Goal 5: Improve maternal health

Maternal health is still a grave concern for most of Africa. The continent’s average maternal mortality ratio (MMR) was 590 deaths per 100,000 live births in 2008. This means that, in 2008, a woman in Africa died as a result of pregnancy or childbirth every 2.5 minutes – 24 an hour, 576 a day, and 210,223 a year (UN, 2011).24

The link between other MDGs and maternal mortality is important in identifying drivers of trends and policy responses. Gender parity in education and women’s empowerment have a positive effect on fertility and access to health information. Similarly, poorer women are disproportionately affected by higher mortality rates owing to lower access and use of health services. Malaria, HIV and AIDS, TB and other health threats in pregnant women are important factors in driving MMR.

Maternal mortality is a result of a multitude of factors, including too few health services and providers, poor infrastructure and transport, and low empowerment of women. Some of the primary causes are haemorrhage, sepsis, hypertensive disorders, unsafe abortion and prolonged or obstructed labour. These complications can often be managed with a health system that provides skilled personnel and facilities to handle emergencies and post-partum care. Thus access to and use of health services focused on childbearing becomes vital (UN, 2011).

For years, governments and policymakers have recognized that the number of maternal deaths in Africa is unacceptable. They have put forward numerous strategies, yet maternal mortality remains disproportionately high, and has decreased by an average of only 1.6 per cent a year across the continent. Some international initiatives, such as the UN Secretary General’s Global Strategy on Women’s and Children’s Health, continental initiatives such as the African Union’s Campaign on Accelerated Reduction of Maternal Mortality in Africa as well as the Maputo Plan of Action, besides other national and local projects and programmes, have raised awareness and increased financing for maternal health.

No new comprehensive data for maternal health indicators have appeared since 2008, presenting a conundrum. Without proper data, countries cannot fully know what interventions are most effective and where to concentrate financial and programme efforts. Looking at data in new ways while examining best practices and key challenges can, though, assist policymakers in understanding how to focus efforts to accelerate progress towards MDG 5.

24 Calculations are based on UNSD data for the MMR in Africa in 2008 and UNICEF data on Africa’s total birth rate that year (35,631,000 live births).
Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

Indicator 5.1: Maternal Mortality Ratio (MMR)

Some countries in Africa are close to achieving MDG 5

An article published by *The Lancet* in 2010 showed that maternal mortality is declining, even in Africa. This is in line with UN data which shows that many African countries in fact recorded large declines in maternal mortality during 1990–2008: Equatorial Guinea, Eritrea, Egypt, Morocco, Cape Verde, Tunisia, Ethiopia, Algeria, Rwanda and Mauritius all saw a more than 50 per cent reduction, and are thus close to achieving MDG 5 (figure 5.1).

What did these countries do to achieve such a reduction in MMR? First, most of them greatly improved the proportion of women giving birth with a skilled health attendant. They did this mainly through policy interventions that focused on improving access through means such as transport to referral health institutions, increased information about contraception and better supply of health attendants. Equatorial Guinea – the closest to achieving MDG 5 with a 72 per cent reduction in maternal mortality during 1990–2008 – improved the proportion of births attended by a skilled personnel from 5 per cent in 1994 to 64.6 per cent in 2000. (New data being collected in that country will probably show further progress since 2000.) Egypt, Morocco and Rwanda (box 5.1) also have steep gains in the share of births with a skilled health attendant, and are among the best performers in reducing maternal mortality.

The best performers also share high economic growth rates. Equatorial Guinea has seen rapid growth over the past 20 years, and Egypt, Morocco and Cape Verde have had sustained

Figure 5.1 Best performing countries on maternal health, MMR, 1990, 2008 and 2015 target

Source: Computations from UNSD, accessed December 2011
Box 5.1 Political commitment and well-planned interventions fast-track Rwanda’s progress towards MDG 5

While African countries in conflict or post-conflict suffer from a loss of critical infrastructure and health services, leading to high levels of maternal mortality, these countries are also presented with an opportunity to focus efforts on maternal and child health in the most cost effective ways. Rwanda is a good example of a country arising from conflict that has seen concrete results from its investments in maternal and child health.

