

# Reducing maternal deaths: Evidence and action

A strategy for DFID



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## **by the Rt Hon Hilary Benn MP Secretary of State for International Development**

A poor woman in Malawi, Ethiopia or Nepal is over 200 times more likely to die as a result of pregnancy and childbirth than a woman in the UK. This inequity between developing and developed countries is indefensible. We know how to prevent these deaths.

Each year, over half a million women die from complications of pregnancy and childbirth. Almost all of them would live if they had access to a skilled midwife or doctor during childbirth and to effective emergency obstetric care when complications arise. Greater access to family planning would reduce the risk of death for women who want to delay or stop childbearing. And women who do face unwanted pregnancies should no longer die because they resort to unsafe abortions. They should have access to safe abortion services where legal and to post abortion care everywhere.

In 2000, 189 governments committed themselves to achieve the Millennium Development Goals by 2015. One of the goals is to improve maternal health. At current rates of progress we will not meet the target, but it can be achieved if governments and their partners turn words and promises into resources and action.

Progress on maternal health will also mean fewer deaths and better lives for children. We have the evidence on what works to prevent women dying. DFID will step up its efforts to stop these deaths. We will work with governments to put maternal health at the centre of national plans, and to support women's right to maternal health.

It will take the combined efforts of many to make the big difference needed. We must all challenge indifference, and encourage action. I look forward to working with partners on this, and to seeing a real change in the health and lives of women and their families.



Hilary Benn  
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# Contents

Foreword	iii
Summary	1
Introduction	3
The problem	5
Death, disability and ill-health	5
Impact on the family	6
Pregnancy and childbirth involve risks	7
What can be done to reduce maternal deaths?	9
Action to help individuals	9
Effective health services	10
Successful programmatic approaches	12
Addressing wider barriers to access	14
Measuring progress	16
The international effort	18
Action to achieve faster mortality reduction	20
Priority 1: Advocate – Raise the profile	20
Priority 2: Scale up evidence-based interventions	20
Priority 3: Address wider social and economic barriers to maternal health	20
Priority 4: Develop and apply new knowledge	21
Conclusion	22
Annex: Action across DFID	23
References	26

Each year 529,000 women die unnecessarily as a result of pregnancy and childbirth. Many millions more suffer ill health and disability. The death of a mother causes disruption to the immediate family and the wider community and contributes to deepening levels of poverty. This toll is almost entirely avoidable. We now have good evidence about how to reduce deaths and improve health.

Every woman is at risk of developing a serious complication, and therefore disability and death, during childbirth. About 15 per cent of all pregnant women will suffer a complication that cannot be predicted, or prevented. However 80 per cent of deaths result from one of five well-understood and relatively common obstetric complications that can be readily treated with existing, inexpensive medical or surgical interventions.

A woman in the poorest countries is over 100 times more likely to die in pregnancy and childbirth than is a woman in a developed country. This stark difference in risk of death is the widest disparity in all human development indicators. And for the poorest women, the risk is even higher.

Countries that have successfully reduced maternal mortality have had high levels of access to a skilled attendant at birth (a nurse or doctor with midwifery skills) and effective referral to emergency obstetric care when it is needed. Both of these need effective functioning health services.

Delaying marriage and first birth, preventing unwanted pregnancy and eliminating unsafe abortion will avert up to a third of maternal deaths. Wider birth spacing, and prevention of pregnancy in very young women, could also reduce child mortality by a quarter.

Underlying the failure to solve the problem lie broader social, cultural and political factors: the low status of women and the low priority given to their health, the failure to assure their rights to appropriate care, and the lack of political commitment to address the problem.

A number of middle-income countries have significantly reduced maternal mortality levels over a decade. However the poorest countries with very high levels of mortality and poorly functioning health services can only make such rapid progress with a big increase in effort and action now.

The fifth Millennium Development Goal is to improve maternal health, with a target to reduce the maternal mortality ratio by three quarters, between 1990 and 2015. Yet maternal mortality in developing countries has barely decreased over the past decade, and in parts of Africa it has increased. This failure is in contrast to successful efforts to reduce child mortality over recent decades and fresh efforts to combat the major communicable diseases.



The maternal health MDG will not be met without rapid action to:

- increase awareness of the nature and scale of the problem – making the problem visible to politicians, professionals and the public can be a powerful catalyst for change;
- increase investment in strengthening health systems and in improving access to reproductive health services generally and to maternal health services specifically;
- address the wider social, cultural and economic barriers to better maternal health, including the unequal status and rights of women; and
- develop and apply new knowledge.

Effective action requires, above all, the political will to act.

1. Each year 529,000 women die unnecessarily because of pregnancy and childbirth. Millions more suffer ill health, with as many as four million suffering a severe disability. Maternal mortality in developing countries has barely decreased over the past decade and has risen in parts of Africa. But we now have good evidence about how to reduce deaths and improve health.
2. Reasons for lack of progress include an inadequate international profile; insufficient commitment by leaders and opinion formers; the historic absence of a clear focus and consensus around the most effective approach; a failure to prioritise maternal health in either health or development strategies; persistent gender inequality; and the broader challenge of ensuring access to functioning health services.
3. The failure to mobilise world opinion to reduce maternal deaths is in sharp contrast to successful efforts in past decades to reduce child mortality and the recent global effort on HIV and AIDS, TB and Malaria.
4. In a clear call for international action, world leaders at the Millennium Summit in September 2000 made a renewed commitment to improve maternal health (the fifth Millennium Development Goal) and endorsed the target to reduce the maternal mortality ratio<sup>a</sup> (MMR) by three quarters between 1990 and 2015.
5. While some consider the challenge too ambitious, there is now evidence from a number of countries that maternal mortality levels can be significantly reduced within a decade. There is broad international consensus on the type of technical interventions that can lead to mortality reduction and the required actions needed to improve the wider enabling environment.
6. The health of the newborn child is bound to that of the mother. Delivery of effective interventions to improve maternal health could also avert 70 per cent of neonatal deaths<sup>b</sup>. Reducing child mortality (the fourth Millennium Development Goal) will be dependent on reducing neonatal deaths, which account for up to 40 per cent of deaths of children under five.
7. Accelerating progress to improve maternal health will also contribute to achieving the Millennium Development Goals to promote gender equality and the empowerment of women and to combat HIV and AIDS, malaria and other diseases.

