Reducing maternal mortality in St Petersburg

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Following the entry of St Petersburg into Europe's Healthy Cities Project in 1991 it was decided that the highest priority should be given to reducing the city's maternal mortality ratio, then standing at approximately 70 deaths per 100,000 live births. Preventing deaths from unsafe, illegal abortion became the main focus of attention. The use of modern contraceptive methods was promoted, information was disseminated to improve the utilization of family planning services, special outreach services for teenagers were established, and providers were given opportunities for education and training. The maternal mortality ratio and the abortion rate have now declined and contraceptive use appears to be increasing. These achievements are attributable in large measure to the commitment of a broad spectrum of St Petersburg society as well as to outside support.

St Petersburg in the Russian Federation joined WHO's Healthy Cities Project in 1991, and the following year the city's leaders decided that the highest priority should go to reducing its maternal mortality ratio of approximately 70 deaths per 100,000 live births, one of the highest in Europe.

A consensus conference was attended by women's groups, politicians, health planners and administrators, obstetricians, paediatricians, nurses, midwives, epidemiologists, social scientists and journalists. Attention was focused on priority issues, awareness was raised about the range of concerns of women and children, and support was mobilized for an action plan for presentation to local funding sources, local and multinational industry, bilateral funding agencies and the Healthy Cities network. WHO recommendations for maternity care and family planning served as models in the development of the action plan.

Situation analysis

Interviews were conducted in September 1993 with leading health planners and with many health care providers working in primary care centres and hospitals. Visits
were made to maternity homes, women’s consulting centres and the city’s new family planning centre, and summaries of demographic data and information on the causes of maternal mortality were obtained.

A reduction in the number of live births had occurred between 1985 and 1992 from approximately 75,000 to 36,000 per year. Abortion was the mainstay of fertility regulation: in 1992 there were 323 abortions per 100 live births, and 69 abortions per 1000 women of reproductive age. Low contraceptive use explained this state of affairs: only 6.7% of women of reproductive age were using intrauterine devices, while only 1.3% were using oral contraceptives. Injectable contraceptives and implants were unavailable. Increasing maternal mortality between 1989 and 1992 appeared to be primarily caused by illegal abortion. For the period 1990–92, illegal and legal abortion together accounted for a greater proportion of maternal deaths than did haemorrhage, infection and hypertensive diseases of pregnancy combined (Fig. 1).

For women aged up to 30 with at least three children and for older women with two or more, sterilization on request became legal in 1990 but was rarely carried out because of scarcities of laparoscopic equipment and trained providers. Abortion on request can be obtained in the first trimester of pregnancy or at any stage with a physician’s referral. The age limit for parental consent for abortion is now 15 years, but until December 1995 it was 18 years. In addition to this requirement, factors that possibly induced women to bypass the system and seek illegal abortion included problems of access to care and dissatisfaction with care.

Contraceptive and other reproductive health services were available in a network of women’s consultation centres, which were not, however, easy to use, since it was usually necessary to see various specialists and to have several appointments for laboratory tests and physical examinations. Women were often denied their preferred contraceptives because of contraindications listed in official guidelines. There was a lack of outreach, especially for teenagers. Family planning services were not integrated into routine prenatal or postpartum services or routine gynaecological care. Until 1993 there was a serious shortage of contraceptive drugs and supplies, and their costs were high relative to average disposable income and the city’s budget for health care.

Women were faced with incentives to choose abortion rather than contraception. Abortions, unlike contraceptive drugs and
supplies, were paid for by the health care system. Three days of leave from work were given to women having abortions, even early in the first trimester. Women lacked confidence in contraceptives produced in Russia, and many misconceptions existed about the risks of oral contraceptives and intrauterine devices. Providers often reinforced these misconceptions and generally made little attempt to counsel women about the need to protect themselves from unwanted pregnancy. Moreover, political support for family planning was not forthcoming because of concerns about the falling birth rate.

**Planning and programme implementation**

The strategy for reducing maternal mortality focused on:

- reinvestment of local funds to increase the availability of modern contraceptives and family planning services;
- education of the public in sexuality and family planning;
- training health workers to provide improved reproductive health care for women.

Strategies that increase the availability and use of contraceptives reduce abortion-related deaths. Fears expressed in some quarters that family planning programmes would further reduce the birth rate are unfounded. On the contrary, comprehensive women’s health and family planning programmes not only prevent maternal mortality but also help to prevent infertility, low birth weight and subsequent infant mortality.

