Reduction of Postpartum Haemorrhage

Obstetric haemorrhage is the world’s leading cause of maternal mortality, responsible for an estimated 127 000 deaths annually. Postpartum haemorrhage (PPH) is the most common type of obstetric haemorrhage and accounts for the majority of the 14 million cases that occur each year.

Failure of the uterus to contract adequately after childbirth is the most common cause of postpartum haemorrhage. In the absence of timely and appropriate action, a woman could die within a few hours.

In the developed world, PPH is a largely preventable and manageable condition. In developing countries, mortality from PPH remains high and recent studies have shown that PPH causes up to 60 per cent of all maternal deaths. For example, PPH accounts for 59 per cent of maternal deaths in Burkina Faso, 53 per cent in the Philippines, and 43 per cent in Indonesia. PPH also causes considerable suffering for women and their families and places a heavy burden on national health systems.

In response to the urgent need to provide evidence-based guidance on this issue, the World Health Organization (WHO) organized a technical consultation on the Prevention of Postpartum Haemorrhage in Geneva on 18–20 October 2006. An international panel reviewed the evidence and provided answers to key questions related to prevention.

Based on the recent proven advantages of oxytocin (more effective, fewer side effects, less expensive compared to other medicines), the panel recommended oxytocin as the drug of choice for prevention.

WHO has continuously promoted active management of the third stage of labour as an intervention for the prevention of PPH. This intervention is a package comprising administration of a uterotonic drug to make the uterus contract after delivery of the baby, clamping and cutting the umbilical cord, and delivery of the placenta by controlled cord traction, followed by uterine massage. Experts at the technical consultation endorsed this evidence-based recommendation.

WHO guidelines recommend oxytocin to be routinely used in the active man-
From 13-14 March 2007 in London, influential women from all over the globe came together to urge the world to redouble efforts and boost investments to reduce the global burden of maternal and newborn death. The policy-makers and parliamentarians from developing and developed countries met to mark Mother’s Day in the United Kingdom on Sunday, 18 March. Key participants included Mrs Cherie Blair, wife of the British Prime Minister and international lawyer, Mrs Hilary Benn, MP, Secretary of State, Department for International Development, UK, Ms Liya Kebede, Supermodel and World Health Organization Goodwill Ambassador for Maternal, Newborn and Child Health, and the First Lady of Lesotho, Mrs Mathato S. Mosisilli.

A Global Plan of Action agreed at the meeting calls for a universal right to health for mothers and their babies by ensuring skilled care at every birth, active community involvement, global monitoring networks, and better infrastructure including roads, transport and human resources. The plan calls on governments to take the lead in fighting maternal and newborn illness and death. Members of Parliament from countries including, Botswana, Brazil, Cambodia, Indonesia, Kenya, Pakistan and Tajikistan gathered to pledge commitments and to honour this day by recognizing the importance of mothers -- women who have a great impact on our lives.

Mother’s Day is very much a day for giving. Yet, too many mothers are suffering and dying each year. Every minute, a mother dies from complications in pregnancy and childbirth.

This year, Liya Kebede, the World Health Organization’s Goodwill Ambassador for Maternal, Newborn and Child Health asks you to honour this day in your country and to recognize the importance of honouring our Mothers, — women who have a great impact on our lives.

Whether you have a mother or are one, we ask that you look at the bountiful task of being a mother-nurturing a child, working, raising a family – and keeping yourself healthy! So many mothers across the globe, don’t have access to basic health services and many are deprived from skilled care before, during and after birth.

Healthy mothers and children are the real wealth of societies. This Mother’s Day, we ask that you celebrate motherhood in your country. Without healthy mothers, we cannot have healthy families and communities.

So support us to Make your Mother’s Day, every day. Millions of lives could be saved using knowledge we have today. The challenge is to transform this knowledge into action. In order to make a difference, we must all join forces and act. Together we can do it. Each one of us has a role to play.

Ensuring skilled care at every birth and investing in human resources for health will promote better family planning, give greater access to skilled care during pregnancy and childbirth, and will aid in the prevention and management of maternal complications and death.

To support us please go to:


WHO Mother’s Day campaign

What can your donation buy?

