Safe motherhood: Can we make a difference?

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More than 150 million women become pregnant in developing countries each year, and an estimated 650,000 of them die of pregnancy-related causes. This death rate is roughly equivalent to 4 jumbo jets carrying 450 passengers crashing every day—a terrible loss. The World Health Organization (WHO) has declared this year’s World Health Day, Tuesday, April 7, 1998, as “Safe Motherhood Day” to bring attention to the tremendous disease burden suffered by women throughout the world, particularly in relation to pregnancy and childbirth and specifically in developing countries.

The risks to mothers and children

Conventional maternal and child health programs have focused primarily on infants and children, not their mothers, and the problems of pregnancy-related death and illness among women in developing countries have been neglected by the medical, obstetric and public health communities, by international agencies and in particular by the governments of developing countries. The estimated lifetime risk of maternal death for a woman in Africa is 1/21 on average; in contrast, this figure is 1/9850 in northern Europe and Canada. This is the widest disparity in human development indicators yet reported. Maternal mortality—the death of a woman while pregnant or within 42 days of the end of the pregnancy from any cause related to the pregnancy—accounts for less than 1% of all deaths of women in Canada but is responsible for 25% to 30% of women’s deaths in developing countries. According to studies by the WHO and the World Bank, 80% of maternal deaths in developing countries are direct obstetric deaths, which are, for the most part, preventable. Of these direct obstetric deaths, 25% are due to hemorrhage, 15% to sepsis, 13% to unsafe abortions, 12% to hypertension disorders and 8% to atomic labour. The approximately 20% of maternal deaths from indirect causes are due to complications from diseases such as malaria, viral hepatitis, diabetes, anemia, rheumatic heart disease and AIDS.

Morbidity is also high; acute complications affect an estimated 50 million women yearly, and 20 million of these cases are sufficiently serious to warrant referral-level care. One of the worst consequences of childbirth is obstetric fistula, a common consequence of untreated obstructed labour, especially in young women having their first babies. Affected women experience continual leakage of urine and sometimes feces. They may be rejected by their families, lose their children and become social outcasts; the problem may go untreated for many years or even for their entire lives.

Pregnancy involves both the mother and the fetus, so when the mother suffers, the fetus or the newborn is extremely vulnerable. Of the 13 million deaths occurring annually among children less than 5 years of age in developing countries, 3 million occur in the first week of life and another 4 million are late fetal deaths. These deaths are almost always associated with maternal complications resulting from poor management techniques during labour and delivery and the woman’s general health and nutritional status before and during pregnancy. Poor management during labour and delivery is associated with an additional 1.5 million perinatal deaths and many more serious impairments such as birth asphyxia and palsy. If the mother does not live through childbirth, her death has devastating effects.
on the newborn. Among infants who survive the death of the mother, only a few (10%) live beyond their first birthday.\(^7\) The babies of women suffering from malaria may be severely underweight at birth and hence subject to serious illness and high rates of death; this problem occurs in 3 million cases a year in sub-Saharan Africa.\(^8\) A pregnant woman with HIV has a 25% to 40% chance of passing the infection to her child in the womb or at birth.\(^9\) The WHO has estimated that 4 million infants were born to HIV-infected mothers in 1992 and, using the 25% transmission rate, that 1 million babies were infected at birth.\(^10\)

**Action taken, action needed**

In this bleak picture is there any reason for hope? In 1987 more than 40 countries launched the “safe motherhood initiative.” This short-term strategy was intended to offer family planning services and effective maternal health care by improving the quality of, providing access to and educating the public about essential obstetric services. In the beginning, the focus was more on advocacy than on action. Then, in 1992, the World Bank convened a safe motherhood initiative to develop action plans.\(^11\) Many of the efforts in this area were initially directed toward what appeared to be the most cost-effective intervention: training traditional birth attendants at the local level. However, despite these interventions, maternal mortality seems to have increased—or perhaps it was underestimated in the first place.

Why has this been so? The problems underlying maternal mortality are poverty and the low status of women, so empowering women to enhance their socioeconomic and legal status should go a long way toward reducing maternal death and illness. In some countries, the status of women has improved with better nutrition, education, development of income-generating opportunities and delayed age of first marriage.\(^12\)

A consistent pattern of delays to safe delivery services has been identified: a delay in the recognition of the problem by family and village workers, a delay in transportation to health care facilities and a delay in effective treatment at the referral centre. Programs to address these problems need to be organized at the political level, at the grassroots level, and along the spectrum in between. In addition, policy-makers and planners need to build commitment among decision-makers, opinion leaders and the potential beneficiaries, i.e., the men and women in developing countries.

Beyond improvements in social conditions and action to address delays, what is needed to reduce maternal mortality? All women should have access to maternity care, including antenatal care, clean and safe delivery, postnatal care and family planning in the community. It is estimated that 15% of women in a community will need emergency obstetric services by qualified midwives, as well as easy access to a referral centre, and that 5% to 7% of all women will require a cesarean section at some time in their life, so these services must be in place.

Among the essential obstetric services that should be available within 45 minutes to 1 hour’s transportation for any woman are family planning; anesthesia; transfusion services; and capability to perform emergency cesarean section, vacuum and forceps extraction, manual removal of the placenta and suction curettage.

Inadequacy of abortion services, for both spontaneous and induced abortions, is a serious impediment to women’s health in developing countries. At the local village level, trained midwives will need to work with traditional birth attendants to develop awareness about the risks of pregnancy, including spontaneous abortion.

The role of the obstetrician-gynecologist is to work as a team member with other health care providers to make available emergency obstetric care on a 24-hour basis year-round at the district level. An obstetrician can also take overall responsibility to lead, train and retrain the health care team.

A maternal mortality and morbidity committee review and audit are essential components of any safe motherhood project: without systematic maternal mortality audits, errors will be repeated and maternal mortality will not decline.

**What can Canada do?**

Safe Motherhood Day can serve as a wake-up call for all Canadians. Canada, which has had success in reducing the tremendous burden of land-mines and their destructive effects on civilians, both children and adults, has the leadership to address the terrible human tragedy of maternal death, which has remained hidden for the last 25 years, a period during which substantial progress has been made in other areas.

Canada’s government signed the Cairo (1994) and Beijing (1995) “Platforms of Action” for concerted attention to women’s health. Unfortunately, the Canadian International Development Agency (CIDA) has seen its budget cut drastically during the last 3 to 4 years. Whereas WHO estimates that 0.7% of GNP should be spent in overseas assistance programs, including those relating to maternal and child health, Canada is spending only 0.3%. This level is insufficient for a country blessed with resources and health care second to none in the world.

The Society of Obstetricians and Gynaecologists of Canada (SOGC) is working on a partnership program with developing countries to assist their medical associations in organizing services to promote women’s health.
We will share with our colleagues knowledge, experience and training materials that are essential in the fight against maternal mortality. The SOGC has also formed a working group to plan a specific project with one developing country. We hope to establish a Canadian Safe Motherhood Program in Uganda, where Canadian obstetricians, family physicians, midwives, pediatrists and other health care providers will work with Ugandan professionals at the local and district levels on a continuous basis.

On Apr. 7 and every day this year, let us remember that for many women in developing countries, pregnancy presents a major risk and that for them maternal mortality and debilitating morbidity are simply facts of life. One in 5 of these women will die during childbirth or shortly afterward or will suffer serious complications. To reduce this devastation, safe delivery and, whenever possible, access to emergency obstetric services must be made available to every woman in the world. To accomplish this goal, we Canadians need to stimulate our governments to honour their commitment to women’s health internationally.

References


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