



# CEMACH

## NEWSLETTER

Issue 4, November 2008

The Northern Ireland regional newsletter of the Confidential Enquiry into Maternal and Child Health

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### Welcome

Welcome to the fourth issue of the CEMACH newsletter, produced to disseminate information about current and planned CEMACH projects.

The newsletter is for those health professionals who contribute to the work we undertake and to everyone committed to improving maternal and child health through the planning and delivery of health services.

It has been a very busy time since the last newsletter was issued, with the production of several key CEMACH reports and the hosting of two major regional conferences on maternal and child health. There have also been some changes in staffing at the regional office.

In April 2009, the CEMACH regional office will become part of the new Regional Agency for Public Health and Social Well-being. The Health Promotion Agency for Northern Ireland will also be subsumed into the new regional agency.

We welcome the opportunities this move will present and to work more closely with colleagues within the wider public health arena.

*Angela Bell*

### Consultant in Public Health joins CEMACH



Dr Elizabeth Reaney was appointed to the Health Promotion Agency for Northern Ireland as Consultant in Public Health for CEMACH in September 2008.

Liz has been assisting Dr Angela Bell in the development of confidential enquiries and regional information on the health of mothers and children, with special responsibility for providing public health input. She will also take the lead on the CEMACH Obesity in Pregnancy project.

Liz has extensive experience in maternal and child health, most recently as Senior Medical Officer in Acute Services/Maternal and Child Health in the Department of Health, Social Services and Public Safety (DHSSPS).

She also worked in community paediatrics for 12 years prior to training in public health and undertaking research and teaching in the Department of Epidemiology and Public Health at Queen's University Belfast.

## Reviewing maternal deaths to make motherhood safer

The main findings and recommendations from the CEMACH report *Saving mothers' lives: reviewing maternal deaths to make motherhood safer (2003–2005)* were discussed at a conference in March.

The event, attended by around 100 health professionals from all trusts in Northern Ireland, aimed to encourage participants to consider and plan ways to implement the report's recommendations in their area of work.



The key findings of the report were presented in the morning session by guest speakers from England and by two CEMACH regional assessors, Dr Ann Harper and Dr Janine Lynch.

The event finished with an interactive workshop in the afternoon where the participants considered the 10 key recommendations in relation to their clinical practice and the service provision within their trust.

The findings of the report show 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 between 2003 and 2005. The maternal mortality rate was 14 per 100,000 maternities – a slightly higher rate than from the last report.

There are many possible reasons why the maternal mortality rate is not declining, including:

- rising numbers of older or obese mothers;
- growing numbers of women with medically complex pregnancies;
- increasing numbers of migrant women.

Pictured at the 'Saving Mothers' Lives' conference at the Dunadry Hotel earlier this year are, left to right: Dr Ann Harper, Consultant Obstetrician, Royal Jubilee Maternity Hospital, Belfast; Dr Michael McBride, Chief Medical Officer, DHSSPS; Richard Congdon, Chief Executive, CEMACH; and Dr Brian Gaffney, Chief Executive, Health Promotion Agency for Northern Ireland.

More than half the women who died were either overweight or obese, with 15% of all women who died from either direct or indirect causes being morbidly obese.

The most common cause of 'direct' death, as in previous reports, was thromboembolism. Cardiac disease was the most common cause of 'indirect' death as well as of maternal deaths overall.

In the main, this reflects the growing incidence of acquired heart disease in younger women related to less-healthy diets, smoking, alcohol and the growing epidemic of obesity.

While it was pleasing that there was a slight decline in the number of cases associated with substandard care, or avoidable factors, there are still important learning points for all health professionals caring for pregnant or recently delivered mothers.

For the first time the report contains a list of 10 overall recommendations that, where possible, are accompanied by suggested benchmarks and/or auditable standards to ensure more consistent implementation, monitoring and feedback.

We would like to thank all health professionals who contributed to this report with the aim of improving maternity care and we would ask that trusts ensure that measures are put in place to measure the 10 auditable standards highlighted in this report.

The report is available on the CEMACH website [www.cemach.org.uk](http://www.cemach.org.uk) and further information from the CEMACH regional office.



## Update on Obesity in Pregnancy project

The Obesity in Pregnancy project is CEMACH's principal project on mothers for 2008–2010.