US$ 0.50 will help treat a child with diarrhoea

US$ 1 will immunize a child against measles

US$ 1 will help a child receive the antibiotic needed to treat pneumonia

US$ 1 will prevent anaemia during birth

US$ 5 will buy enough Iron Folate supplements for 10 pregnant women during pregnancy and for six months in postpartum period

US$ 20 will help support a midwife in a maternity waiting home to ensure skilled care before, during and after birth

US$ 50 will buy sufficient therapeutic food which will save a child in Ethiopia from dying of severe malnutrition

US$ 50 will save a woman’s life in countries like Burkina Faso, Nepal and East-Timor. She will receive skilled care at childbirth by a trained birth attendant equipped with essential medicines like Oxytocin, Magnesium Sulfate and antibiotics to prevent postpartum haemorrhage and sepsis

US$ 100 will help train a health worker in Bolivia with the skills needed to promote infant feeding and to prevent children’s death from disease and malnutrition

US$ 300 will provide 300 women with emergency preparedness antenatal cards to promote maternal care and follow-up visits

US$ 1000 will provide a C-section for a woman with complications during pregnancy

US$ 5000 will help upgrade a health centre for maternal and child care after birth

US$ 6000 will help fund a health post for one year in countries such as Bangladesh, Indonesia and Malawi. The post will be able to provide essential vaccines and necessary human resources and equipment for safe birth and regular maternal, newborn and child check-ups.
In October 2006, at the Royal Society for Medicine in London, WHO Regional Office for Africa marked a great milestone in WHO’s efforts to achieve Millennium Development Goal 5 which aims to reduce maternal mortality by three-quarters by 2015. The launch of *Postpartum Haemorrhage: A comprehensive guide to evaluation, management and surgical intervention*, highlighted the great need to address this burden in Africa, especially eastern and western Africa which has the highest ratio of women dying as a result of pregnancy or childbirth. The current mortality estimates are at an average of 1 000 per 100 000 live births.

Half of all the maternal deaths worldwide occur in Africa. These deaths have been a direct result of the defects in the social, cultural and economic status of women as well as inadequacies in existing health systems. The causes of maternal death include obstructive labour, hypertension disorders, sepsis, malaria, anaemia and HIV/AIDS.

Postpartum haemorrhage accounts for 25 per cent of maternal mortality in Africa. Malaria in pregnancy predisposes women to a number of complications including anaemia, which places them at a higher risk of mortality from haemorrhage. Qualified health personnel assist in only 46 per cent of total deliveries and this reality makes reduction of maternal mortality one of the priorities of WHO.

The comprehensive guide provides evidence-based practical guidance to build capacity of health providers in the management of postpartum haemorrhage in both pre-service and in-service training.

The gap between the mortality rates from PPH in developed countries and developing countries underscores the need for effective and timely response by health workers to pregnancy and childbirth related complications. There is also an urgent need to identify low-cost interventions that can be implemented in poor resource settings.

WHO Regional Office for Africa encourages practitioners, tutors and trainers to apply this guide at all levels of care along with other interventions, including community participation to increase appropriate utilization of health services.

In northern rural Honduras, at the Centro Materno-Infantil (CMI), a freestanding public birth center, access to medication such as oxytocin is extremely unreliable. Women are brought to the health centre only during labor and delivery occurs primarily by auxiliary nurses.

Using a community based participatory research model, members of the research team, including WHO, witnessed births with staff at CMI. Despite having skilled attendants at birth, barriers to implementing active management of third stage are high due to limited resources and current staff skill level.

To determine the potential of implementing the new recommendations, a knowledge assessment and focused training process was implemented with staff.
Prior to this training, the first line intervention for management of PPH was for the birth attendant to insert an IV and have it run wide open, call for medical back up, which was usually off site and provide oxytocin, if it was available. Estimation of blood loss was not conducted and bimanual compression or uterine massage was not part of the standard of care.

The aim of this project was to gather baseline data regarding rates of blood loss experienced by women at CMI to determine the incidence of PPH and to assess the potential value of implementing new and more sustainable interventions and thus preventing future maternal complications.

