

Infant and perinatal mortality not directly linked to PCT funding

The amount of money spent in delivering maternity care in Primary Care Trusts (PCTs) does not have a significant impact on rates of infant or perinatal mortality, researchers at the University of Birmingham report.

Nick Freemantle, Professor of Clinical Epidemiology and Biostatistics, found that between 70–80% of variations between PCT infant and perinatal mortality can be explained by a combination of social deprivation, ethnicity and maternal age.

In work carried out across the 303 PCTs in England, Professor Freemantle looked at potential causes of variability in the rates of infant and perinatal mortality and aimed to identify those with worse than expected outcomes. The Government has designated PCTs with the worst health and deprivation indicators as Spearhead Trusts. The team were keen to analyse the impact on variation of patient demographics and health service funding for maternity services. They obtained data for each PCT on the number of infant and perinatal deaths, ethnicity, deprivation, maternal age, PCT spending on maternity services and Spearhead status.

They found that there were considerable differences in infant and perinatal mortality rates across PCTs, but that these did not relate to the levels of financial resource directed at them.

Professor Freemantle said: "We have clearly demonstrated that there is no straight correlation between the money spent on maternity services and their outcomes. We found that levels of investment do not in themselves impact on the variation in outcomes – in the level of infant and perinatal mortality in different PCTs."

Although Spearhead PCTs have higher rates of infant and perinatal mortality, they were not found to have results out-of-line with the risks in the population. Neither of the two PCTs identified as having higher than expected rates of perinatal mortality have Spearhead Status. Professor Freemantle concludes: "We know the causes that impact on the levels of infant and perinatal mortality – what we need to find now are solutions."

CEMACH Becomes CMACE

CEMACH became an independent charity in July 2009 with the new name Centre for Maternal and Child Enquiries (CMACE).

CEMACH was set up in April 2003 as a unit within the Royal College of Obstetricians and Gynaecologists (RCOG).

The independent status and new name reflect significant developments since 2003. CMACE will continue to be committed to work for mothers and babies but also aims to develop and expand its work on child health. The organisation has also broadened its range of activities beyond its core national confidential enquiry activity.

Local review, clinical audits and research collaborations represent increasingly important parts of its work. These all support its wider mission to improve the health of mothers, babies and children.

CEMACH has worked closely with a wide range of clinicians, including midwives, paediatricians, obstetricians and, increasingly, general practitioners in carrying out its reviews. It is committed to continuing and further strengthening these relationships now it has become CMACE.

Links with the RCOG as the legal host have been particularly strong. Although CMACE will not be part of the RCOG in the same way as CEMACH, both parties are committed to retaining close ties in the future.

Professor Arulkumaran, RCOG President, said: "I have greatly valued the role played by CEMACH in recent years. We welcome its achievement of independence and look forward to working in partnership on our shared goals."

DVD to teach parents resuscitation skills

Special care baby charity Bliss has launched a DVD specially designed to help train parents in infant resuscitation.

It is hoped the DVD will be a welcome resource for parents taking their premature or sick baby home from hospital.

The resuscitation DVD, originally produced by NHS Ayrshire and Arran with funding from Bliss, gives parents precise information and a step-by-step demonstration of what to do if their baby

chokes or stops breathing. The DVD will help parents to be better equipped and feel more confident in caring for their baby by themselves once they are at home and away from the unit.

It is designed to be used initially by unit staff as a teaching aid as part of the discharge pathway. Parents can then take their own copy home with them.

To order copies contact Zoë Chivers on 020 7378 1122 or zoec@bliss.org.uk



Eight outstanding maternity units have won awards from the All-Party Parliamentary Group on Maternity (APPGM). A further four units were awarded highly commended. The awards acknowledged the units' inspiring work in improving local maternity services and were presented at the APPGM summer reception in July at the Houses of Parliament. Jack Straw MP is seen here sharing a joke with the East Lancashire Hospitals NHS Trust who won an award for their work in the Normality of Birth category.

New cord blood collection centre at St George's

A new centre for the collection of vital cord blood donations has been opened by Public Health Minister Gillian Merron.

NHS Blood and Transplant and St George's Healthcare NHS Trust have established the fifth site at which mothers can donate cord blood, the blood that remains in the placenta and umbilical cord after a baby is born. It is rich in stem cells and can be used to help patients whose bone marrow is not working properly due to disease or medical treatments such as chemotherapy and radiotherapy.

Donations to the NHS Cord Blood Bank are given on a voluntary basis.

The NHS Cord Blood Bank has four other sites across London and the south-east, chosen for the broad ethnic mix of the community they serve.



Public Health Minister Gillian Merron with Luam Kidane, Team Manager for cord blood collections.