<sup>a</sup> The maternal mortality ratio (MMR) is the number of maternal deaths per 100,000 live births. The MMR measures the risk of maternal mortality among pregnant or recently pregnant women. Live births are used as a proxy denominator for all births (information on the number of stillbirths is very difficult to obtain). The MMR can only be lowered by making childbirth and the management of unwanted pregnancy safer.

<sup>b</sup> The neonatal period is the first month of life.

8. The international community has an important role to play in supporting countries to uphold the right to be free of avoidable maternal death and disability, as required under several human rights conventions.

9. It is clear that without rapid scaling up of action at all levels, the Millennium Development Goal on maternal health will not be met in much of Asia and sub-Saharan Africa.

10. This paper explores how to speed up improvements in maternal health outcomes. It offers insights into the problem, describes effective interventions that have led to falls in mortality, and recommends a number of priority actions. It has drawn on more detailed studies of specific aspects<sup>c</sup> as well as the work of the many organisations and individuals referenced.

<sup>c</sup> covering: the economic rationale, poverty and gender, human rights, HIV and maternal mortality, neonatal mortality, child and maternal health programming, life cycle issues, livelihoods, governance, education, physical infrastructure, health systems, financing, measuring and monitoring, historical success stories, key actors.

## Death, disability and ill-health

11. Almost all deaths as a result of pregnancy and childbirth are avoidable. 99 per cent occur in developing countries and two thirds in 13 countries<sup>d</sup>. 25 per cent of all deaths occur in India alone<sup>1</sup>.

Table 1: 2000 Maternal mortality estimates by UN MDG regions<sup>1</sup>

Region	Maternal mortality ratio	Number of deaths
Sub-Saharan Africa	920	247,000
Northern Africa	130	4,600
South-Central Asia	520	207,000
South-Eastern Asia	210	25,000
Western Asia	190	9,800
Latin America/Caribbean	190	22,000
Europe	24	1,700
<b>World</b>	<b>400</b>	<b>529,000</b>

12. Beyond the stark mortality data in Table 1 lies a huge toll of ill health, long-term disability, child death and orphanhood, disruption to families and deepening poverty. Every year:

- 80 million women face an unwanted or unplanned pregnancy;<sup>2</sup>
- 20 million women risk an unsafe abortion rather than carry their pregnancy to term:<sup>3</sup> 68,000 will die as a result;
- 50 million women suffer from a serious pregnancy related illness;
- 4 million women are disabled as a result of pregnancy or childbirth.<sup>4</sup>

13. Fifteen million adolescents give birth at an age when the risks are particularly high: girls under age 15 are five times as likely to die in childbirth, and girls aged 15-19 twice as likely to die, as women in their twenties.<sup>5</sup>

<sup>d</sup> India, Nigeria, Pakistan, Democratic Republic of the Congo, Ethiopia, Tanzania, Afghanistan, Bangladesh, Angola, China, Kenya, Indonesia, Uganda.

14. An estimated 300 million women worldwide (25 per cent of the developing world's adult women) currently live with avoidable ill health and disability as a result of pregnancy.<sup>6</sup> Problems include infertility, uterine prolapse (where the womb falls into the vagina) and vesico-vaginal fistula (holes in the birth canal that allow leakage of faeces and/or urine into the vagina). Many women become socially excluded as a result.

15. An estimated 2 million women infected with HIV infection become pregnant each year. Few are aware of their infection. Evidence from Malawi and Zimbabwe indicates that the HIV and AIDS epidemic is having a significant impact on maternal mortality, reversing any past gains.<sup>7</sup>

16. There are more than 600,000 new cases of HIV infection in children each year with most contracting the infection from their mothers. The contribution to the HIV and AIDS burden of unsafe health care practice, including unsafe care in childbirth, is still being explored. Evidence suggests that service providers may neglect HIV positive women due to their known or perceived HIV status. AIDS-related mortality among health staff has led to further reductions in already inadequate health services and threatens efforts to increase skilled attendance at birth.

17. Maternal health conditions are the leading cause of the burden of disease faced by women of reproductive age. National data hide gross inequities, with maternal ill health and deaths disproportionately clustered in the poorest populations.<sup>8</sup> Poor women face financial and other barriers that prevent them from using health services where they are available. The cost of hospital care, particularly for severe obstetric complications, can have a catastrophic impact on household resources. In many communities the health system is unable to ensure access to effective care even for those women willing to incur debt to obtain life-saving treatment.

## Impact on the family

18. Maternal ill health results in much of the toll of 2.7 million stillbirths and the death of a further 3 million babies in the first week of life. Many of the conditions that cause child mortality also cause severe and lifelong disability. Families coping with child death and disability face costs that can place them or keep them in poverty. Many of these outcomes could be averted through simple interventions<sup>e</sup> provided through maternal health services before, during, or shortly after delivery. Efforts to reduce maternal mortality will have positive impacts on the Millennium Development Goal to reduce child mortality. Globally 40 per cent of under-five deaths occur in the neonatal period. This proportion increases as countries make headway in reducing mortality among older children.