If the numbers of abortions per 1000 live births per year in St Petersburg were lower, the money saved could help the authorities to fund family planning and reproductive health care. If the abortion ratio in 1993 had been the same as that, for example, in the United Kingdom, there would have been a saving of approximately US$ 800,000 on the performance of abortions plus the amounts corresponding to the cost of sick leave for three days and the treatment of complications. The money saved could have bought over 100,000 women-years of protection with oral contraceptives. The cost of an abortion is equivalent to that of a five-year supply of condoms or as much as a two-year supply of oral contraceptive pills for one woman.

Because of St Petersburg’s economic problems the implementation of the programme to reduce maternal mortality could not have taken place without financial aid from industry, other cities in the Healthy Cities network, bilateral aid agencies, WHO and UNICEF. St Petersburg is using city funds to purchase large quantities of oral contraceptives from foreign suppliers, although some supplies are gifts from pharmaceutical companies and some are sold by companies at cost. These contraceptives are sold on at reduced prices without prescription in kiosks, pharmacies, hospitals, clinics and markets. The city also buys large quantities of quality latex condoms that are sold widely and inexpensively.

Women of reproductive age need accurate information about the risks of various contraceptives compared with those of childbirth and unsafe abortion, and about
the benefits of family planning. Certain categories of women require special attention in educational programmes for sexual health and family planning, notably adolescents, pregnant women and women having abortions. Health education schemes have therefore been developed. Public service announcements in the mass media and a weekly radio talk show for young people have been used to make women aware of the availability of services and the desirability of preventing unwanted pregnancy. Health education materials have been developed which explain the various contraceptive methods and their advantages and disadvantages. A health centre for teenage girls provides comprehensive educational, referral and health services. It has an anonymous telephone hot line and its staff visit schools to train teachers in sex education and family planning.

Providers at all levels of the health care system need up-to-date, accurate information on the efficacy, safety, costs and benefits of contraceptives. Primary care providers who lack information are often the first barrier to the delivery of adequate contraceptive services. The provision of family planning services should be as simple, inexpensive and trouble-free as possible so as to increase the acceptance and utilization of contraceptives. The Centre for Family Planning and Reproductive Health, now in its third year of operation, is a focal point for provider training and community outreach, especially for high-risk groups, and also serves as an initial source of limited contraceptive services.

The Commission for Maternal Mortality conducts enquiries into the circumstances surrounding each maternal death. The findings are summarized and each case is reviewed in monthly open meetings, the objective being to find ways of preventing maternal mortality. The St Petersburg Obstetric Society provides continuing education for obstetricians, with particular emphasis on the prevention of maternal and perinatal mortality.

A provider training programme in family planning, safe motherhood and maternity care is run by the Canadian Government in cooperation with city health personnel and WHO. The Canadian team, comprising a psychologist, a midwife, a nurse, an obstetrician, a family planning educator and a perinatal epidemiologist, provides three-day workshops for obstetricians, midwives and nurses. The team also works with schools of nursing, midwifery and medicine to strengthen educational programmes for family planning and medical care.

The present situation

The birth rate has levelled off and the legal abortion ratio and rate continue to decline. The maternal mortality ratio decreased in the 1993–95 period to 51 deaths per 100,000 live births from its previous level of around 70 per 100,000, but there was a rise in mortality associated with unsafe abortion from 17 to 30 deaths per 100,000. On the other hand, cause-specific mortality ratios for infection, hypertensive disease of pregnancy, and haemorrhage declined, presumably because of improve-
Efforts to reduce maternal mortality in St Petersburg are hampered by difficult economic conditions and the vicissitudes of health care reform and social upheaval. Much remains to be done to reduce the number of deaths from unsafe illegal abortion. More data are needed in order to determine why women are turning to it, and measures should be taken to improve access to safe abortion and heighten public awareness of the subject.

Maternal mortality is slowly decreasing, abortion rates have declined, and contraceptive use appears to be increasing. In the achievement of these trends a key factor has been the commitment of the entire community, including political leaders, health care providers, local grass-roots organizations, and the media. The community-wide consensus conference and the situation analysis helped to focus local effort and to target resources for the attainment of a defined set of objectives. From the outset the project was locally directed and designed, although outside consultants were involved in training and technical assistance. Continuity of membership of both the locally based teams and those from outside helped to strengthen the project. Grants and seed money have been vital, and it is to be hoped that support of this kind will be maintained.

Acknowledgements

The financial support of the Canadian International Development Agency for the Canada–WHO–St Petersburg Maternal Child Health Project, the collaboration of Dr Agis Tsoiros (Healthy Cities Project, WHO Regional Office for Europe), and the assistance of Dr Mida F. Samarskya, Inspector for Obstetric Care, Public Health Committee of St Petersburg, are gratefully acknowledged.