After the 1994 genocide and years of conflict, Rwanda had an extremely high MMR of 1,400 deaths per 100,000 live births in 1995, then the highest in Africa. Less than one third of births were attended by a skilled health worker, only 13.7 per cent of women used contraceptives and just 10 per cent of women had the recommended four antenatal visits. Through strong political will and solid planning of maternal health financing and interventions, Rwanda cut its MMR to 540 in 2008. Estimates from Health Management Information Systems put Rwanda’s MMR at 383 in 2010, a near three-quarter reduction since 1995.

The Ministry of Health has fast-tracked progress towards MDG 5 in several ways. First, by institutionalizing audits of maternal deaths, it can better identify when, where and how maternal deaths throughout the country occurred. Through this initiative, 256 maternal deaths in 2009 and 221 in 2010 were audited, and recommendations were formulated to avoid similar deaths in the future. The ministry sees this approach as one of the most effective ways to avoid further preventable deaths and focus on maternal health interventions.

Another initiative, the RapidSMS service launched in 2010, equips health providers to track expectant mothers and to provide antenatal care and delivery advice via short messaging services (SMS). Between March and May 2010, 432 community health workers were trained in RapidSMS, and tracked 14,000 pregnancies. During the period, they reported 583 births, 115 risks during pregnancy and no maternal or child deaths. This service also increased the share of women receiving antenatal visits: nearly 100 per cent of Rwandan women have at least one, and the proportion with at least four has more than doubled since 1995.

Last, Rwanda has placed a strong focus on increasing women’s access to and use of contraceptives. Community health workers have been trained to provide condoms, pills and injectables, and the government has made a reduction in the total fertility rate a maternal health goal, alongside the MDGs. As a result, 36.4 per cent of women now use contraceptives, and the total fertility rate fell from 6.1 to 5.5 during 2005–2007 (UNSD, 2011).

Sources: UN Rwanda (2011); UNFPA Rwanda (2011).
**GOAL 5 IMPROVE MATERNAL HEALTH**

**Other countries, especially those heavily affected by HIV/AIDS, and those in conflict or post conflict, have made little progress or have regressed since 1990**

Some countries have made no progress (Gabon and Namibia) or have in fact regressed: nine countries have seen an increase in their MMR since 1990 (figure 5.2). In particular, Botswana and Zimbabwe’s MMR more than doubled from 1990 to 2008 (UN, 2011).

Most of these countries are experiencing HIV/AIDS epidemics, which puts women more at risk of dying as a result of childbirth. HIV can kill mothers directly through, for example, anaemia, post-partum haemorrhage and puerperal sepsis, as well as indirectly through opportunistic infections, pneumonia, TB and malaria. Thus testing women of the reproductive age group, especially when they are pregnant, is essential to secure the proper treatment and adequate medical precautions during delivery. This will ensure safer childbearing as well as lower risk of mother-to-child transmission of HIV/AIDS.

Yet maternal mortality is not only a problem in countries with high rates of HIV/AIDS. Conflict and political instability also affect it. All eight countries with the highest MMRs in 2008 were in conflict or were post conflict. Preliminary estimates of maternal mortality in South Sudan in 2011 were reported to be 2,054 deaths per 100,000 live births, the highest in the world (UNICEF, 2011a).

The high likelihood of a woman dying as a result of pregnancy or childbirth in conflict-afflicted countries is illustrative of the importance of functional infrastructure and services – not only of health institutions, but of other infrastructure as well. Roads, transport and communication are crucial

**Figure 5.2 Regressing countries on maternal health, MMR, 1990, 2008 and 2015 target**

![Graph showing maternal mortality rate (MMR) for selected countries from 1990 to 2015 target.](image)

Source: Computations from UNSD, accessed December 2011.


26 Burundi, CAR, Chad, DRC, Guinea-Bissau, Liberia, Sierra Leone and Somalia.
for mothers to access life-saving care. Countries affected by conflict require a rebuilding of key institutions and infrastructure in a broad range of sectors, including health, as well as training for medical professionals.