<sup>e</sup> In the antenatal period: vaccination against tetanus, screening for and or treatment of sexually transmitted diseases including HIV, anaemia, high blood pressure, malaria; nutritional supplementation; preparation for birth and potential complications; early establishment of breastfeeding. Safe delivery care, appropriate management of asphyxia, prevention of cold injury and early treatment of infection.

19. The death of a mother is a sharp and unpredictable shock to the livelihood of any household and is likely to lead to deepening poverty. Few poor households are secure enough to absorb the loss of their most economically and socially active member. Household income drops and effective care of surviving children and other household members is threatened, falling either to elderly relatives or to young siblings, whose own vulnerability thereby increases. Up to 2 million children are orphaned each year by the death of a mother.

20. Women are the main investors in social networks and these may break down when a woman dies. Families without mothers are often at increased risk of children not attending school and/or living and working on the street. Daughters are at higher risk of unwanted pregnancy and early marriage and threatened with the same fate as their mothers. Unsustainable debt and destitution can result and families can be forced to disband. The consequences can be just as dire for a woman left severely disabled as a result of complications of pregnancy or childbirth. In many societies resulting infertility and disability can lead to domestic violence and social exclusion. The poorest women with insecure livelihoods are at much greater risk and their family livelihoods less resilient to such shocks.

## Pregnancy and childbirth involve risks

21. Programmes to reduce maternal deaths are based on the principle that, while pregnancy and childbirth are normal life cycle events, every woman is at risk of developing a life-threatening complication. Most routine antenatal care during pregnancy has little effect on reducing this risk.

22. The causes of maternal death in developing and developed countries are broadly similar but there is a massive difference in a woman's chance of surviving these complications (see **Box 1**).<sup>9</sup> **The difference in level of risk between developed and developing countries shows the widest disparity in all human development indicators.** High fertility rates and repeated pregnancy further increase the lifetime risk of maternal death for poor women.

### Box 1: Comparative mortality risk<sup>1</sup>

In Mozambique 1,000 and in India 540 women per 100,000 live births will die each year. The equivalent figure in the UK is 13.

Globally, the lifetime risk<sup>f</sup> for women of maternal death is 1 in 74. In industrialised countries this risk is 1 in 2,800. In the least developed countries, they face a 1 in 16 chance of dying in childbirth in their lifetime.

<sup>f</sup> Women face potential risk of maternal death in every pregnancy. The lifetime risk is derived from both the maternal mortality ratio and the total fertility rate.

23. Up to 80 per cent of deaths result from five well-understood and relatively common obstetric complications: bleeding, infection, complications of abortion, high blood pressure associated with pregnancy and prolonged or obstructed labour.<sup>10</sup> These are the 'direct' causes of maternal death. All can be readily treated with existing, inexpensive medical or surgical technologies.

24. The remaining 20 per cent of deaths are caused by underlying conditions that are made worse by pregnancy, such as severe anaemia, tuberculosis, malaria and, increasingly, AIDS. The contribution of these 'indirect causes' to the total maternal death burden depends on the general health of the population.

25. For every death, a further 30 to 50 women will survive the same complications but be left with short or long term disability if not treated properly and on time.

26. Underlying social and political conditions contribute to the high incidence of maternal deaths and ill health. These include lack of political commitment to address the problem, the low priority given to women's health, and the failure to assure their rights of access to appropriate care.

# What can be done to reduce maternal deaths?

## Action to help individuals

27. Early mother and child health programmes were concerned mainly with child survival and family planning interventions. The belief that women who were most at risk of maternal death could be identified and targeted for special care led, in the 1980s and early 1990s, to a focus on antenatal care, and to the widespread training of traditional birth attendants (TBA).<sup>11</sup> These approaches were however broadly unsuccessful in reducing maternal mortality. We now understand that:

- Every pregnancy exposes a woman to the risk of a complication and therefore disability and death.
- The five major complications cannot in the main be predicted, nor prevented, but can be addressed when they occur.
- About 15 per cent of all pregnant women will suffer one of these complications.
- Almost all deaths can be prevented through ensuring access to skilled attendance at birth with timely access to effective emergency obstetric care in the event that a complication arises.

28. The following interventions are essential to reducing mortality:

- **Prevention of unwanted pregnancy:** Accessible, effective family planning services may avert up to 35 per cent of maternal deaths.<sup>12</sup> Optimal birth spacing and prevention of pregnancy in very young women, who are at greater risk, could also reduce child mortality by a quarter.<sup>13</sup>
- **Safe management of unwanted pregnancy.** Unwanted pregnancies may result from lack of access to family planning services, family planning failure, or lack of control over the circumstances of sexual intercourse. Where safe alternatives are unavailable or unaffordable, unsafe abortion results and causes up to 15 per cent of maternal mortality. Where legal, safe abortion services should be provided. In all settings effective post-abortion care should be a part of routine services.
- **Prevention of death from a complication of pregnancy or childbirth.** This requires access to a skilled health worker backed up by a functional referral system. In 1994 Thaddeus and Maine described the 'three delays':<sup>14</sup>
  - delay associated with the decision to seek care;
  - delay in arrival at the point of care; and
  - delay in the provision of adequate care.



