



Confidential Enquiry into Maternal and Child Health

Improving the health of mothers, babies and children

CEMACH release: Saving Mothers' Lives (2003-2005)

Findings on the causes of maternal deaths and the care of pregnant women

The Confidential Enquiry into Maternal and Child Health (CEMACH) publishes *Saving Mothers Lives: reviewing maternal deaths to make motherhood safer (2003 – 2005)* today, Tuesday December 4th.

The report will reassure the public that maternal deaths in the UK are rare. Overall, 295 women died of pregnancy-related conditions out of the two million mothers who gave birth during the three year period from 2003 to 2005. Although there has been a slight increase in deaths, the birth rate also rose so the maternal mortality rate provided from this in-depth Enquiry of 14 per 100,000 is not statistically different to the previous report and there was no increase in substandard care. The maternal mortality rate derived from the method in use in other countries, 7 per 100,000 maternities, is unchanged.

The findings show that women who live in the poorest circumstances are up to seven times more likely to die than women from other demographic groups. These women were also in poorer overall health and far less likely to be in regular contact with maternity services. The findings also reflect the poor general health status of the increased number of refugees and asylum seekers who sought maternity care in the UK in 2003-05.

Additionally, maternal obesity is now a major and growing risk factor for maternal death and more than half of the women who died were either overweight or obese and more than 15% were extremely obese.

The report also points to a large decline in deaths from suicide, the overall leading cause of death in the last triennial report. If this reduction is sustained, this may indicate that the recommendations in the last two reports (identifying women most at risk during the antenatal period and then applying appropriate management strategies) are having a beneficial effect on women's health.

This new report provides 10 key recommendations for policy makers, service commissioners and providers and healthcare professionals. The main points are:

- Preconception care – better counselling and support to be provided for women, especially those with pre-existing serious medical or mental health problems such as epilepsy, diabetes and obesity (BMI > 30).
- Access to care – antenatal services must be accessible and welcoming to women. Women should have had their first visit to the antenatal clinic after the first 12 completed weeks of pregnancy.
- Migrant women – the medical history and clinical assessment of overall health for these women must be recorded. Doctors should be particularly sensitive toward women from countries where genital mutilation is practised and provide appropriate care for them.
- Treatment for systolic hypertension – pregnant women with a systolic blood pressure \geq 160 mm/hg must be provided with anti-hypertensive treatment.
- Caesarean section – women who have had a previous caesarean section or are going to have one should be advised about the risks in future pregnancies.
- Clinical skills – trusts and practices should instil a learning culture from critical events and serious untoward incidences (SUIs). Additional staff training for care to newborns should be provided.
- Early warning scoring system – trusts should adopt an early warning system to help in the timely recognition, treatment and referral of treatment of women who have or are developing critical conditions.
- Guidelines for development – guidelines in the care of women who are obese, have sepsis during pregnancy and, pain and bleeding during early pregnancy should be produced.

CEMACH is planning to undertake a national enquiry into obesity in pregnancy as a result of its concerns about the impact on outcomes for both mother and baby.

Gwyneth Lewis, CEMACH Director of the Maternal Deaths Enquiry, said “The findings of this report, widely considered as one of the cornerstones of our maternity services, shows the impact poor maternal health can have on pregnancy and birth. Whilst it is pleasing that the incidence of poorer care has declined a little, and especially gratifying that the number of women who committed suicide appears to have dropped substantially, possibly as the result of previous recommendations, the report clearly shows the impact that a mother’s overall health has on the outcome of her pregnancy.

“Healthy mothers have healthier pregnancies and healthier babies. The fact that more than half of the women who died were obese or overweight, and that preventable causes of cardiac disease were the leading cause of death shows that strong public health messages are needed both before and during pregnancy.”

Professor Sabaratnam Arulkumaran, President of the Royal College of Obstetricians and Gynaecologists (RCOG) said, “Obesity is fast emerging as the public health issue of our generation and its impact on maternity must be taken seriously.

“Maternity services are already struggling to cope with the increasing birth rate. Maternal obesity places more pressure on existing resources and the RCOG is seriously considering the CEMACH recommendation that a guideline on the management of obesity in pregnant women is the first step to provide clinicians with clear information on care for this group of mothers.”

Main findings of the new report

The causes of death identified by the report include:

Direct causes (deaths by pregnancy or birth)

- Thromboembolism
- Sepsis
- Pre-eclampsia
- Amniotic fluid embolism

There was a decline in deaths from haemorrhage, anaesthesia and uterine trauma.

Indirect causes (deaths from pre-existing or new medical or mental conditions aggravated by pregnancy)

- Heart disease (there is a growing incidence of heart disease caused by poor dieting, smoking, alcohol consumption and obesity)

The report also identifies the risk factors for maternal deaths. The links between vulnerability and social exclusion and adverse pregnancy outcomes are once again drawn. A major reason such women are more at-risk is because many do not seek antenatal care or stay in regular contact with maternity services. The range of complex non-medical problems which these women are subject to include domestic abuse (14%) and substance abuse (11%). The children of vulnerable women were also reported to have a higher risk of death or morbidity. There is therefore a need for medical and social support to be provided to these women and their children.

The report identifies avoidable factors which led to the deaths in most cases. These include a lack of cross-disciplinary team or inter-agency working, communication problems and lack of senior staff presence in the labour ward.

The Confidential Enquiry into Maternal and Child Health (CEMACH) report *Saving Mothers' Lives: reviewing maternal deaths to make motherhood safer (2003 – 2005)* was funded by the National Patient Safety Agency (NPSA), the Scottish Programme for Clinical Effectiveness in Reproductive Health and by the Department of Health, Social Services and Public Safety of Northern Ireland.

This is the 7th report into maternal death published by CEMACH. Previous reports were titled *Why Mothers Die*. Copies of the current and previous reports can be obtained via CEMACH's website on www.cemach.org.uk.