**Indicator 5.2: Proportion of births attended by skilled health personnel**

*Delivering with the assistance of a skilled health attendant is one of the best ways to ensure survival of mother and child*

Pregnancy-related deaths can, without doubt, be cut heavily in Africa. The health risks of both mothers and babies are greatly reduced with an increase in the proportion of babies delivered under the supervision of health professionals. It is well recognized that efforts focused on providing antenatal care, ensuring skilled health attendance at birth, improving access to basic and comprehensive emergency obstetric and newborn care, and providing basic post-natal and newborn care, are essential components for improving maternal health. The provision of maternal and reproductive health services within the framework of primary health care is fundamental to making such services available to all.

An analysis of the data for 1995–2008 bears out the fact that the percentage increase in the proportion of births with a skilled health attendant is correlated with the percentage decrease in the MMR (figure 5.3). In sum, a 1 per cent increase in this proportion is associated with a 0.21 per cent decline in maternal mortality.

Several countries illustrate this relationship. Equatorial Guinea increased the proportion of women

**Figure 5.3 Correlation between % change in proportion of births with a skilled health attendant and % change in MMR, 1995–2008**

Source: Computations from UNSD, accessed December 2011.
giving birth with a skilled attendant from 5 per cent to 64.6 per cent in six years, almost a 10 percentage point increase every year. Morocco, Rwanda, Egypt, Angola and Niger all more than doubled this proportion during 1990–2008, and all these countries are performing relatively well in reducing maternal mortality.

Likewise, countries that have performed poorly in reducing the MMR have shown little progress in increasing the proportion of deliveries with skilled birth attendants. Zimbabwe saw a steep fall in this proportion from 69.2 per cent in 1994 to only 60 per cent in 2008; and that year, 790 out of 100,000 births resulted in maternal death – more than twice the rate of 1990. The deteriorating capacity of the health system in Zimbabwe partly contributed to this regression – for example, 80 per cent of public midwifery posts are vacant. In addition, only 5.4 per cent of pregnant women knew their HIV status before pregnancy, and just 34 per cent of pregnant women were tested for HIV during pregnancy.

*Spatial and income inequalities remain a challenge for increasing access to skilled birth attendants*

Comparing MMR performance among countries is only part of the story. Vast inequalities exist within countries as well, and access to skilled birth attendants highlights the gaps between urban and rural women, and between high- and low-income women.

The world’s widest urban–rural gaps are in Africa (excluding North Africa) where women in urban areas are almost twice as likely as those in rural areas to deliver with a skilled health attendant, and where 80 per cent of those in the highest income quintile deliver this way against only 24 per cent for the lowest quintile (figure 5.4).

**Figure 5.4 Share of births with a skilled health attendant by region, urban versus rural, 2006–2010**

Source: Compiled from www.childinfo.org.

Note: No data for Libya, Sudan and South Sudan.
By country, Niger, CAR and Djibouti have the biggest urban–rural divide (figure 5.5). In Niger, 71 per cent of urban women deliver with a skilled health attendant versus only 8 per cent in rural areas. Tunisia, Botswana and South Africa are the most equal on this measure, with a less than 10 percentage point difference.

Income inequalities are bigger than urban–rural gaps in accessing skilled health care
African women in the richest quintile are more than three times as likely to give birth with a skilled health attendant as women in the poorest (figure 5.6). West and Central Africa have the largest sub-regional inequality. Nationally, Nigeria has the biggest gap: 86 per cent versus 8 per cent. Cameroon, Mauritania, Sudan (North and South), Eritrea and Ghana have more than a 70 percentage point difference between the two quintiles.

Burkina Faso has a relatively equal proportion of women across all wealth quintiles for this indicator: 56 per cent in the lowest and 65 per cent in the highest. Algeria and São Tomé and Príncipe also have a fairly equal distributions across income groups. 27

Access, cost and demand for services explain inequalities within countries
The spatial and wealth gaps demonstrate key challenges to increasing the share of women giving birth with a skilled health attendant.

