



Joint G8 science academies' statement on Health of Women and Children

Magnitude and Importance of the Problem

Local Capacity

The health of families, communities and economies is inextricably tied to the health of women – yet every 100 seconds, a woman dies in pregnancy or childbirth somewhere in the world. Mother and child outcomes are closely linked.

Reducing maternal mortality is critical and is also a priority for improving child health.

There are less than 6 years left to meet the United Nations Millennium Development Goals (MDGs). The fourth and fifth are critical to this document.

Millennium Development Goals 2015

Goal 4: Reduce under five child mortality by two-thirds

Goal 5: Reduce maternal mortality by three-quarters

There has been some progress in global child health. Since 1990, deaths of children under five have declined. However it is estimated that 8.8 million children still die each year - more than 1000 every hour.

Progress to reduce deaths in pregnancy and childbirth by 75 per cent by 2015 has been similarly limited and the goal remains a distant target. Over 99% of the women who die do so in the developing world.

Specific Health and Disparity Issues

Maternal Mortality and Morbidity

The risk of a woman dying as a result of pregnancy or childbirth during her lifetime is one in seven in the poorest parts of the world compared with about one in 30,000 in Northern Europe. Maternal deaths cluster around labour, delivery, and the immediate postpartum period, with hemorrhage being the main medical cause of death; more than 80% are preventable. For every death in pregnancy and childbirth there are 16.5 cases of significant maternal illness or disability; maternal chronic ill-health seriously affects the health and quality of life of surviving children, who often depend on their mothers for food and support.

Perinatal and Neonatal Death

Each year, 3.2 million babies are stillborn and 4 million die in the first month of life – 99% of neonatal deaths occur in developing countries. Neonatal deaths comprise 38% of deaths in those younger than 5 years, and are the main barrier to MDG 4. Major immediate causes of death in the first month of life are preterm birth, asphyxia and infections. Proven, low cost interventions, including prenatal care, skilled care at delivery and community based postnatal care could decrease neonatal mortality by more than one half. Three-quarters of these deaths could be prevented at an additional cost of US\$1 per head.

Family Planning

Family planning improves maternal health by reducing unintended pregnancies and abortions, and impacts positively on resource availability. Inadequate spacing of children exacerbates major nutritional disorders and increases child mortality by precluding adequate nutrition during gestation. Provision of effective contraception for approximately 200 million women who have none would prevent 23 million unplanned births, 22 million induced abortions and 14,000 pregnancy-related maternal deaths each year. Quality education for women will improve family planning and child care.

Every year, 42 million pregnancies are terminated, of which about 50% are considered illegal under national legislation, performed by unskilled providers or take place in unhygienic conditions. Severe complications result; there are around 70,000 maternal deaths, more than 3 million reproductive tract infections, and almost 1.7 million cases of secondary infertility. Unsafe abortion accounts for 13% of maternal deaths.

Child Illnesses

Of 8.8 million children under the age of five that die each year, main causes of death from 1 month to five years are pneumonia, diarrhea, malaria, measles and HIV. These deaths are preventable with low-cost, evidence-based public health interventions, such as good nutrition and immunization. Still more deaths would be prevented by simple treatment when children are sick: for example anti-malarials, antibiotics, oral and rehydration therapy.

Maternal and Child undernutrition

The attribution of about one-half of child deaths and more than 10% of global disease burden to maternal and child undernutrition demonstrates the huge importance of these risk factors to health goals. Malnutrition in mothers accounts for substantial neonatal mortality and intrauterine malnutrition leads to adult disease: diabetes, hypertension, and dyslipidaemia.

HIV and AIDS

AIDS-related deaths remain a leading cause of premature death globally. Untreated pregnant women infected by HIV have a 30% chance of infecting their child. Without treatment, more than 50% of HIV infected children die before two years of age.

Gender Issues and Women's Rights

The failure to meet MDGs 4 & 5 is inextricably linked with poor progress in promoting gender equality and empowerment of women. Regions with high maternal death rates are characterized by disenfranchisement and marginalization of women. Gender inequality is propagated by a lack of access to education (reflected in low literacy rates) and thus an absence of women in positions that set opinion or policy.

Deficiencies in Knowledge Translation

Meaningful progress requires resources in two key areas: knowledge translation and implementation research. Evidence-based policy making has had a limited impact on maternal and child health policy and program development. The reasons for this are many: a lack of highly-qualified national researchers in the developing countries, a lack of high quality research programs and a severe paucity of research funding in maternal and child health issues. There is also too little research into how interventions or programs can be successfully implemented, and then successfully transferred to other areas.

Recommendations for the G8 Summit

Risks to maternal and child health are not confined to the developing world; vulnerable populations, wherever they exist, need to be targets of interventions that are generally simple and accessible, do not involve specialized technology and are cost-effective.

Intensified effort to improving maternal and child health is essential to attaining Millenium Development Goals 4 & 5.

- Funding for maternal and child health must increase. Governments and other organizations need to increase resources. Donors need to increase financial contributions in low-income countries to help fill the resource gap. There should be no user fees for basic health services such as delivery care. Immunization of children should be universal.
- Health facilities and staffing need strengthening. Increased access to prenatal, midwifery, essential obstetric and newborn care must remain the cornerstone of safer motherhood programs. Skilled emergency obstetric care must be accessible to all women who experience complications; research into most effective methods of delivering such care is needed. Support for community facilities should emphasize maternal and child health and also nutrition.

Health workforce strategies need to include plans to build a cadre of skilled birth attendants and community health workers to care for pregnant women and children. Developing countries should establish incentive programs to retain clinical

staff trained internally and repatriate former staff. Developed countries should be discouraged from actively recruiting trained individuals in healthcare from developing countries and encouraged to form health education partnerships.

- Strategies to improve maternal health should facilitate access to contraception services and measures to reduce unsafe abortion. Up to 40% of maternal and child deaths could be averted by providing access to these services. The use of modern contraceptives, sex education and appropriate child spacing should be fostered. Greater access to family planning would reduce population growth and impact favorably on resource availability. Accessible family planning services should be integrated with HIV/AIDS prevention services. Governments and inter/nongovernmental organizations must deal openly with unsafe abortions, and ensure appropriate and accessible treatment of women who develop complications.
- Initiatives to strengthen the health of women and children should be more effectively coordinated. The community shaping global political priority for the health of Women and Children has been fragmented. G8 Governments should work with international agencies to facilitate regional coordination mechanisms for women and children's health the main focus of which is achievement of MDGs 4 & 5.
- Policies which protect women and children from all forms of abuse, injury, exploitation and violence must be promoted. Harmful practices such as female genital mutilation should be eradicated. Misuse of technology of prenatal sex determination for aborting female fetuses should be condemned.
- Maternal and child health research needs strengthening, especially in knowledge translation. There is a lack of research into how interventions or programs including translational and communication strategies can be successfully implemented, and then successfully transferred to other areas. Capacity building including interdisciplinary centres of, health science and innovation should be encouraged in all regions. Health information and education programs are needed to disseminate acquired knowledge; this will require enhanced organizational infrastructure.



Royal Society of Canada, Canada



Académie des Sciences, France



Deutsche Akademie der Naturforscher
Leopoldina, Germany



Accademia Nazionale dei
Lincei, Italy



Science Council of Japan, Japan



Russian Academy of Sciences, Russia



Royal Society, United Kingdom



National Academy of Sciences,
United States of America