Motherhood is unsafe for many women in the world, especially those in low- and middle-income countries (LMICs). In this chapter we look at the different factors which contribute to this continuing human tragedy, with a particular focus on Africa (which has the highest rates of maternal mortality in the world).

Of the Millennium Development Goals, MDG 5 aimed at reducing maternal mortality by 75 per cent between 1990 and 2015 (United Nations 2003). In 2007, a part (b) was added to MDG 5: universal coverage of reproductive health. This addition was an important gain for women’s health since it challenged the notion of pregnancy only being linked to motherhood and instead embraced the goal of reproductive choice for women. Universal access to reproductive and sexual health includes access to effective contraception, safe abortion, and treatment of sexually transmitted infections, and incorporates a focus on adolescents and adolescent-related issues around sexuality. The paradigm shift to viewing contraceptive provision as part of women’s freedom of choice and of exercising control over their own fertility, from embracing the population control ideology of the 1960s, was another important gain that needs to be closely guarded. This goal was accepted at the International Conference on Population and Development (ICPD) in Cairo in 1994 (UNFPA 1995).

Progress in achieving the MDG 5 goal has been extremely uneven – a progress report in 2005 identified sixty-eight priority countries that were farthest from meeting their MDG target. They included all the countries of sub-Saharan Africa (SSA) (UNICEF 2008).

Women’s sexual and reproductive rights, which include the right to survive childbirth and the right to be treated with dignity, are clearly enunciated in the technical guidance document produced by the UN Human Rights Council in July 2012 (United Nations 2012). Within this framework, accountability for maternal deaths extends beyond families and health workers to government institutions and leaders. Item no. 65 states: ‘A rights-based approach requires simultaneous attention to immediate health interventions and the longer-term social transformation required to reduce maternal mortality and morbidity.’

**Global progress in reducing maternal mortality rates, 1990–2010**

Maternal Mortality Rate (MMR) is the health indicator that shows the greatest disparity between rich and poor countries, with women in high-income
countries having a one in 3,800 lifetime chance of dying of a cause related to childbirth and women in low-income countries having a one in 39 chance (WHO et al. 2012). These disparities have not improved since 1987, though the absolute numbers of maternal deaths per year (global) have declined from 543,000 in 1990 to 287,000 in 2010. One third of all maternal deaths occur in two countries: India (56,000 deaths per year) and Nigeria (40,000) and the slowest reduction in maternal mortality is in SSA. Importantly, 10 per cent of maternal deaths in Africa were due to the aggravating effects of HIV.

Figure B8.1 presents trends regarding maternal deaths in different areas of the world.

However, within the African continent there are considerable differences between the countries of northern Africa, which have the lowest MMRs and show the greatest percentage decline (Table B8.1). Several countries in southern Africa showed an increase in MMR from 1990 onwards, and some countries in conflict-affected areas have MMRs in excess of 1,000.

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<th>Table B8.1 Progress in reducing maternal mortality rates in selected African countries, 1990–2010</th>
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Why pregnancy kills women in Africa

The potential answers to why so many women die during childbirth in Africa (as well as in many LMICs) are examined in the following section.
Lack of reproductive health choices The unmet need for contraception is estimated to be experienced by one in four eligible women in SSA. This has roots in patriarchal values, cultural norms and high levels of infant mortality, resulting in the lack of provision of contraceptive services for many women in SSA (Singh and Darroch 2012). Other important indicators are access to safe abortion care and services that promote sexual health in women and adolescents.

It is estimated that if contraceptive needs were fully met for all women throughout the globe, it would reduce MMR by one third (Cleland et al. 2012). While it is a priority to expand and diversify the contraceptive choices offered to women, it is important that the debate around safe abortion and associated legislative changes is not dropped from the agenda. Post-abortion care programmes have improved safety, but have not tackled the related and relevant legislative issues. Unsafe abortions affect 6.2 million women annually (2008) and SSA accounted for 29 per cent of this total (Shah and Ahman 2009). The US ‘gagging rule’ under which USAID (US Agency for International Aid) set conditions that foreign aid to women’s health programmes must not be linked to abortion care services limited the effectiveness of such programmes (Cohen 2011).

Untreatable childbirth complications The childbirth (obstetric) complications that result in maternal death can all be treated and some can be prevented. These include: excessive bleeding after birth, high blood pressure (eclampsia), infection after childbirth, unsafe abortion, medical disorders such as rheumatic heart disease, infections such as AIDS, TB and malaria.

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**Box B8.1 Beyond the numbers**

Personal stories of bereaved families show us what it really means to have a mother who dies in childbirth, as in the following vignette from a rural village in southern Africa (Fawcus et al. 1996).

Ms Z, forty years old and into her fifth pregnancy, was told to deliver at a district hospital (50 kilometres away). Her labour pains started during the night. No transport was available and she was worried about leaving her children alone at home. She delivered at home but then suffered massive bleeding. Her eleven-year-old daughter went to alert neighbours to inform the hospital to send an ambulance. She returned home and found her mother dead in a pool of blood surrounded by other younger children.