First, they highlight the need to increase availability of trained and skilled providers in rural areas. Furthermore, these providers need access to essential drugs, supplies, equipment and emergency obstetric care. Increasing the number of trained and skilled birth attendants requires a revitalization of the midwifery profession, and a commitment from governments to provide adequate funding and training. Some countries have implemented programmes to improve services in rural areas. In Nigeria, for example, where the most women in an African country die from giving birth, and where there are vast inequalities between urban and rural women and between wealth quintiles, the Midwives Service Scheme requires midwives to undertake a compulsory year of community service in rural and underserved areas. From the launch of the scheme in 2009 to July 2010, 2,622 midwives had been deployed to primary health facilities in rural areas (WHO et al., 2012).

A second key challenge is meeting the cost of giving birth with a skilled health care attendant. Not only does delivery away from home cost money for transport and health care, but entails an opportunity cost. Women may have to leave home and travel for hours, sometimes days, to the nearest clinic, where they are not even sure if they will receive timely or adequate care. They must arrange for care of children, and ensure that other house duties will be taken care of. Only if countries can reduce the direct and opportunity costs of such delivery, including free maternal health care as in Malawi, Rwanda and Sierra Leone, will rural and low-income women be able to access skilled assistance for delivering their babies. Similarly, introducing social protection is a crucial part of removing cost barriers and decreasing maternal mortality (Africa MDG Report 2011).

Lastly, the spatial and wealth gaps illustrate the importance of empowering women with the
knowledge and power to decide on her delivery. Indeed, women who are better able to decide where they give birth are more likely to deliver with the assistance of a skilled health attendant. Beyond this, cultural barriers often keep down these rates of delivery in rural areas and among lower income groups. There may be a higher distrust of health care attendants and greater reliance on family or community members, as well as a lack of knowledge or belief in the benefits of skilled attendance. Thus such cultural barriers need to be dismantled. Improving girls’ education, providing women with more economic opportunities and reinvigorating community awareness campaigns are just a few of the ways to give rural and poor women more say in their childbearing conditions.

**Target 5B: Achieve universal access to reproductive health by 2015**

**Indicator 5.3: Contraceptive prevalence rates for married people, and Indicator 5.6: Unmet need for family planning**

**Access to contraceptives reduces the risk of maternal death**

Access to reproductive health services, including family planning, and maternal mortality are two sides of the same coin. UNFPA (2009) estimates that one in three maternal deaths could be avoided if all women had access to contraceptive services. When women are better able to control when and how many children to have, the health outcomes of both mother and child improve greatly. Indeed, almost one in four women in Africa who want to space or delay their next pregnancy seem not to be using contraceptives (UN, 2011).

Unfortunately, as data on contraceptive prevalence and on unmet need are scarce, comparative analysis between these indicators and maternal mortality is difficult. It is self-evident, though, that fewer pregnancies will lead to fewer maternal deaths. Indeed, the total number of maternal deaths is calculated as the product of the number of women of reproductive age, the general fertility rate, and the MMR. Because the number of women of reproductive age is steadily increasing and the MMR is declining only slightly, African countries have seen the total number of maternal deaths fall largely owing to declining fertility rates.

In fact, UNFPA (2009) shows that reduced fertility accounts for 53 per cent of the fall in the number of maternal deaths. It is thus imperative for African countries to make a real effort to lift the population’s access to contraceptives, as well as provide the information for effective use.

**Vast family-planning disparities exist between countries**

The contraceptive prevalence rate (CPR) for married people in Africa averages 29.3 per cent, but with huge disparities. Chad had a CPR of less than 3 per cent in 2004 and Mauritius 75.8 per cent in 2002 – one of the highest in the world (UNSD, 2011). Countries with particularly low CPRs are mostly in conflict or are post conflict (table 5.1), again illustrating the importance of health infrastructure.

Countries with high CPRs are almost all in North Africa or Southern Africa. Those in North Africa are performing well across all maternal health variables. The high CPRs in Southern Africa may well be attributable to increased condom use as a response to the HIV/AIDS epidemic.
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Changing attitudes towards family planning

Use of contraceptives is changing across the continent: CPRs have risen slightly from 21 per cent in the early 1990s to 29 per cent in recent years. Yet the proportion of women with an unmet need for family planning has not changed, staying at around 25 per cent (UN, 2011).

