

Invited paper

# Maternal health in the Eastern Mediterranean Region of the World Health Organization

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**SUMMARY** Globally, progress in improving the survival and well-being of mothers has been slow, and this holds true for the Eastern Mediterranean Region. Thus at the current pace, it is unlikely that the Millennium Development Goal related improving maternal health will be achieved in the Region by the year 2015. This paper outlines the factors contributing to maternal mortality and poor health in the Region and the challenges faced. The action needed to redress the situation and improve maternal health, and hence achieve the fourth Millennium Development Goal, is presented.

## Introduction

Too many mothers in the world are dying or suffering from the effects of ill-health, poor nutrition and inadequate health care. Each year more than half a million mothers die in childbirth and around 4 million babies do not survive past the first 4 weeks of life [1]. A significant proportion of these deaths take place in the Eastern Mediterranean Region (EMR) of the World Health Organization. In fact, in several countries of the Region, pregnancy and childbirth are one of the leading causes of death for women of reproductive age. The latest estimates show that in terms of the levels of maternal mortality, EMR falls directly below the African Region. Every year in the Region, approximately 53 000 mothers die as a result of pregnancy-related complications [2]. Many more become ill or are left disabled. Yet, the fate of these women is often not fully recognized.

## Maternal health in the Eastern Mediterranean Region

The 10th revision of the *ICD-10: International classification of diseases and health-related conditions* defines maternal mortality as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes” [3].

Around the world, every minute, a woman dies from complications in pregnancy and childbirth. That means that 1400 women die every day and more than half a million women die every year [4]. Many millions more suffer disabilities. In the Region alone, 145 women die from complications in pregnancy and childbirth every day, and more than 53 000 women die of these causes every year [2]. In fact, the 2004 es-

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imates report the Regional maternal mortality ratio at 370 deaths per 100 000 live births and the neonatal mortality rate at 32.7 per 1000 live births.

There are great variations and disparities in maternal mortality levels between countries of the Region. Kuwait, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia and United Arab Emirates have, significantly, achieved over 75% reductions compared to levels in 1990. Maternal mortality ratios in these countries range from 0 to 40 per 100 000 live births. Other countries, such as Bahrain, Egypt, Islamic Republic of Iran, Jordan, Morocco, Syrian Arab Republic and Yemen have made considerable progress in reducing maternal mortality by 50% to 75% from levels in 1990. These countries still need to bring about further reduction in maternal mortality, with maternal mortality ratios ranging widely from 21 to 366 per 100 000 live births. Meanwhile, the reduction in maternal mortality in Afghanistan, Djibouti, Iraq, Pakistan, Somalia and Sudan has not exceeded 25% from levels in 1990, with maternal mortality ratios ranging from 294 per 100 000 live births in Iraq to 1600 in Afghanistan and Somalia [2].

Over 95% of the burden of maternal death in the Region is shared by 7 countries, namely Afghanistan, Iraq, Morocco, Pakistan, Somalia, Sudan and Yemen. These countries, along with Djibouti, have particularly high maternal mortality ratios (over 200 deaths per 100 000 live births). These countries are therefore considered priority countries whose maternal health must be addressed if the Millennium Development Goals are to be achieved [2]. That said, it is nevertheless important to remember that maternal health is a high priority that should be of concern in all countries of the Region.

## Factors contributing to maternal mortality

Global progress in improving the survival and well-being of mothers has been slow. The regional target, established in 1990 by the Thirty-seventh Session of the Regional Committee for the Eastern Mediterranean, was to reduce the maternal mortality ratio by 50% between 1990 and 2000 [5]. However, the average maternal mortality ratio in the Region in 2004 was estimated at 370 per 100 000 live births, compared to 465 per 100 000 live births in 1990, a reduction of only around 20% between 1990 and 2004 (Figure 1). Thus at the current pace, it is unlikely that the Millennium Development Goal related improving maternal health will be achieved in the Region by the year 2015.

The process of improving maternal health in the Region faces many challenges which have slowed progress in recent years. The most important factors that contribute to the maternal health situation are community awareness about life-saving practices in pregnancy, childbirth and home care for children, literacy and female education, fertility and family formation patterns, and quality of health care delivery systems.

Unfortunately, for many years the Eastern Mediterranean Region has been devastated by man-made disasters and conflicts which have tremendously affected the health of the populations in some countries, especially the vulnerable groups such as children and mothers. The social and health impacts of political instability, domestic crises and economic sanctions are well documented in the Region.

The impact of political instability and domestic crisis on the maternal health-related indicators is clearly demonstrated in

Iraq. After experiencing a remarkable decline in the morbidity and mortality indicators for children and mothers in the 1980s, death levels among mothers rose sharply from 40 per 100 000 live births in 1989 to 294 per 100 000 in 2004 [2]. In addition, the low birth weight rate also increased from 4.5% in 1990 to 25% in 2004. These increases resulted mainly from the application of economic sanctions, which led to a deterioration in the quality of health care, lack of essential drugs and poor nutritional status. To varied intensity, similar situations apply in other countries with high maternal mortality levels, including Afghanistan, Somalia and Sudan. Provision of essential health services to mothers in these countries is a human right that can be fulfilled through the implementation of effective interventions.