CEMACH reports have shown that obesity is a significant risk factor in pregnancy for both maternal and perinatal death and there is also increasing evidence that obesity in pregnancy increases morbidity for both mother and baby.

The study seeks to gain an overview of current service provision for women with obesity in pregnancy and to identify any gaps that may exist in the provision of care for these women.

Recommendations based on the project findings will focus on how to improve management and, ultimately, the outcomes for these women and their babies.

The study has three components:

1. **An organisational survey of services** for obese pregnant women. This survey is now complete and results are due in early 2009.
2. **Development of consensus standards** of care for obese women in pregnancy will take place through the work of an expert multidisciplinary group that has now been convened. Once these standards are agreed, the project will move to the third stage.
3. **A detailed audit of standards**, using a retrospective review of case notes of women identified as obese during pregnancy. This component consists of two sections.
  - a) **Case notification**

In this stage, unit coordinators will work with colleagues in their units to complete a labour ward log of all obese women with a BMI of 35 or above at any stage in pregnancy who deliver (at  $\geq 24$  weeks gestation) during an eight week period in early 2009. This log will include demographic and clinical information and give valuable data on the national and regional prevalence of obesity in pregnancy.
  - b) **Review of medical records**

The second part of the audit is a retrospective review of case notes of a national sample of 1,000 cases selected from the labour ward logs. This will evaluate care against the predetermined consensus standards.

### What will this mean for you?

This study is of particular relevance to midwives, as we rely on your participation. Please ensure that all women have height and weight measured at booking, as women who are booking now will be potential candidates for the project. We will soon be meeting with unit coordinators from each unit who will keep you informed of the project.



### Thank you to Sister Joan Wells

Joan has been CEMACH unit coordinator for the Mater Hospital since 2003. At the beginning of October 2008 Joan moved to another post within

the hospital and will be replaced by Sister Brenda Reddington. We would like to thank Joan for her contribution to the work of the Confidential Enquiry into Maternal and Child Health over the past five years.

## Why children die: a pilot study and beyond

The CEMACH regional conference 'Why children die: a pilot study and beyond' was held in Belfast in October. The aim of the day was to present the findings of the CEMACH report *Why children die: a pilot study 2006*. The conference also highlighted key recommendations and provided an opportunity to hear how these are to be taken forward in Northern Ireland.

This was the first published confidential enquiry specifically focused on children that entailed a review of all child deaths in Northern Ireland, Wales and three regions of England during the 2006 calendar year.

The event was well attended by almost 100 delegates from a wide range of professions. An overview of the main findings of the enquiry was given by Dr Gale Pearson, Clinical Director for Child Health for CEMACH in London, who presented the quantitative data of the 957 reported deaths and a summary of the findings of the multidisciplinary panels which looked at 126 deaths in detail.

Primary care aspects of the child death review were presented by Dr Anthony Harnden, guest speaker from Oxford, who had conducted a more detailed review of primary care notes. A local perspective was brought by members of the regional CEMACH Child Death Review team, which had been chaired by Dr Moira Stewart.

During the afternoon session delegates had the opportunity to hear plans for the Safeguarding Board for Northern Ireland (SBNI) from Mr Martin Quinn, who is responsible for the development of SBNI. The event ended with a keynote talk by Simon Ward on 'Promoting mental health and emotional wellbeing', in recognition of the high number of deaths from suicide in young people during the study.

Pictured at the 'Why Children Die' conference, which took place in October at the King's Hall, Belfast, are: back row: Mr Seamus O'Reilly, Consultant in Accident and Emergency Medicine, Craigavon Area Hospital; Dr Gale Pearson, Clinical Director, Child Health Enquiry. Front row left to right: Dr Angela Bell, Director, CEMACH (NI); Dr Claire Thornton, Consultant Paediatric Pathologist, Royal Hospitals, Belfast; Mrs Deirdre McGonagle, Health Visitor and CONI Coordinator, Western Health and Social Care Trust; and Dr Moira Stewart, Clinical Lead for the Child Death Review, Northern Ireland.

The child death rate reported is as was expected at 2.47/10,000 children. The epidemiological analysis provides useful information on the causes of child death and highlights regional variations. There was little regional variation in the death rates overall but among 15 to 17 year olds there were significantly higher rates in Northern Ireland and North East England.