28 Unmet need is defined as the percentage of currently married women aged 15–49 who want to stop having children or to postpone the next pregnancy for at least two years, but who are not using contraception.

The slight rise in the continental CPR masks a wide range of increases among countries. Niger, Zambia, Mozambique, Ethiopia, Malawi, Sierra Leone, Tanzania and Guinea have seen their CPRs more than triple over the past 20 years (UNSD, 2011). This is partly due to interventions that targeted increased access to family planning services, improved awareness of the benefits of family planning and enabled women to space or limit births.

That said, although more African women are using contraceptives, the provision of such services to

### Table 5.1 Contraceptive Prevalence Rate (CPR), various years

<table>
<thead>
<tr>
<th>Below 10%</th>
<th>10–15%</th>
<th>15–30%</th>
<th>30–50%</th>
<th>Above 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mauritania (2007)</td>
<td>9.3</td>
<td>14.7</td>
<td>29.2</td>
<td>47.0</td>
</tr>
<tr>
<td>Burundi (2006)</td>
<td>9.1</td>
<td>14.6</td>
<td>25.7</td>
<td>45.5</td>
</tr>
<tr>
<td>Guinea (2005)</td>
<td>9.1</td>
<td>14.6</td>
<td>37.7</td>
<td>45.2</td>
</tr>
<tr>
<td>Mali (2006)</td>
<td>8.2</td>
<td>14.0</td>
<td>23.5</td>
<td>44.4</td>
</tr>
<tr>
<td>Sierra Leone (2008)</td>
<td>8.2</td>
<td>12.9</td>
<td>19.0</td>
<td>44.3</td>
</tr>
<tr>
<td>Eritrea (2002)</td>
<td>8.0</td>
<td>11.8</td>
<td>18.0</td>
<td>41.0</td>
</tr>
<tr>
<td>Sudan (2006)</td>
<td>7.6</td>
<td>11.4</td>
<td>17.8</td>
<td>40.8</td>
</tr>
<tr>
<td>Chad (2004)</td>
<td>2.8</td>
<td>10.1</td>
<td>17.4</td>
<td>38.4</td>
</tr>
<tr>
<td>Equatorial Guinea (2000)</td>
<td>17.1</td>
<td>17.0</td>
<td>36.4</td>
<td>Swaziland (2007)</td>
</tr>
<tr>
<td>Benin (2006)</td>
<td>16.8</td>
<td>16.8</td>
<td>34.4</td>
<td></td>
</tr>
<tr>
<td>Togo (2006)</td>
<td>16.5</td>
<td>32.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Computations from UNSD, accessed December 2011.
Note: Reference years are shown in parentheses.
all who demand it is not met (UN, 2011). All else being equal, an increase in the CPR should see an equal decrease in unmet need, but that need is not declining in Africa – and in many countries is even increasing. On the positive side, this means that more women wish to space or limit births, indicating increased awareness of the benefits of family planning, and perhaps greater gender equality and women’s empowerment. Unfortunately, this desire is not being met for two main reasons.

First, the wealth effect is important in contraceptive use, for short- and long-term purposes. Whereas certain countries have increased their CPRs, access may be skewed toward higher income levels. Creanga et al. (2011), for example, found that wealth-related inequalities, measured as the concentration index of met need to limit childbearing, were highest in Namibia, Mozambique and Ethiopia and lowest in Ghana and Malawi. There is also the wealth-related inequality in the met need for contraception to space births, which was found to be highest in Ethiopia and lowest in Malawi, Namibia and Zambia.

Second, adequate empowerment for women to choose to use contraceptives is critical. In other words, contraceptives may be available, and women may wish to space or limit births, but owing to cultural, economic or social factors, they do not use available methods of family planning. Furthermore, there may be a mismatch between the types of contraceptives desired and provided. Women may have access to short-acting contraceptives, such as condoms or the oral contraceptive pill, when they may actually desire long-acting or permanent methods, such as an intra-uterine device or sterilization.