**Box 2: The three delays****The first delay**

'We knew she needed help but her husband was away working so there was nobody with the authority to make the move to the hospital' – Nepal<sup>15</sup>

**The second delay**

'...in the rural parts of the district, roads are opportunistically created by the tracks of vehicles that have previously cut their way through the vegetation. These routes become impassable with flooding in the rainy season...' – Ghana<sup>16</sup>

**The third delay**

'... so we searched for a (blood) donor around here. But it was the middle of the night, so it was impossible to find somebody.... At midnight the patient died. It was one hour after entering the hospital, and people were still discussing how to find some blood' – Indonesia<sup>17</sup>

29. These delays are interrelated and occur for a wide variety of economic, social, cultural and political reasons. Each must be addressed if death or severe illness is to be averted. For example, improving access to care without improving health service responsiveness and ability to manage life-threatening complications will not reduce maternal deaths. However, many of the poorest women may have no contact with formal health services. There is a need to better understand their needs and the barriers they face in using services. These barriers can be within the household as well as at the point of care.

**Effective health services**

30. Much analysis identifies an effective functioning health system as the cornerstone of successful efforts to reduce maternal deaths. Improvement does not require high technology equipment or expensive drugs. Existing basic systems can be built upon. Urgent needs in reversing years of under investment in health services are to:

- Upgrade infrastructure to provide a network of appropriately equipped health facilities able to provide basic emergency obstetric care<sup>g</sup>. These need to be linked to accessible referral facilities able to provide round-the-clock comprehensive emergency obstetric care<sup>h</sup>.

<sup>g</sup> Basic emergency obstetric care (BEOC) includes: injectable antibiotics, anticonvulsants and oxytocics; assisted vaginal delivery; removal of retained placenta; evacuation of retained products of conception.

<sup>h</sup> Comprehensive emergency obstetric care (CEOC) includes all elements of BEOC plus blood transfusion and caesarian section.

- Develop effective referral (transport and communication) systems to link the birth attendant at the first level with trained staff at the emergency care facility.
- Invest in human resources, particularly midwifery but also referral level skills such as obstetric surgery and anaesthesia.
- Improve accountability of professionals and officials.
- Build procurement and logistics systems that are able to provide an uninterrupted supply of emergency drugs and medical supplies.
- Develop an information system, embracing confidential enquiries and audits of maternal deaths and near misses,<sup>18</sup> that makes the problem visible and monitors progress.
- Introduce financing systems that ensure access for the poorest.
- Regulate service providers (public and private) and insurers.
- Ensure a supportive legal framework on working practice and limits.
- Ensure access to family planning and, where legal, safe abortion services and post abortion care.

31. There is no quick fix or single technological solution to the problems associated with maternal mortality and morbidity. Unlike immunisation and family planning, they cannot be addressed in poor policy environments through vertical projects outside the health system. An important reason for lack of progress in maternal health is lack of attention to upgrading the wide range of components of the health system that need to be in place.

32. Health sector reform aims to address failings in health services. However this is a long-term process and maternal health has rarely been a high priority within it. Safe motherhood projects have led to improvements in limited geographical areas, but have been unable to address systemic issues such as staff pay and incentives. Success has not generally been replicated on a national scale. More positively, addressing maternal mortality can be, as in Sri Lanka, an entry point for dealing with wider health system constraints and for introducing a sector reform programme.

## Successful programmatic approaches

33. In the early 1990s Vietnam, Lesotho, Central African Republic and Nepal had maternal mortality ratios of 160, 600, 700 and 1500 respectively, even though each of these countries had a very similar per capita GNP.<sup>19</sup> **The vast differences are not explained by economic status and the extent of poverty but by commitment to address the problem and to ensure equitable access to the necessary services.** Countries that have succeeded in reducing maternal mortality have invested in developing equitable health systems while maintaining a focus on maternal health outcomes. The steps and circumstances that led to a reduction in maternal mortality in industrialised and transitional countries had the following common features:

- As life threatening obstetric complications often cannot be prevented, averting most maternal deaths requires **access to curative clinical care**. Where the maternal mortality ratio has been substantially reduced, access to emergency obstetric care has been widely available. This requires expansion and strengthening of health services.
- In developing countries both **care and transport to care was either provided free** or covered by an insurance scheme to ensure equity of access.
- In most countries where the maternal mortality ratio has been reduced below 100 deaths per 100,000 live births there has been a high level of **skilled attendance at delivery**. Skilled *attendance* is defined as the presence of a professional with midwifery skills (the skilled *attendant*) backed up by a functioning referral system, able to provide rapid access to life saving skills and procedures in the event of an obstetric emergency.<sup>20</sup> This reduces maternal, perinatal and neonatal mortality.
- A precondition for successful maternal mortality reduction was **sustained political commitment**. This commitment enabled the implementation of wider policies and legislation that supported maternal well-being.
- **Improved availability and use of data** were crucial to raising public, professional and political awareness of the problem and in creating demand.
- DFID's own experience suggests that access to health services is severely constrained by the cost of services, lack of human resources, cultural, social and geographic factors. Some may be addressed through immediate interventions but many require **medium to longer-term social and cultural change**.

34. Sri Lanka and Malaysia reduced mortality by ensuring that all deliveries, whether at home or in a health facility, were attended by a trained midwife backed up by accessible emergency care.<sup>21</sup> Removal of financial barriers ensured free access for all. Sri Lanka expanded access to services, including maternity homes, in rural areas. Both countries established quality assurance programmes that held staff accountable. An enquiry was carried out into every maternal death to identify avoidable failures. Awareness of the extent of the problem was a catalyst for political action. Both countries built upon a commitment to 'access to all' as a driving force of health care reform. Falls to current mortality levels were however achieved over decades and indicate the need for long-term strategies and commitment.