Political commitment is an essential factor contributing towards the achievement of the Millennium Development Goals. Unfortunately, however, since 2000, there has been a reduction in health expenditure on maternal health in the Region. Moreover, there are no clear policies on maternal

health in most of the countries that would give long-term direction and ensure sustained commitment to this important public health area.

The current level of health expenditure, especially in the low-income countries of the Region, which are also those with the highest maternal mortality, is insufficient to support strategies and actions necessary to achieve the Millennium Development Goals. The serious reduction in WHO allocations to maternal health at the regional level has also adversely affected the scaling up of the implementation of effective related interventions.

Furthermore, the current tendency to fund vertical, disease-specific programmes has dramatically shifted resources from maternal health. This tendency may lead to neglect of integrated strategies that aim to strengthen the health system and to build capacity in human resources, both of which are essential to support and sustain progress towards achieving the Millennium Development Goals.

A lack of qualified human resources for maternal health interventions and pro-

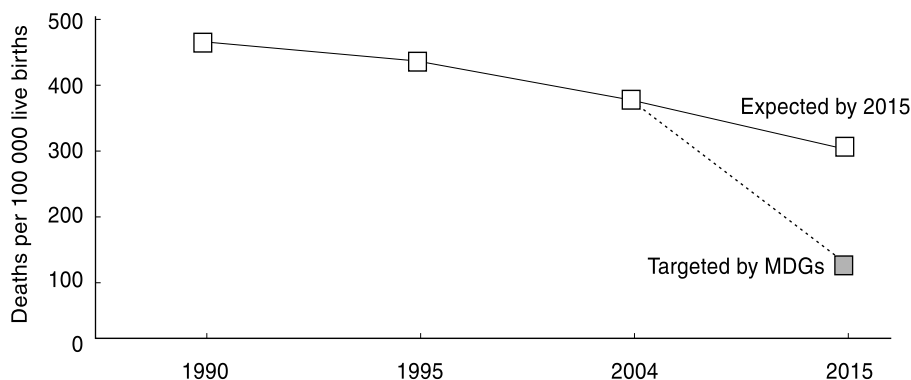


Figure 1 Regional trend in reduction of maternal mortality 1990–2004, with projections to 2015 (Source: WHO/EMRO, 1976–2003)

grammes in the Region adds to the magnitude of the problem and the development of qualified, skilled staff requires further attention. The inadequate pre-service (basic) education of health providers overburdens the health system with a continuing need to improve and update health providers' knowledge and skills. Low quality in-service training of health providers and high turnover of trained staff are also major obstacles to providing good quality health services to mothers, particularly where they are most needed.

Socioeconomic factors play a large role in the maternal health situation. Poverty, illiteracy, malnutrition and the low social status of women are undoubtedly among the major underlying causes of maternal mortality. The average literacy rate for adult females in 6 countries (Afghanistan, Djibouti, Pakistan, Somalia, Sudan and Yemen) with high maternal mortality is 40%, compared to 56% for the Region as a whole. Poverty alleviation, improved feeding practices, female education and eradication of illiteracy, particularly among women, are important factors in protecting and promoting maternal health, and require special attention in countries with high maternal mortality levels [2].

Provision of primary health care and effective referral services to mothers is a prerequisite to reduction of morbidity and mortality among this vulnerable group of the population. In the 6 countries with high maternal mortality, the average proportion of the population with access to local health facilities is around 70%, compared to 84% in the Region as a whole [2]. Lack of quality services, lack of essential supplies and trained personnel, lack of access to quality care, lack of facilities for emergency transport, and lack of or poor referral services are all crucial steps on the road to death due to poor infrastructure.

The health hazards resulting from too early pregnancy, too late pregnancy, too close pregnancy and too many pregnancies are well established. If such high-risk pregnancies were prevented, it is estimated that maternal mortality could be reduced by up to 25%. Unfortunately, in the 6 countries with high maternal mortality, on average only 26.5% of married women use contraceptives compared to 40% for the Region. Promoting family planning among married women is an effective intervention to prevent many avoidable deaths among mothers [2].

Data and information related to maternal health are still scarce in most countries of the Region. Even when available, these data are often either of poor quality or their use in decision-making and planning is very limited.

### Transforming knowledge into action

Much research has been conducted, producing a considerable fund of information on maternal health and causes of ill health. For example, it has been established that some 80% of all maternal deaths are caused by just 5 factors: haemorrhage, infection, unsafe abortion, high blood pressure and obstructed labour [2]. In addition, poverty, social exclusion, low levels of education and violence against women are powerful underlying causes of maternal death and disability. Women who become pregnant very young, who give birth many times, who suffer from infectious diseases such as malaria, tuberculosis and HIV/AIDS, and who are malnourished or anaemic are more likely to die.

Effective knowledge and tools exist to reduce this suffering and death. However, to make a real difference they must reach

all mothers who need them. Experience has shown that the known interventions are affordable and can be delivered, even in the poorest parts of the Region. At the same time, international agreements such as the United Nations Millennium Declaration have paved the way for removing important obstacles to the widespread delivery of life-saving knowledge and tools.