The report did identify many cases of high quality care but also areas for development, including:

- the need for children to be cared for by paediatric trained health care professionals, particularly in emergency care and primary care settings;
- a risk that serious illness can be missed in children;
- the need to proactively follow up children who miss appointments;
- the importance of including complete accurate information on death certificates particularly relating to the underlying cause of death.

Key learning points for primary care from the report included:

- the importance of timely and complete immunisation of children;
- the medical concept of 'at risk' children should be extended to all children with chronic illnesses;
- that GPs should be proactive in contacting the family after the diagnosis of a serious illness;
- that with adequate resources it is possible to deliver high quality palliative care for children in the community.

The report is available on the CEMACH website [www.cemach.org.uk](http://www.cemach.org.uk) or for further information contact the CEMACH regional office.



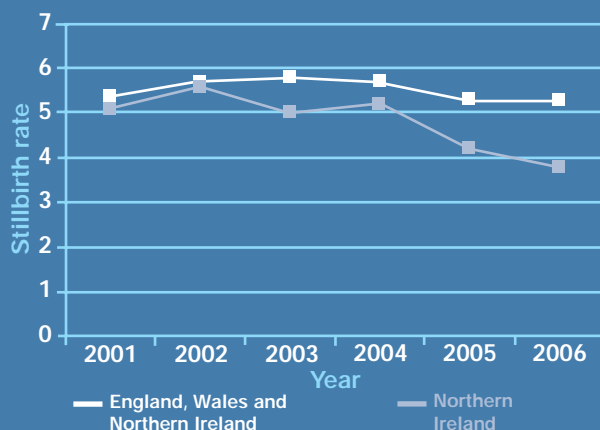
## Perinatal mortality 2006

CEMACH published its annual perinatal mortality report *Perinatal mortality 2006* in May. This was supplemented by a regional report and trust-specific reports to support local benchmarking.

The report describes the results of CEMACH perinatal mortality surveillance of fetal deaths from 22 weeks gestation and all baby deaths in the first four weeks of life in England, Wales and Northern Ireland.

The report showed that the neonatal mortality rate has fallen significantly since 2000 with a reduction from 3.9 to 3.4 per 1,000 live births. Concerns remain around stillbirths as there has been no significant change in the stillbirth rate at 5.3 per 1,000 live births and stillbirths in 2006 with half of the stillbirths being classified as unexplained using the existing Wigglesworth classification system. This has not been the case in Northern Ireland, however, where stillbirth rates have fallen steadily over the past three years (Fig 1).

**Fig 1: Trend in stillbirth rates from 2000 to 2006 for Northern Ireland compared to England, Wales and Northern Ireland**



The regional results show that Northern Ireland compares very well with the national results. There were 200 perinatal deaths in 2006, a reduction from the previous year despite an increase in birth rate in Northern Ireland giving a lower perinatal death rate of 6.8 per 1,000 total births compared to 7.9 for England, Wales and Northern Ireland.

The neonatal death rate had fallen to 3.7 per 1,000 live births and the stillbirth rate of 3.8 per 1,000 total births was lower than in England and Wales (Fig 1).

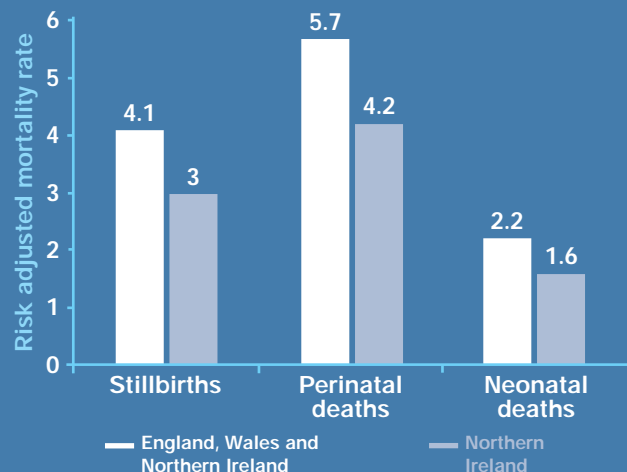
This was the first time that CEMACH included risk-adjusted mortality rates to allow health authorities and trusts to make more meaningful comparisons when evaluating their care.