**WHO Regional Office for the Eastern Mediterranean**

The maternal death level in the Eastern Mediterranean Region has increased in countries that have suffered from a lack of national policies, political instability, and inadequate financial and human resources. There is a heavy burden on pregnant women especially if the country has restrictive regulations, poor socioeconomic conditions and gender-based discrimination, reduced access and utilization of safe motherhood services, including family planning, and scarcity of health-related data and information necessary to monitor and evaluate maternal health needs.

There are also great variations and disparities in maternal death levels between countries in the WHO Regional Office for the Eastern Mediterranean. Bahrain, Kuwait, Libyan Arab Jamahiriya, Oman, Qatar, the United Arab Emirates and Saudi Arabia have significantly achieved over 75 per cent reduction in maternal deaths, 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 Egypt, Islamic Republic of Iran, Jordan, Morocco, Syrian Arab Republic and Yemen have made considerable achievements in reducing maternal deaths by 50 to 75 per cent from levels in 1990. However, these countries still need to bring further reduction in maternal mortality.

Sadly, the reduction in maternal deaths in Afghanistan, Djibouti, Iraq, Pakistan, Somalia and Sudan has not exceeded 25 per cent from levels in 1990. The maternal mortality ratio in these countries varied from 294 in Iraq to maternal mortality rates as high as 1600 in Afghanistan and Somalia.

In 2005, it was estimated some 54 per cent of births in the WHO Regional Office for the Eastern Mediterranean were attended by skilled health personnel in 2005 in four countries: Afghanistan, Pakistan, Somalia and the Republic of Yemen, and this indicator ranged between 50 and 80 per cent in Djibouti, Egypt, Morocco and Sudan. However, more than 80 per cent of births were assisted by skilled birth attendants in the remaining countries of the Region.

There are several key constraints inhibiting further reduction in maternal and perinatal mortality and morbidity, especially in the economically lagging countries of the Region. The main constraints are summarized, as follows:

- Lack of national policies that reflect long-term direction and ensure sustained commitment.
- Poor health care delivery systems - inadequate capacity building of human resources and high turnover of health providers.
- Barriers that hinder disadvantaged populations from utilizing the available health services.
- Poor availability and use of relevant data in decision-making, planning, monitoring and evaluation.
- Gender-based discrimination that prevents women from decision-making power in reproductive health.

**WHO Regional Office for Europe**

In Albania, 40 percent of maternal deaths are a result of haemorrhage. The country is saddled with a shocking rate of only 20 percent of mothers who have had a postnatal visit. Postpartum visits occur more often in urban settings and with mothers with higher levels of education. Mothers with lower levels of education in the rural areas have very little access to basic obstetric health services.

The political, social and economic changes throughout the country, compounded with poverty and migration and the relatively low level of education across the country, have increased burdens on the health sector. With quality and access of services lacking, WHO Regional Office for Europe is working with the Ministries of Health and Education to build on the national health care strategy and support trainings that promote knowledge networking and technical skills of health staff. This includes monitoring and supervision, management of rural, district and country-wide health services, reorganization of perinatal services, and improvement of equipment and drugs. Through the poverty reduction strategy to achieve the Millennium Development goal targets 4 and 5, the continuum of care approach is being mainstreamed throughout the country and the WHO team in Albania is working hard to improve the overall health system.
WHO has also strived to raise awareness among policy-makers and planners in the country on maternal and newborn mortality. WHO has worked with the Ministry of Health to determine the population groups among Albanian women at higher risk of maternal mortality and to work towards tackling these deaths. A key ongoing initiative has been the improvement of existing recording and reporting systems.

WHO has also worked to support Ministry of Health efforts to support ongoing reforms on decentralization and healthcare, promote financial and human resources and more equitable distribution of health resources. Next steps will focus on promoting better coordination among partners (UNICEF, UNFPA, donors and obstetrician/gynecologist departments) and to work with national professionals to boost training of clinical guidelines on obstetrics and neonatology.