35. Recent research in seven countries suggests that, where there is a clear target, national will and strategies adapted to address local barriers, substantial progress can be achieved in reducing maternal mortality within a decade.<sup>22</sup>

36. Three countries have successfully reduced the maternal mortality ratio to around 100 in less than a decade from initial levels of 174 (Egypt), 182 (Honduras) and 149 (Yunnan, China). Honduras reduced the maternal mortality ratio by 47 per cent over seven years. A 1990 mortality study gave the Ministry of Health a 'rude awakening' and a programme was initiated to increase access to skilled attendants, comprehensive referral facilities and community birthing centres to augment health facilities. Efforts were initially targeted at regions with the highest mortality rates. In China mortality was reduced through reliance on unskilled attendants but with rapid and free access to emergency care. Abortion was eliminated as a cause of mortality through early legalisation. Promotion of later marriage and women's education also contributed. Every province has a strategy for maternal mortality reduction and officials are held accountable for progress. There is strong political will and visibility – maternal health is one of three main indicators reviewed annually and publicly at national level.

37. There is a need to find the right balance between ensuring skilled attendance for all deliveries and ensuring access to emergency obstetric care for complicated deliveries. The balance will be defined by the individual country context. In Indonesia and parts of India availability of facilities is high but use is low. Indonesia has made great efforts to place a midwife in every village and, between 1991 and 1997, 56,000 young midwives were placed on three-year contracts then encouraged to enter private practice. Low uptake of services may reflect continuing cultural and cost barriers. Bangladesh has seen a 25 per cent fall in the maternal mortality ratio over the past decade despite continuing low levels of access to skilled attendants at birth. The fall is thought to have resulted from increased uptake of emergency obstetric care. The maternal mortality ratio however remains very high.

38. There remains a question whether low-income countries with very high mortality levels (a maternal mortality ratio around 1000 deaths per 100,000 live births) and weak health systems can make significant reductions in mortality in the period to 2015.

39. There are islands of progress in the poorest countries. In both Malawi and Nepal a national review of maternal mortality built political commitment and access to emergency obstetric care is increasing in defined project areas. Mozambique and Bhutan are dealing with critical skills shortages through training nurses and medical assistants to provide obstetric surgery and anaesthesia. Bolivia's insurance programme has increased use of maternal health services but many of the poor remain outside the health care system.

### Addressing wider barriers to access

40. Health systems improvement needs to be complemented by action to address maternal health as a development issue across sectors and disciplines. Governments and their partners need to give systematic attention to the supply and retention of trained staff, public expenditure management, and governance. Action is needed on gender-based discrimination, education, infrastructure, and communication and transport systems.

41. Better health systems can increase the supply of quality services. There is need also to understand better demand side issues, and address the social and cultural barriers faced by women in accessing adequate care. This includes the absence of legal and social rights. Poor women's voices must be heard to influence demand and challenge the cycle of gender poverty, social exclusion and discrimination. It is also important to listen to bereaved families and their experience of the real economic and social costs of maternal death.

42. Effective regulation and enforcement of service providers and health insurance providers is important. Access to services can be increased by action on illegal charges, publishing fee rates and exemption policies, and stopping illegal drug sales and procurement related corruption.

43. Maternal mortality reduction should be defined in terms of human rights as well as health. Almost all deaths are avoidable and rooted in inequitable access to care, a sign of denial of women's rights. Maternal mortality reflects the greatest disparity between rich and poor and is a good indicator of the extent to which a health system is rights-based.

44. The continuing low status of women in many societies and the failure of their needs to register with policy makers is a major barrier to improved maternal health. Programmes that seek to empower women economically and socially and to secure livelihoods should include the right to safe childbirth and question how they contribute to reducing maternal mortality.

45. Work with the legal profession can create a more supportive legal environment for women. Appropriate legislation and enforcement can contribute to maternal mortality reduction through improving the range and quality of service provision. A review of maternal mortality in Nepal influenced the legalisation of abortion. Women may need support to gain the right to use services without the consent of husbands. Dealing with practices such as child marriage, sexual violence and coercion, and female genital mutilation can have a major impact on women's health. In many places there is need to allow a legal right for health staff to provide services appropriate to the reality of the situation (e.g. only a doctor may legally carry out a particular life saving procedure but there may be no doctors).

46. Greater public awareness is a powerful tool in reducing maternal mortality. Advocacy by civil society groups, professional associations and the media and increasing the representation of women's groups on local institutions can lead to greater pressure for entitlements and rights. Civil society groups have an important role in drawing attention to the problem and in strengthening government accountability through engagement with Parliament and in consultations around poverty reduction strategies.

47. Violence is responsible for a sizable proportion of maternal deaths.<sup>23</sup> Women who suffer domestic violence in pregnancy are more likely to have a miscarriage and low birth weight babies. Gender violence is particularly high in conflict situations. Support for women's groups can raise the visibility of the problem and stimulate action.

48. Education, particularly of girls, empowers women to make informed choices and increases demand for improved services. Better-educated women marry later, have fewer, healthier and better-educated children and make more effective use of health services. Maternal health should be introduced into school curricula and into contacts with adolescents in formal and informal settings.

49. Effective communications and transport are critical to success. New technologies, including mobile and satellite phones, can speed calls for assistance and warn referral facilities. Some countries have developed short-term solutions using links with police communications and transport networks to increase access to emergency care in rural areas, and in urban areas where security concerns prevent movement at night. New solutions to reduce barriers are needed.

50. It is important to work with communities to understand local transport networks, reduce barriers, and take on board local views on the appropriateness of transport methods. Improvements in referral systems cannot be achieved through provision of hardware alone but will require training in management, maintenance and use.