Although this incident occurred twenty years ago, it still reflects the reality of many remote rural communities in the African continent.
It is important to note that these conditions cause maternal deaths, but even more frequently result in severe morbidity rates among survivors, a notable example being women who survive sepsis and haemorrhage associated with prolonged labour but are left with urinary incontinence from a vesico-vaginal fistula (Wall 2006).

Untreated medical conditions The majority of medical conditions indirectly associated with maternal deaths can be treated. In most southern African countries, AIDS-related respiratory infections are the most common cause of maternal death, accounting for 40 per cent of all maternal deaths (Department of Health, Pretoria 2012).

One of the reasons that countries in SSA initially showed an increase in MMR after 1990, and why they are so far from meeting their target for achieving the MDG 5 goal, is the HIV epidemic.

Inadequate functioning of health systems In several African countries, local and national enquiries into maternal deaths show that many deaths could have been prevented if ‘the health system had functioned better’. The South African Confidential Enquiry into Maternal Deaths (2008–10) showed that in 35 per cent of maternal deaths, there was an administrative problem such as lack of blood, lack of functioning operating theatres, or lack of transport that contributed to the death. Further, in 14–38 per cent of maternal deaths (depending on the level of care), there was inadequate care provided by the health worker (ibid.).

Problems with health personnel can be quantitative, relating to inadequate numbers and inequitable distribution between private and public sectors,
between rural and urban areas, and between low-income women and higher-income women. The problems can also be qualitative, relating to the competence of health providers in terms of knowledge, skills and attitudes. They also include deficiencies in life-saving emergency obstetric skills among health providers.

Poor access to and utilization of health facilities: It is estimated that in SSA only 69 per cent of pregnant women had at least one antenatal care visit, only 42 per cent gave birth with a skilled birth attendant present and only 45 per cent received postnatal care. In addition, the average Caesarean section (CS) rate was 3 per cent, which is well below the minimum of 10 per cent set by WHO, and required to save the lives of mothers and newborns (Adegboyega et al. 2006). Access to CS is a marker of access to emergency obstetric care, and when CS rates are too low, it reflects inadequate coverage. Many women and newborns in SSA die from conditions such as ruptured uterus and uterine infection because they did not have access to a CS for complicated labour. In addition, many women in SSA suffer from obstetric vesico-vaginal fistulae, which may cause lifelong disability owing to lack of access to timely CS for obstructed labour.

Coverage rates are usually presented as averages to hide inequities within and between population groups. They also give no indication of the quality of care, which, as suggested earlier, may be substandard, with considerable inequities between rural/urban and different socio-economic quintiles of the population (see Box B8.2, which throws up very similar issues).

What are the implications of overcrowded hospitals?

1. Many children continue to be delivered by midwives, but the official system ignores traditional birth attendants (TBAs).
2. Primary-care centres are not equipped to attend to deliveries that can be handled at this level with proper training and facilities.
3. Hospitals are overwhelmed by cases that could be handled by midwives at the primary level of care, thus making it difficult for them to attend women who truly need care at secondary or tertiary levels.
4. In hospitals, women are less likely to receive socially and culturally appropriate care.

In Chiapas, fewer than one third of women are indigenous. Yet, of women who die from maternity-related causes, half are indigenous (OMM 2014). In Chiapas, indigenous women’s greater risk of death is evidence of how inequality and discrimination are a persistent cause of preventable deaths.

One of the World Health Organization’s recommendations for attaining MDGs 4 and 5 is for all deliveries to be attended by skilled personnel (WHO 2004). However, places like Chiapas do not have enough professional midwives. Yet the response has not been a coordinated effort to improve the technical skills of existing TBAs. Instead midwives were explicitly banned from attending births.
Several structural reasons contribute to poor access to care, including:

- Unavailable or inequitably distributed services.
- Natural disasters, wars, and conflicts.
- Serious transport problems.
- Unfriendly facilities: this includes unkind and harsh attitudes of health workers towards women in labour at a time when the latter are at their most vulnerable. This, together with some culturally insensitive practices such as a supine position for delivery, can be a deterrent to seeking care (Jewkes et al. 1998; Human Rights Watch 2011).
- Unaffordable services: this is a problem of user fees. The majority of African countries rely on user fees to fund part of their healthcare systems (Dzakpasu et al. 2014). This is because public healthcare systems are seriously under-funded. Some countries, such as Ghana, are trying to radically change the financing of their health system by introducing fee exemption for delivery care (Blanchet et al. 2012).

Several community-based studies have explored the reasons for poor access to care. When families in rural Masvingo province in Zimbabwe were asked why their relative had died in childbirth, the common responses were ‘no money’ and ‘no transport’ (Fawcus et al. 1996). In India, the verbal autopsy approach
a delayed Caesarean section, and then her gall bladder was removed. Later, inadequate post-operative care led to her death (Sinembargo 2013).