The rates were adjusted by removing all notified terminations of pregnancy and all lethal or severe

malformations. Deaths with birth weight less than 500g and or gestation below 22 weeks gestation were also removed.

Adjusted mortality rates resulted in Northern Ireland having significantly lower mortality rates for all groups including neonatal deaths compared to England, Wales and Northern Ireland (Fig 2).

**Fig 2: Risk adjusted mortality rates, Northern Ireland 2006, compared to England, Wales and Northern Ireland.**



The report also includes key findings from areas where CEMACH plans to carry out more detailed or continued study:

- intrapartum-related deaths where the incidence has not changed significantly since 2000 with the burden of cases in fetuses and babies born at term with birth weight between 2.5 and 4kg.
- most deliveries at home where death occurred were not planned as home deliveries. The majority had booked to deliver in hospital (61%) or had not booked (29%).

Copies of the report can be obtained from CEMACH central office in London or is available to download from the CEMACH website [www.cemach.org.uk](http://www.cemach.org.uk)

### Future report

The annual perinatal mortality surveillance report for 2007 is due to be published in January 2009. For the first time this report will include information on international comparisons and will also include results on maternal mortality surveillance.

Trust specific reports will be further improved with additional results on cause of perinatal deaths within a trust and graphs to allow comparison with trusts providing comparable levels of care.

CEMACH welcomes any suggestions you may have for improving reports further to support you in improving perinatal care.

## Perinatal autopsy – why is this tool underused?

In May, Joanne Gluck, Clinical Research Midwife for CEMACH, delivered a presentation at the Irish Perinatal Society annual scientific meeting on a review of the perinatal autopsy rates in Northern Ireland from 2000–2006.

Autopsy is a valuable tool in assessing cause of death and auditing care after a perinatal death. Despite this, perinatal autopsy rates in Northern Ireland and the rest of the UK are well below the recommended standard.

The study therefore focused on factors contributing to poor utilisation of autopsy following stillbirth and neonatal death in Northern Ireland.

The low perinatal autopsy rates were shown to be due to failure to request an autopsy as well as parents refusing.

Associated factors identified were:

- time of death with higher autopsy rates when death occurred during a standard working day between 8am and 4pm;
- gestational age where the autopsy rate was lowest in stillborn babies at term, with more cases where autopsy was not requested, compared to immature stillbirths;
- following newborn deaths the reverse was the case with highest rates in term babies (53.3%) and lowest in immature babies with paediatricians not requesting an autopsy in 50% of babies <24 weeks gestation.

The autopsy rates were shown to be slowly improving with the perinatal rate for 2006 now just above 40%. It is an important area that needs addressed through education of midwives and doctors, appropriate use of staff and provision of perinatal pathology services.

The study prompted discussion amongst the audience and was awarded the prize for the 'Best Nurse/Midwife Presentation' Irish Perinatal Society, April 2008.



Pictured is Joanne Gluck, Clinical Research Midwife for CEMACH, with her award for 'Best Nurse/Midwife Presentation', Irish Perinatal Society.

## Best wishes to Miss Breige Gillen on her retirement

Miss Breige Gillen, Clinical Midwife Specialist in the Altnagelvin Hospital, retired in 2008. Miss Gillen has served as unit coordinator for both CESDI (the Confidential Enquiry into Stillbirths and Deaths in Infancy) and CEMACH.

Mrs Anne Marie McGurk, Head of Midwifery, has taken on her role of CEMACH unit coordinator for Altnagelvin Hospital.

CEMACH would like to wish Miss Gillen a very happy retirement and to thank her for her contribution to the work in maternal and child health carried out in Northern Ireland.

## Finally, thank you!

The work of CEMACH is only possible because of the work and commitment of many health professionals who provide data, act as assessors and implement the recommendations.

CEMACH welcomes enquiries from professionals who may wish to use the mortality data for specific projects. Data release and data request forms are available through the CEMACH regional office or can be downloaded from the CEMACH website at [www.cemach.org.uk](http://www.cemach.org.uk)

## Contact us

Further information on the work of CEMACH can be obtained from the CEMACH (Northern Ireland) regional office.

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