**WHO Regional Office for South-East Asia**

From 19-21 January, the WHO Regional Office for South-East Asia team coordinated a field visit to Tamil Nadu to survey maternal health in the southern Indian state. Tamil Nadu has improved significantly over the past decade. The region has one of the highest PPH rates, but several factors may have contributed to these improvements in recent years. This visit provided the opportunity to observe how maternal health services were provided by the government through its health facilities, and in collaboration with nongovernmental organizations and the private sector. Dr Razia Pendse, WHO Regional Office for South-East Asia, Mr Dorji Phub (Bhutan) and Dr Rajesh Mehta (World Customs Organization, India) also participated in the field visit. The team accompanied by the Director and Deputy Director of Public Health in Tamil Nadu visited several primary and referral level facilities in Kanchipuram and Vellore districts, and had discussions with staff on a proposal to document the Tamil Nadu experience.

The team also visited the Christian Medical College, Vellore and observed the community and facility based maternal and newborn health activities, which promote a WHO model in primary health care and nursing and midwifery. Visits were also conducted in the nodal training centre for trainers in emergency obstetric care for India. Discussions centred on supporting ongoing institutional activities, strengthening training opportunities regionally and collaboration with MPS on developing training material based on managing newborn problems.

MPS focal points from Bangladesh, Bhutan, India, Myanmar, Sri Lanka, Thailand and Timor-Leste also organized a review of regional and country activities in 2006. Presentations from participating countries and discussions focused on three thematic areas: adaptation of guidelines, skilled birth attendance, and advocacy with the individual, family and community. Technical updates on key topics were provided and participants also discussed country and regional plans including multi-country activities for 2007 and possible collaboration with other programmes at the regional and country level.

The mission also provided opportunities to discuss a proposal from Sri Lanka on the evaluation of MCH services, increasing skilled birth attendants and institutional deliveries in Bhutan (including training, deployment and mapping of MNH service availability), and proposals from UNICEF to evaluate MNH programmes in the region, a WHO Collaborating Centre in Wardha, India, and by the Regional Office for developing a framework and tools for quality improvement and technical supervision within MNH services at primary and referral levels.

A meeting was also arranged at the Indian Council of Medical Research (ICMR). ICMR is currently evaluating community-based newborn care through a large multicentre randomized trial.

**WHO Regional Office for the Western Pacific**

Inter-country training workshop on active management of the third stage of labour

In the last decade, Mongolia has achieved significant reductions in its maternal and infant mortality rates. Moreover, Mongolia is now ahead of schedule in reaching the targets of Millennium Development Goals 4 and 5.

To maintain and accelerate a further reduction in maternal and infant deaths, efforts to upgrade the skills and qualifications of midwives in order to improve midwifery service are essential. Rural government officials and midwives are demanding support for this effort. In response, WHO with the Ministry of Health and its collaborating partners such as Darkhan-Uul Medical College and the Maternal...
and Child Health Research Centre conducted the first “Local Fellowship” training on Pregnancy, Childbirth, Postpartum and Newborn Care for rural midwives. The training included a practical session as well as lectures using “Practical Guidelines on Pregnancy, Childbirth, Postpartum” and “Essential Newborn Care” developed by the WHO team for Reproductive Health.

The practical sessions conducted in the Central Hospital of Darkhan-Uul aimag (province) provided participants with an opportunity to apply new skills and knowledge on midwifery health care. As a result of the 21-day training programme, 25 midwives upgraded their skills and were introduced to new approaches of modern midwifery care and service. Skill testing scores increased from a start level of 60 per cent to 100 per cent upon the completion of training.

The workshop was conducted in Ho Chi Minh City, Vietnam, on 24 July to 2 August 2006. Seventeen participants (midwives and obstetricians) from Vietnam, Cambodia, Laos, People’s Democratic Republic and Mongolia attended the workshop in order to update knowledge and skills on prevention and management of postpartum haemorrhage, which is the first cause of maternal mortality in many countries in the region. Deep analysis on preferable use of oxytocin over ergometrine and misoprostol in term of effectiveness in reducing amount of blood loss, side effects and condition for storage and costs was introduced. Timely clinical intervention was also emphasized. All participants agreed that active management of the third stage of labour should be applied in health facilities at all levels.