Susana’s family, with support from civil society organizations, filed a lawsuit, not only because of the medical errors, but also because both Susana and her family were subjected to mistreatment that demonstrated a lack of cultural sensitivity in a healthcare facility that primarily treats indigenous women. This lawsuit has spurred discussions on several important issues: the need for development of technical and physical capacity to attend normal births at the primary-care level; improvement of training of medical personnel and use of treatment protocols; the development of technical standards for intercultural healthcare; and installation of an intensive care unit in the hospital. However, at another level, this case should also lead to a review of public policies that are causing overcrowding in hospitals (largely to attend to normal deliveries), an increase in unnecessary CS (while needed CS are delayed, as in Susana’s case), and the marginalization of TBAs in official health services.

In 2012, there were at least sixty-eight maternal deaths in Chiapas. Of these, 44 per cent were indigenous women, 71 per cent died in a public clinic or hospital, and another 10 per cent in a social security clinic or hospital (OMM 2014).

looks at delays in accessing care from the family’s perspective and uses the symbolism of the Rashomon phenomenon (contradictory interpretations by different people of the same event) to show that there are many different ways of looking at a problem (Iyer et al. 2013). What health providers frequently label as ‘delay in seeking care’ would, from the community’s perspective, have many very different explanations.

Socio-economic determinants Inequitable distribution of wealth, poverty and associated lack of transport are all linked with increasing MMR. Studies show that the poorest quintiles have the highest MMR (Ronsmans and Graham 2006). Poverty is associated with higher levels of MMR owing to food insecurity, lack of transport and lack of female educational or work opportunities.

Gender discrimination and oppression Owing to their gender, women lack power to control their own fertility, to engage with health services, and to exercise their right to good healthcare. Women are frequently disadvantaged owing to prevailing patriarchal values, cultural practices that are harmful, and sometimes religious prescripts. Female literacy is only 50 per cent in one third of the countries that are not on track to meet their MDG 5 target. Access to secondary education for girls is less than 20 per cent in some African countries
and less than the rate for boys (African Union 2013). Practices such as child marriage, which may be a cultural norm, are not in the interests of the health of young women. Patriarchal values and patriarchal systems mean that some women are not able to take decisions about their own health or the need to access care. Delays in seeking care occur because the woman is forced to await male permission to do so.

Further, violence experienced by women both in the domestic environment and in the context of armed civil conflict negatively affects their reproductive health outcomes as well as their utilization of health facilities (see Chapter C4). Female genital mutilation is a practice that is dangerous for maternal health and is an abuse of women’s sexuality (Banks et al. 2006). Maternal death on its own can be viewed as a form of gender-based violence, since it is specific to women and dependent on their gender.

Women are dying because they lack the power to control their own fertility and because they lack access to safe contraception and abortion. Women are dying because maternity services are of poor quality, and there are multiple reasons for poor access to care. In addition, various socio-economic determinants contribute to poor reproductive health outcomes for women. Women are denied the right to safe childbirth because of failures of the health system, but these, in turn, may be determined by legislation, political decisions and cultural practices. The model above (Figure B8.2) illustrates all the determinants of maternal health (Fawcus et al. 1996).

**Interventions that could make a difference**

The ‘three delays’ model is a useful framework around which to identify interventions (Thaddeus and Maine 1994).
• Delay in the decision to seek care
• Delay in reaching the place of care
• Delay in receiving appropriate-quality care after arriving at the health facility.

However, the model does have some limitations. The first two delays can be interpreted too narrowly as indicating poor knowledge and poor transport, whereas a much broader interpretation would look at all the socio-economic determinants that shape decision-making and influence access to care. In addition, the third delay does not distinguish the administrative aspects of the health system, such as lack of supplies, poor infrastructure and absence of medication, from the actions (or lack thereof) of the health workers themselves.

**Monitoring and analysis** Local and national processes for Maternal Death Surveillance and Response (MDSR) can promote accountability as well as monitoring of information (Commission on Information and Accountability for Women’s and Children’s Health 2011). The WHO is facilitating the development of these processes that encourage improved surveillance and measurement and perform a root-cause analysis of the causes and systems failures associated with the death (WHO et al. 2013). Verbal autopsy is a tool for identifying the sequence of events in the community by interviewing family and community members (WHO 2007). The ‘r’ in MDSR is the ‘response’ to the death at the national or local level. This includes identifying the remedial actions taken to prevent a similar recurrence of problems and their implementation. This aspect is the most important and challenging of any audit, but is often the weakest link in the audit loop.

**Conclusion**

In spite of some recent progress, the levels of maternal mortality and morbidity remain unacceptably high and there are major inequities between and within countries. Universal access to reproductive and sexual health is the cornerstone of programmes aimed at improving both maternal and women’s health, and there has been a renewed focus on contraceptive provision, but safe abortion and care programmes must not be marginalized.

The strengthening of health systems and improvement of human resources to provide equitable access to quality emergency obstetric care and to prevent maternal health complications are vital for reducing maternal mortality. However, this has political implications in terms of health financing and budgetary allocations, which are, in turn, determined by national and global economic policies and recessionary trends. The prevailing political systems entrench the perpetuation of poverty for the majority of women in Africa, resulting in both poor health outcomes and the lack of mechanisms that allow women to demand their right to health.
References