More than 189 nations – including the countries of the Region – have committed themselves to the Millennium Declaration and the targets of the Millennium Development Goals. The Millennium Development Goals acknowledge the importance of healthy mothers for social and economic development. They also show that simultaneous action is needed across many different fronts in order to achieve results.

The World Health Organization has dedicated World Health Day 2005, as well as *The World Health Report 2005*, to mothers and children. The slogan used for World Health Day 2005, “Make Every Mother and Child Count”, reflects the urgent need for governments and the international community to make the health of women and children a higher priority. World Health Day 2005 has been a unique opportunity to raise awareness of this major public health and development issue, and of the efforts needed by all to ensure life and good health among mothers and children.

To reduce maternal deaths dramatically, all pregnant women need access to high-quality delivery care with at least 3 key elements: skilled care at birth, emergency obstetric care in case of complications, and a functioning referral system which ensures access to emergency care if needed. There are sound medical reasons why governments should invest in skilled birth attendants, especially for the time of birth. Most maternal and newborn deaths occur around the time of delivery or shortly there-

after. These deaths could be prevented or managed if women had access to a skilled attendant with necessary back-up and support. In fact, there is a reverse correlation between the percentage of births attended by skilled health personnel and maternal mortality ratio in countries of the Region [2].

The Regional Office has adopted the Safe Motherhood Initiative as a priority strategy to protect and promote maternal health in countries of the Region. As a result, maternal health care delivery indicators have improved significantly. Between 1990 and 2004, the percentages of pregnant women and deliveries attended by skilled personnel increased by 114% (from 28% to 60%) and 47% (from 36% to 53%) respectively. Nevertheless, if current trends continue, some countries will not be able to achieve the targets of the Millennium Development Goals. Therefore concerted acceleration efforts are urgently needed, particularly in priority countries. The launch of WHO’s Making Pregnancy Safer initiative in 2000 was a significant step forward towards reducing maternal and neonatal ill health in Member States. The adoption of the Making Pregnancy Safer strategy is expected to accelerate the reduction of maternal morbidity and mortality through: 1) strengthening health care delivery systems; 2) improving knowledge and skills of health workers about early detection and management of complications in pregnancy and delivery; and 3) educating women and their families about the risks mothers may encounter and about the appropriate actions that need to be taken should danger signals be identified.

In October 2004, noting with concern the high levels of maternal and child mortality in some countries of the Region which prevent the achievement of the Millennium Development Goals, and impede the human

and socioeconomic development of those countries, the Fifty-first Session of the Regional Committee for the Eastern Mediterranean passed Resolution EM/RC51/R.4, which focused on moving towards achieving the Millennium Development Goals through investing in maternal and child health [6]. The Resolution urged Member States to re-examine their existing national policies and strategies; to expand upon achievements made and build on them; to strengthen national surveillance systems and adopt evidence-based interventions; to establish national maternal mortality committees to review and monitor maternal deaths; and to incorporate maternal health approaches into formal teaching curricula of medical and paramedical schools. In addition, the Resolution called upon the Regional Office to support further the scaling up of effective interventions; to assist Member States to conduct in-depth assessment of maternal mortality; and to report periodically to the Regional Committee on the progress in maternal and child health.

In accordance with the Making Pregnancy Safer strategy, the Regional Office – in collaboration with WHO Headquarters – developed a strategic document entitled *A framework for strategic directions for accelerating the reduction of maternal mortality in the Eastern Mediterranean Region* [7]. The document has served to provide a reference on the situation of mothers in the Region, along with a background to the problem of maternal mortality that is facing several Member States. The document also discusses the challenges facing the Region that may impede the process of moving towards achieving the Millennium Development Goals. At the same time, the document sets out strategic directions to pave the way for Member States to accelerate the reduction in maternal mortality and move closer to realizing the targets set

by the Millennium Development Goals. The central objective of the Making Pregnancy Safer strategy is to ensure safe pregnancy and childbirth through the availability, access and use of quality skilled care for all women and their newborns by ensuring that skilled care at every birth is a priority.

## Conclusion

There is widespread lack of awareness in the Region about the Millennium Development Goals announced in the Millennium Declaration in 2000, even among maternal health programme managers, and the adoption of the goals has not translated into action to achieve them. National policies on maternal health are still lacking in most of the countries.

If the current maternal mortality trends in the Region continue, the Millennium Development Goals are unlikely to be achieved. Only if commitment, intensive efforts and national plans are made and translated into action, including resources allocation, will the Region be able to meet the Millennium Development Goals. Such efforts and plans should target the strengthening of health systems, expansion in the coverage of effective integrated interventions and recognition of the essential role of community participation.

Too many women are dying due to potentially preventable causes. The magnitude of the problem is known, so are its causes and contributing factors. The challenges to promoting the health of mothers have been laid out. At the same time, we know the appropriate and effective interventions. Rapid and coordinated action is needed to reach every mother with an essential and affordable package of these proven interventions. The time to act is now.

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