Region of the Americas, and in the European and Western Pacific regions. (8)

Just 60% of births are attended by skilled health personnel in low-income countries compared to nearly 100% in upper-middle-income and high-income countries. (8)

Other factors that prevent women from receiving or seeking care during pregnancy and childbirth are:

- poverty
- distance
- lack of information
- inadequate services
- cultural practices.

To improve maternal health, barriers that limit availability and access to quality maternal health services must be identified and addressed at all levels of the health system.

## WHO response

Improving maternal health is one of WHO's key priorities. WHO is working to reduce maternal mortality by providing evidence-based clinical and programmatic guidance, setting global standards, and providing technical support to Member States. In addition, WHO advocates for more affordable and effective treatments, designs training materials and guidelines for health workers, and supports countries to implement policies and programmes and monitor progress.

A renewed commitment to maternal health was made with the *Global strategy for women's and children's and Adolescent's health (2016-2030)*. WHO is working with partners to accelerate progress towards improved health and well-being of women, children, and adolescents. (9)

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