Thus while countries are moving their CPRs in the right direction, they must take a closer look at the barriers to accessing the correct types of contraceptives, and why the unmet need is not decreasing. In Egypt, for example, removing barriers to family planning was a key component of the country’s maternal health campaign. Despite having a family planning programme in place since the 1960s, the CPR remained relatively low and the unmet need for family planning high. Through a unique campaign put in place by the government in the early 1990s, women in rural areas throughout the country were trained and paid by the government to act as advocates for family planning, alongside a widespread television and radio campaign.

Through these initiatives, Egypt addressed certain cultural barriers to contraceptive use, more than halving the unmet need for contraceptives from 19.8 per cent in 1992 to 9.2 per cent in 2008, as more women used family planning services. Egypt was the best performer in Africa for the unmet need indicator. The country’s maternal mortality decreased from 220 to 82 deaths per 100,000 live births over the same period.

**Indicator 5.4: Adolescent birth rate**

**Adolescent birth rates in Africa stay high**

Girls aged 15–19 are twice as likely to die during childbirth as women 20 years and above. Unsafe abortion because of unwanted pregnancy is also common among adolescents. Complications from pregnancy or childbirth contribute up to 30 per cent of maternal mortality, and are the leading cause of death among girls in this age group (UNFPA, 2009). Thus reducing adolescent birth rates and making post-abortion care available and
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accessible are imperative for African countries to reduce maternal mortality.

For countries with the most recent data, an average of 101.3 women aged 15–19 give birth per 1,000 women, meaning that over 10 per cent of African women will have given birth by age 20. This number does not take into account the large proportion of young women who do not carry their pregnancy to term owing to miscarriage or abortion.

Africa’s adolescent birth rate has remained fairly stagnant over the past two decades, showing only a 3.6 per cent decrease from an average of 105 per 1,000 women in the early 1990s (UN, 2011). The link between adolescent birth rates and the MMR is clear (figure 5.7), although not causal. The higher the adolescent birth rate, the higher the MMR.

North African countries, namely Libya, Algeria, Tunisia and Morocco, are the best performers in adolescent birth rates in Africa, and all have adolescent birth rates far below the global average. Niger, Chad and Mali have the highest adolescent birth rates, at 199, 193 and 190 per 1,000 births. This means that nearly 20 per cent of women in these countries will give birth before the age of 20. Cultural factors there, namely early marriage and the low importance placed on female education,

Figure 5.7 Correlation between adolescent birth rates and MMR, 2005–2008

Source: Computations from UNSD, accessed December 2011.
Note: The figure illustrates the correlation among countries with data points for both the adolescent birth rate and the MMR for the same year.
are partly responsible for early births. These three countries also have high maternal mortality.

**Reducing adolescent birth rates and improving health outcomes for adolescent mothers**

Numerous policy interventions are needed to lower adolescent birth rates, and to address the health risks associated with adolescent pregnancy. WHO recommends a three-tiered continuum of care that starts among individuals and extends to the health system.

At the individual, family and community level, it is vital to improve the knowledge, education, experience, income and empowerment of young girls. Those who have access to education, especially beyond primary school, are far more likely to delay marriage and childbearing. Adolescent mothers must also be provided with life skills and sexual education to increase their independence, mobility, self-esteem and ability to take decisions. Furthermore, families and communities generally must be aware of complications associated with adolescent pregnancy in order to ensure good pregnancy outcomes if a young woman becomes pregnant. With better awareness at this level, adolescents are less likely to get pregnant and are more likely to survive if they do.

At the outpatient and clinical care level, adolescents must be provided with an early start to antenatal care with options for whether they wish to continue the pregnancy. Making abortion safer is a critical component on improving the health outcome for pregnant adolescents. In addition, adolescent mothers are especially susceptible to anaemia, low birth weight, sexually transmitted diseases and malaria, and thus these risks must be properly screened for and managed.