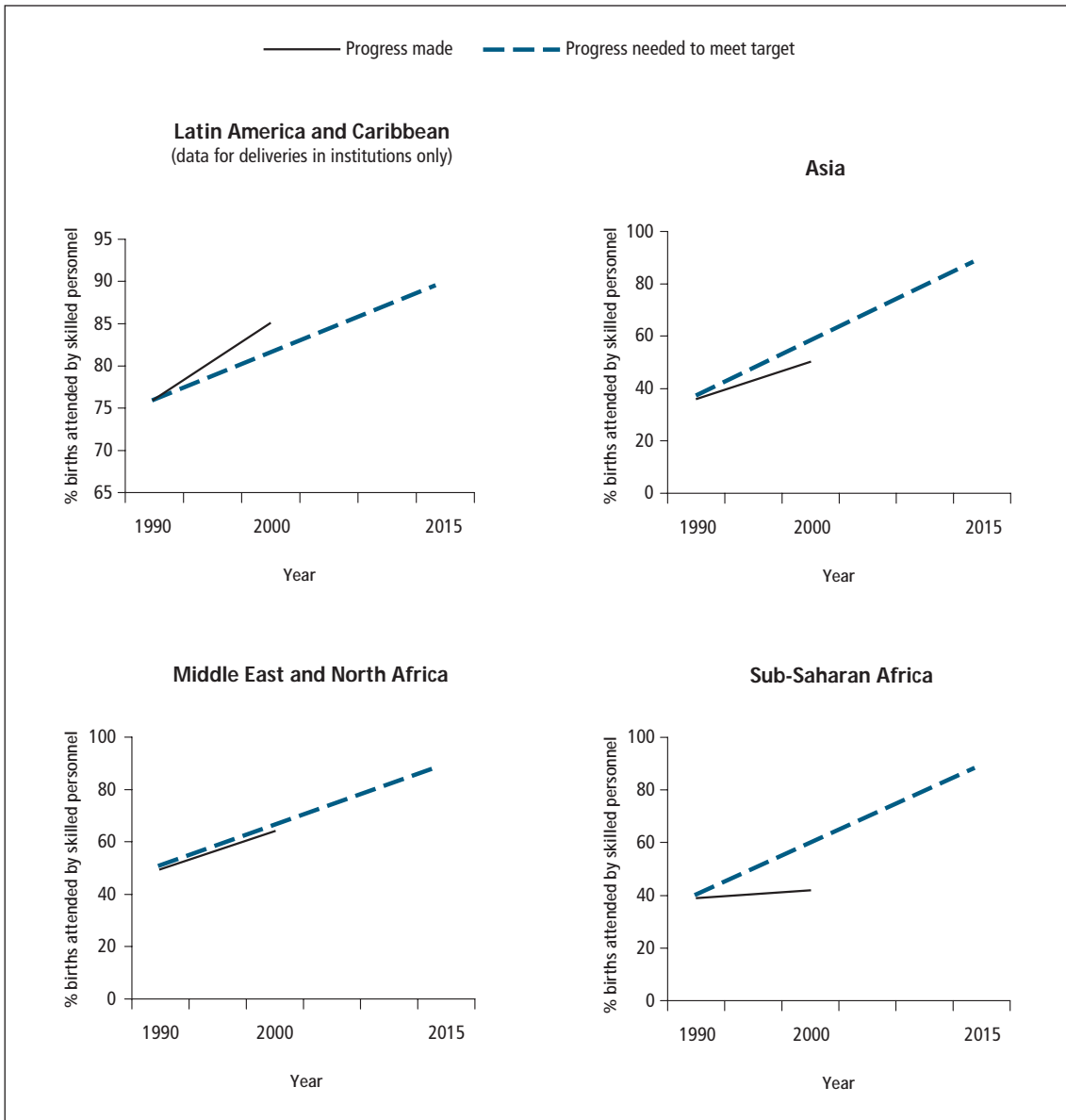
## Measuring progress

51. Effective measurement of maternal mortality is necessary to raise awareness and inform planning. However, existing methods are expensive, technically difficult, require large sample sizes and are too imprecise for tracking progress. In the absence of vital registration systems, countries rely on periodic surveys to estimate the maternal mortality ratio. The sisterhood method generally used in these surveys relies on respondents reporting on the survival of all their sisters. The deaths counted cover the previous seven to twelve years. The maternal mortality ratio cannot therefore currently be used to monitor changes up to 2015.

52. Proxy measures are therefore needed to monitor progress. The proportion of births attended by skilled health personnel is accepted internationally as the best available proxy. However there are limitations to interpretation of this indicator. The presence at birth of a health worker who may be untrained in midwifery may be equated to a skilled attendant in surveys. Even an appropriately trained worker may not be effective where critical elements of the enabling health environment are absent such as drugs and rapid access to life saving care.

53. **Figure 1** demonstrates the rate of change in this indicator from 1990. Only Latin America and the Caribbean are on track to meet the indicative target of 90 per cent births attended by a skilled health worker by 2015. In Asia only limited progress has been made and in Africa the rate has remained the same since 1990. Without a rapid scaling up of action at the national and international level the target will not be met.

Figure 1: Skilled attendants at delivery: progress by geographical region, 1990 to 2000



(Source: UNICEF – Data from Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and comparable surveys, weighted by number of births, based on data from 51 developing countries)



54. Data are needed to inform programme design and to monitor progress. In practice the full picture will be drawn from a combination of intermittent surveys of maternal mortality, monitoring skilled attendants at delivery through the health information system and other surveys, a range of process indicators that monitor access and use of quality interventions by those women in need, and qualitative information that assists in understanding social, cultural and economic barriers to better maternal health.