Postpartum haemorrhage is the second leading cause of maternal mortality in Mongolia. Mongolia’s Reproductive Health Plan for 2002-2008 calls for expanded training on PPH using Integrated Management of Pregnancy and Childbirth /IMPAC/ guidelines. The country will continue to work towards reducing PPH-related mortality as more birth attendants receive training. Through partnership with the Ministry of Health, expectant mothers in rural areas who are anaemic or show other signs of possible complications are now transported at the government’s expense to secondary health care facilities, which are equipped with blood banks and other support services.

Additional reductions in maternal mortality will require consistent support from WHO for PPH training as well as innovative ways to ensure that all possible complications are recognized early to permit timely transport to a secondary health care facility.

Babita’s Story

It could have been a nightmare – but it had a happy ending. Babita was in the late stages of her sixth pregnancy (three girls, two abortions), but during the entire nine months she had contact with her local health authority in India’s northern state of Haryana Karnal District only once. When a painful earache drove her from her village to a community health centre, the female medical officer examined her and noted with alarm that Babita was severely anaemic with a haemoglobin count of 1g/l, and referred her to the District Hospital. After she made the 40 kilometer trip, the hospital refused to admit her unless she brought three units of blood from the blood bank. The blood bank told her to come back the following day with three blood donors. Discouraged, Babita went home by bus to her village – a trip she would not have survived if labour had started that evening.

Fortunately, the Lady Medical Officer raised Babita’s case with the District Magistrate Rakesh Gupta, who was visiting the Community Health Centre while reviewing Karnal’s “Safe Motherhood” campaign in his capacity as chair of the District Health and Family Welfare Society. Appalled at Babita’s treatment, he issued a public warning. Within hours, Babita was admitted to the Government Hospital at Karnal; three days later, with her haemoglobin raised to 7 grams, she delivered a healthy baby boy. The District Magistrate was able to get wide coverage in the media for her case – not least about the way the system had ignored Babita during the early stages of her pregnancy – and the local press followed up by publicizing the unacceptably high levels of pregnancy-related deaths and complications among mothers and infants.

While it is not possible to judge exactly what part this case played in improving results in the district (among other indicators, institutional deliveries rose from 25 per cent in December 2005 to 65 per cent in September 2006), the District Magistrate applauds Babita’s courage in allowing her case to be reported. In his words, “she gave the campaign crucial momentum. A good beginning has been made, but there is a long way to go before we meet the international standards we aspire to in Safe Motherhood.”
Promoting the health of mothers and newborns during birth and the postnatal period

Report of the Collaborative Safe Motherhood Pre Congress Workshop

The intention of this report was to collate, synthesize and disseminate valuable information on the 2005 theme “Promoting the Health of Mothers and Newborns during Pregnancy, Birth and the Postnatal Period”. This report was intended to bring updates, bring back to basics the role of senior midwives, midwife educators, administrators and midwife managers. It focuses on essential midwifery care which makes a great difference to the health outcome of mothers and newborn babies. In the face of repeated complications, there is a tendency to strengthen skills to handle the abnormal, occasionally at the detriment of basic skills. Doing this would unfortunately deny a midwife the full utilization of the unique position in the community and the health care system. This “uniqueness” stems from the fact that the midwife chose to prepare herself/himself to be “with women” at the most crucial time of their lives. The midwife accepts through education and training, the responsibility of caring for women throughout their reproductive years and to concern his/herself with promotive and preventive health action in families and communities. Basic midwifery skills make the midwife the best person to attend a birth as a skilled attendant.

Meeting of Development Partners Report

The Report highlights the Stockholm meeting on maternal and newborn health on 21-22 June 2006, organized by WHO’s Department of Making Pregnancy Safer (MPS) and the Swedish International Development Cooperation Agency (SIDA). The meeting of development partners explored better ways of coordinating partner’s efforts and support to Member countries towards implementing evidence-based and cost-effective interventions. It also aimed at accelerating progress in achieving the Millennium Development Goals 4, 5 and 6 related to maternal and newborn health and survival.