Finally, countries must address adolescent pregnancy at a higher level with a more conducive legal and policy environment that empowers young women, decreasing the amount of adolescents who get pregnant, and improving the health outcomes for those who do. Formulating and enforcing laws on child marriage, improving access to education and economic opportunities for women, and providing adequate financing for maternal health are some of the ways in which governments can address the issue of adolescent pregnancy (WHO, 2008).

**Indicator 5.5: Antenatal care coverage**

Women who receive regular antenatal care are far more likely to give birth with a skilled health attendant and are better able to recognize the signs of complications before, during and after delivery. Yet antenatal care coverage in Africa remains very low. Overall, about 79 per cent of pregnant African women attend at least one antenatal check-up, but fewer than half of pregnant women in Africa attend the recommended four. And these rates mask huge disparities. Although nearly half of all countries show that over 90 per cent of women make at least one antenatal visit, in countries where maternal mortality is the biggest problem, such as Somalia, Ethiopia, Chad and Niger, fewer than half the women make even one antenatal visit.

**Maternal survival increases significantly with four or more antenatal check-ups**

Although the majority of women in African attend at least one antenatal check-up, the correlation with maternal mortality increases significantly with four or more visits (figures 5.8 and 5.9). Attending the WHO-recommended four antenatal care visits has the strongest correlation with reducing the MMR of all the other maternal health variables.
assessed. The correlation between antenatal visits and MMR increases with the number of visits.

Regular contact with skilled health personnel during pregnancy is imperative for the health and well-being of the mother and infant. Antenatal care allows for detection and management of conditions such as hypertension, sexually transmitted diseases and HIV/AIDS as well as malaria, while promoting immunization and nutrition supplements, prevention of mother-to-child transmission of HIV/AIDS and birth preparedness. The antenatal period is also an opportunity for women to get information on future birth spacing or limiting, an important factor in improving mother and child survival.

What is preventing African women from attending the recommended four visits? In many countries, the quality of care is poor, and although the first antenatal check-up is free, women must pay out of pocket for subsequent visits. It is therefore imperative for countries to provide at least four, free, high-quality antenatal check-ups to pregnant women. Women may also not have enough information on the importance of multiple antenatal check-ups, and so health providers must urge women to return for check-ups, and provide incentives for women to do so. If more women can attend the recommended four check-ups, Africa will undoubtedly see a steep fall in maternal mortality.

Post-natal care – health services provided in the first six weeks after birth – although not measured as part of the MDGs is also essential to the health of mothers and newborns. The first day after birth is the time of highest risk for both mother and baby, and half of all post-natal deaths occur in the first week after birth. WHO estimates that every year in Africa, at least 125,000 women and 870,000 newborns die during that first week, largely owing to limited access to, and poor quality of, maternal services.

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**Figure 5.8 Correlation between change in percentage of women attending at least one antenatal check-up and percentage change in MMR, 1995–2008**

![Figure 5.8](image-url)

Source: Computations from UNSD, accessed December 2011.
On average, 18 million African women do not give birth in a health facility every year, making it hard to plan for and implement post-natal services (WHO, 2006). Thus, beyond increasing the number of women who attend antenatal care services and who give birth with a skilled health attendant, countries must improve the availability and quality of post-natal services.

**Conclusions**

Africa as a whole continues to make slow progress towards MDG 5, despite international, continental and national initiatives aimed at improving maternal health. Efforts to decrease maternal mortality cannot be undertaken in isolation, as it is closely linked to other maternal health indicators, as well as other MDGs.

The inadequate access to and use of skilled birth attendants and inequity by location and income are serious impediments to reducing national MMRs. The use of contraception to space or limit births is an important factor in the continent’s high MMR. Furthermore, reducing poverty, improving education, boosting employment and empowering women, as well as fighting HIV/AIDS, TB and malaria will all have positive effects on maternal mortality. Better maternal health will have residual effects on child health and the economic well-being of individuals, families and communities.

MDG 5 provides a good framework for monitoring maternal health, but countries must look beyond the indicators and consider critical issues such as maternal morbidity, post-natal care and fertility rates to comprehensively address maternal health. With an international spotlight on maternal health in Africa, now is the time for governments and policymakers to put into place concrete actions so that no woman must fear death while giving birth.