55. The 'Initiative for Maternal Mortality Programme Assessment' (IMPACT) led by the University of Aberdeen (with significant support from the Gates Foundation, USAID and DFID) aims to develop new measurement tools to better link inputs (access to skilled attendants) and processes to health gain (reduced mortality).

56. Despite guarded optimism in the report of the Commission on Macroeconomics and Health,<sup>24</sup> concern remains whether the maternal mortality target is achievable.<sup>25</sup> This concern should encourage everyone to act now.

## The international effort

57. The World Health Organisation (WHO) through Making Pregnancy Safer, UNICEF and the UN Population Fund (UNFPA) are the main multilateral agencies supporting countries to reduce maternal mortality. The World Bank is the largest external investor in the health sector. The programme 'Averting Maternal Deaths and Disability', funded by the Gates Foundation, works with partners in 40 countries to improve availability, quality and use of emergency obstetric care. Notable national projects include USAID-funded work in Morocco and the DFID-funded safe motherhood projects in Nepal and Malawi.

58. Nonetheless, there is still a lack of international profile and relative lack of investment in maternal mortality reduction when compared to other health issues such as the major communicable diseases. Maternal health has not had a high profile internationally, and international conferences in 1987 and 1997 have not led to sustained action on the necessary scale. In part this may reflect both disillusion in the failure of early approaches and seemingly overwhelming challenges in developing accessible and effective health services.

59. The Inter-agency group for Safe Motherhood has expanded to form the Safe Motherhood and Newborn Health Partnership. This brings together multilateral agencies (World Bank, UNFPA, UNICEF, WHO), professional associations (International Confederation of Midwives, International Federation of Gynaecology and Obstetrics), donors, international NGOs and regional safe motherhood networks. Its role is to bring greater coherence to international advocacy, resource mobilisation and lesson learning, and to better promote the benefits of co-ordinated action on maternal and newborn health.

60. Most current safe motherhood initiatives are projects located within the health sector. Some are substantial – the DFID Malawi project aims to cover half the national population. They have demonstrated improvements at the local level, made the problem visible and led to improvements in elements of the health system. However there are valid concerns about replicability and sustainability. Many initiatives have led to the production of high quality technical tools, progressed work on clinical processes and quality of care but with less emphasis on the planning, organisation and management of programmes on the requisite national scale.

61. New approaches to development assistance offer potential for more co-coordinated and sustained approaches to maternal mortality reduction. Sector wide approaches (SWAps) can reduce or eliminate the distortions created by vertical or fragmented approaches. They provide a framework for donors and government to strengthen health systems while focusing on maternal mortality reduction as an indicator of progress. Reduction in maternal mortality rates should be a key part of sector plans.

62. Progress in reducing maternal mortality should also be an issue in discussions on budget support and should be an indicator in the monitoring of poverty reduction strategies. Strong gender analysis would contribute to more effective consideration of maternal mortality reduction within such strategies.

63. In short, maternal mortality can be considered as the best single indicator of the effectiveness of a country's health system.

64. The maternal mortality target will not be reached without a significant increase in government and donor commitment and changes in national and international policies. This includes allocation of substantially greater resources to the health sector.
65. The key to progress is clear – ensuring a health worker with midwifery skills is present at every birth, and access to comprehensive obstetric care in case of emergency. Increasing the supply and retention of trained health workers, and expanding access to emergency obstetric care, pose particular challenges but are feasible in the medium term.
66. The reproductive health gains of the past decade must be sustained and a renewed commitment made to increase access to family planning and to address unsafe abortion. All support should be part of, and complement, existing country level activity.
67. A bigger effort will require action across four priority areas outlined below. The annex sets out in more detail action to be taken across DFID and with partners, including immediate steps by 2005.

### **Priority 1: Advocate – Raise the profile**

68. Advocacy must aim to ensure that the maternal health MDG secures a level of attention and investment appropriate to the direct and indirect burden of death and ill health. The connections with other MDGs and with other aspects of reproductive health should be recognised and exploited.

### **Priority 2: Scale up evidence-based interventions**

69. This will involve providing support (appropriate to the country context) to strengthen health systems so that they deliver more effective maternal health services (as set out in paragraph 28).

### **Priority 3: Address wider social and economic barriers to maternal health**

70. Alongside strengthening of health systems, we need to address the barriers to maternal health in the wider environment. This will include raising the profile of maternal health as a way to promote the status and rights of women.

## **Priority 4: Develop and apply new knowledge**

71. It will be important to ensure emerging evidence becomes well known and used, and to identify gaps in evidence that are major obstacles to progress. In some cases, this will involve new research or other forms of evidence gathering; in others, it will mean better synthesis and dissemination of existing evidence in forms useful to policy makers, practitioners and client groups. Where existing capacity to generate new knowledge or to convert knowledge into policy and practice is weak, support to improve capacity will be a precursor.

72. The fifth Millennium Development Goal sets a clear framework for action. We are more than half way to 2015 from the 1990 baseline yet few poor countries can demonstrate improvements in maternal health. Without a rapid increase in the implementation of proven interventions the goal will not be met.

73. We know what works to avert most death and disability. The focus must be on increasing access, use and quality of health services that ensure access to a skilled attendant at birth and an effective referral system that is able to deal with life threatening complications. There must be access to safe abortion where legal and effective post abortion care. Past gains in reproductive health need to be build upon and the massive need for safe and affordable contraception met.

74. A successful effort will require increased resources for health systems, increased efficiency in their use and tackling inequity.