Participants included: six high-level national representatives from Angola, India, Malawi, Mali, the Philippines and Sudan; representatives from bilateral agencies in Australia, Canada, Finland, France, Germany, Japan, the Netherlands, Norway, Sweden, the United Kingdom Department for International Development (DFID) and the United States Agency for International Development (USAID); and representatives from the World Bank, the African Development Bank, United Nations Population Fund (UNFPA), the Partnership on Maternal, Newborn and Child Health (PMNCH) and WHO Regional Offices in the African, European, South-East Asia and the Western Pacific Regions.

As a follow-up to the Stockholm meeting on maternal health, the Note for the Record report aims to chronicle ways to improve United Nations agency coordination/partnership and identify areas for improvement, especially in relation to country support.

The WHO Department of Making Pregnancy Safer (MPS) and Sweden jointly organized a meeting of donors and United Nations agencies in Stockholm on maternal and newborn health in June 2006. At the meeting, it was recommended (by donors) that the UN agencies form a common framework of understanding on their roles and responsibilities at the country level to better align and harmonize support to countries. As a result, an interagency meeting was called to discuss how the agencies can best collaborate in maternal and newborn health.

Note for the Record

Career Fair in Lausanne

On 19 March 2007 at the University of Lausanne, the World Health Organization (WHO) participated in International Career Day. This event was organized by the Swiss Federal Department of Foreign Affairs (FDFA) in collaboration with the Swiss Chapters of the International Students’ Association (AIESEC) and the Federal Institute of Technology (EPFL). This year, some 20 International Organizations were present to explain and discuss future employment opportunities within their organization at various locations across the globe. There were over 100 participants and the President of the Swiss Confederation, Mrs Micheline Calmy-Rey, was also present.
Message from the Director

Making Pregnancy Safer

MPS strongly promotes evidence-based health care and whenever possible, supports global efforts to build and create solid standards and policies. An important example can be seen in efforts this year to prevent postpartum haemorrhage (PPH). Bleeding after childbirth accounts for nearly one quarter of all maternal deaths worldwide. Common causes for postpartum haemorrhage include failure of the uterus to contract adequately after birth (atonic PPH, which is the most common), tears of the genital tract and bleeding due to retention of placental tissue.

Although there has been a large degree of agreement among leading health professionals on how to prevent and treat PPH, some unresolved issues relating to active management in the third stage of labour have led to confusion and controversy, particularly in developing countries. In order to resolve these issues and arrive at robust, evidence-based guidelines, our Department organized a Technical Consultation on the Prevention of Postpartum Haemorrhage in Geneva in October this past year. Draft guidelines were successfully produced, following a long and rigorous consultation process involving two other WHO departments (Reproductive Health and Research, and Medicines, Policies and Standards) an external institution (Italy’s Centre for Evaluation of Effectiveness of Health Care), and dozens of experts from around the world. Among other results, the agreement has established that active management of the third stage of labour should be offered to all women by skilled birth attendants. Guidance should also be provided on the appropriate use of the drug oxytocin for prevention of PPH in preference to other medications.

Maternal health programme managers may use these recommendations while reviewing guidelines and make informed decisions on preventing the major cause of maternal death. The complete set of recommendations and supporting evidence are available at http://www.who.int/making_pregnancy_safer.

Before her appointment, Mrs Mafubelu was Health Attaché in the Permanent Mission of South Africa in Geneva, with the rank of Minister. She was the coordinator of the African group on health matters and is well known among the diplomatic community in Geneva. During the five years she has been in Geneva, she has acquired a broad knowledge of WHO through her active involvement and participation in the intergovernmental processes of the Organization.

Daisy Mafubelu started her career in public health almost 26 years ago, as a nurse and midwife. She graduated in Community Health Nursing and Nursing Education from the University of South Africa and later, in Business Administration from the University of Stellenbosch. She also holds a postgraduate diploma in health management from the University of Cape Town.

In 1994, Mrs Mafubelu joined the management ranks of the South African Health service, where she played a significant role in the transformation and management of public health services, holding several positions in senior management within the public health sector, first as a Director of Human Resources and later as a Deputy Director-General of Health. She was named Oliver Tambo Fellow in Public Health Leadership in 1997. This award was made in recognition of her outstanding potential and commitment to provide leadership through public health service towards improving health and health care for all South Africans.