75. Interventions to strengthen the health system must be linked to changes in broader social and economic conditions, including promotion of the status and rights of women. Like HIV and AIDS, maternal mortality reduction must be considered across all sectors.

76. Above all, effective action requires political will to act and a greater level of ambition. Great gains are promised when the national commitment to the Millennium Development Goal is reflected in national poverty reduction strategies and budgets and translated into action, and when governments in developed and developing countries are held accountable for progress.

77. We look forward to working with partners on faster progress towards to Millennium Development Goal of improved maternal health.

# Action across DFID

## Priority 1: Advocate – Raise the profile

- 1.1 Raise the profile of maternal mortality reduction within DFID.
- 1.2 Identify and utilise opportunities to raise the profile in the international arena including the UN, the European Union, World Bank, donor groups and regional fora.
- 1.3 Ensure that maternal mortality reduction is included as a key element of international health initiatives such as UN-led efforts to accelerate progress towards achieving the MDGs. Maximise linkages with global initiatives, such as the Global Fund to fight AIDS, TB and Malaria. Contribute to and draw on the work of the High Level Forum on Health.
- 1.4 Promote more effective international maternal mortality reduction partnerships particularly the evolving Partnership for Safe Motherhood and Newborn Health.
- 1.5 Ensure that in all DFID partner countries the extent of the problem is made visible and appropriate action encouraged in national development policies and budgets and in sector plans. Work with partners to give maternal mortality reduction due attention in country development processes including UN Development Assistance Frameworks and Country Coordinating Mechanisms.
- 1.6 Feature maternal mortality reduction prominently in discussions with Finance and Planning Ministries and other partners around poverty reduction strategies and budget support. Encourage the use of progress in increasing skilled attendance as a core indicator of PRS implementation and health systems development.
- 1.7 Support work to analyse country specific impediments to progress and options to resolve these.
- 1.8 Promote complementarity between efforts to improve maternal, neonatal and child health, addressing human rights issues as appropriate.
- 1.9 Mobilise civil society, working with existing alliances and networks. Encourage links with Parliamentarians.

### **Priority 2: Scale up evidence-based interventions**

- 2.1 Back international efforts that support countries to accelerate progress towards the MDGs.
- 2.2 Where DFID is substantially engaged in health sector development, ensure that maternal mortality reduction is a key component, a lever for health sector reform and systems strengthening, and a measure of progress.
- 2.3 Work with country partners to support incorporation of essential elements of maternal health services in essential care packages – through mechanisms appropriate to the country setting, including sector wide approaches and where appropriate specific support.
- 2.4 Continue high level support to improve broad reproductive health services.
- 2.5 Work with partners to identify and support country champions, lever support to scale up successful programmes. Work with countries that plan to accelerate action on maternal health.
- 2.6 Promote adequate/increased allocations for actions to strengthen health systems and complementary action in critical sectors such as education.

### **Priority 3: Address wider social and economic barriers to access**

- 3.1 Engage other disciplinary groups (particularly governance, education and social development expertise) in getting the health sector response right at country level.
- 3.2 Promote greater understanding of the multi-sectoral dimensions of maternal health and maximise contributions to maternal mortality reduction through action outside the health sector.
- 3.3 Promote women's rights as a framework for accelerating maternal mortality reduction, building on international and national human rights commitments.

#### **Priority 4: Develop and apply new knowledge**

- 4.1 Contribute to the development of a stronger evidence base for maternal mortality reduction including the development of more effective monitoring and measurement tools through specific projects and knowledge programmes.
- 4.2 Consider support to new research agendas including: impact of HIV on maternal health and services and opportunities to expand access to underused life saving interventions. Ensure that new knowledge is reflected in policy and practice.
- 4.3 Support efforts to build capacity of a future generation of safe motherhood and neonatal health leaders and researchers through fellowships, attachments to research institutions and country programmes, mentoring and structured leadership programmes.
- 4.4 Support efforts to share lessons learned and best practice across countries.

#### **Outputs for DFID by end 2005**

- Maternal health outcomes explicitly addressed in DFID consultations with partner governments on poverty reduction strategies, general budget support, sector support and other relevant interventions, leading to increased national commitment and plans to increase coverage and utilisation of health services in ways that will deliver better maternal health.
- For DFID's partner countries with high maternal mortality, an analysis of: the challenges in reducing maternal mortality, and the evidence-based response needed, and the role of DFID; and the outcomes of this analysis reflected in new DFID country assistance plans and investments.
- Analysis of evidence and potential of rights-based approaches to maternal health disseminated in DFID and partner organisations.
- New evidence and improved measurement tools emerging in 2004/05 from DFID-supported work disseminated promptly and effectively.
- Highest priority knowledge gaps identified and being addressed through newly commissioned work.
- Year on year increase in spending on maternal health.



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## Department for International Development

The Department for International Development (DFID) is the UK Government department responsible for promoting sustainable development and reducing poverty. The central focus of the Government's policy, based on the 1997 and 2000 White Papers on International Development, is a commitment to the internationally agreed Millennium Development Goals, to be achieved by 2015. These seek to:

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

DFID's assistance is concentrated in the poorest countries of sub-Saharan Africa and Asia, but also contributes to poverty reduction and sustainable development in middle-income countries, including those in Latin America and Eastern Europe.

DFID works in partnership with governments committed to the Millennium Development Goals, with civil society, the private sector and the research community. It also works with multilateral institutions, including the World Bank, United Nations agencies, and the European Commission.

DFID has headquarters in London and East Kilbride, offices in many developing countries, and staff based in British embassies and high commissions around the world.

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