One million premature babies die every year globally

More than one million infants die each year because they are born too early, according to a White Paper, *The global and regional toll of preterm birth*.

In 2005, an estimated 13 million babies worldwide were born preterm, almost 10 per cent of total births worldwide. About one million deaths in the first month of life (or 28 percent of total newborn deaths) are attributable to preterm birth.

According to the White Paper, the highest rate of preterm birth by UN region according to data available is in Africa followed by, in descending order, North America (Canada and the United States combined), Asia, Latin America and the Caribbean, Oceania (Australia and New Zealand) and Europe.

"Premature births are an enormous global problem that exact a huge toll emotionally, physically and financially," says Dr Jennifer L Howse, president of the March of Dimes, a leading non-profit organisation for pregnancy and baby health.

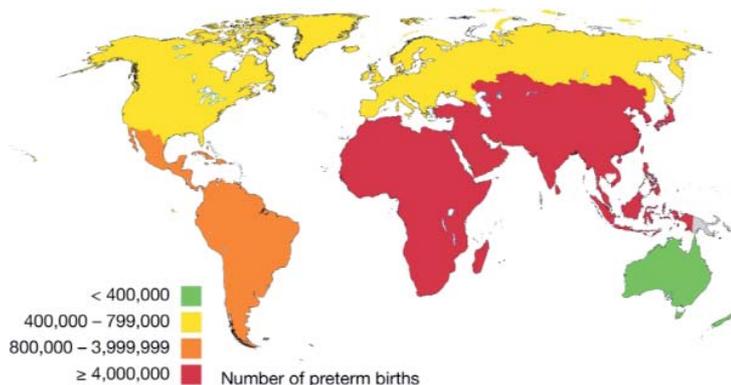
"If world leaders are serious about reaching the UN's Millennium Development Goals to reduce

child mortality and improve maternal health, then strategies for reducing death and disability related to preterm birth must receive priority."

The new White Paper uses data published recently in *The Bulletin of the World Health Organization* (WHO).

The March of Dimes and other authors of the White Paper are calling for greater efforts to inform health professionals, policymakers and others about the worldwide toll of preterm birth and possibilities for prevention and for care of women with high-risk pregnancies and their babies.

"This was a first attempt to estimate the worldwide scale of the problem," says Dr Mario Meriardi of WHO's Department of Reproductive Health and Research, an editor of the White Paper and an author of the study published in *The Bulletin*. "As a first step, it is necessary to improve data on the extent of the problem."



Vitamin D could reduce risk of premature birth

At an international research conference in Bruges delegates were told that mothers taking ten times the usual dose of vitamin D during pregnancy had the risk of premature birth reduced by half.

The vitamin's benefits have been observed previously in uncontrolled studies but this is the first time they have been found in a scientific trial which met criteria for evidence-based inquiry.

Around 600 women from South Carolina took 4,000 IUs (100 micrograms) per day of vitamin D at about three months of pregnancy. A control group took 400 IUs, the normal recommended dose in the US and UK. Blood and urine were tested monthly to ensure calcium and vitamin D levels were within safe limits.

The rates of premature babies born to women taking the high dose were reduced by half at both 32 and 37 weeks and fewer babies were born small for dates. These women had a 25 per cent reduction in infections, particularly respiratory infections such as colds and flu, as well as fewer infections of the vagina and the gums. The core morbidities of pregnancy, such as diabetes and pre-eclampsia, were also reduced by 30 per cent.

The investigations used vitamin D3, the human form of the vitamin which is more potent than vitamin D2, the plant form in Abidec, the vitamin mixture usually recommended for babies in the UK.

Prenatal exposure to 'flu pandemic could increase heart disease risk

People exposed to a H1N1 strain of influenza A while *in utero* were significantly more likely to have cardiovascular disease later in life, a study published in *Journal of Developmental Origins of Health and Disease* reveals.

“Our point is that during pregnancy, even mild sickness from 'flu could affect development with longer consequences,” says senior author Caleb Finch, USC Professor of Gerontology and Biological Sciences. Researchers looked at more than 100,000 individuals born during and around the time of the 1918 influenza pandemic in the United States.

“[The] 1918 'flu was far more lethal than any since. Nonetheless, there is particular concern for the current swine 'flu which seems to target pregnant women,” Finch says. “Prospective mothers should reduce risk of influenza by vaccination.”

Researchers found that men born in the first few months of 1919 – second or third trimester during the height of the epidemic – had a 23.1 percent greater chance of having heart disease after the age of 60 than the overall population.

Women born in the second quarter of 1919 – first trimester during the height of the epidemic – were 17 percent more likely to have heart disease than the general population in later life.

Coping with winter illness

Special care baby charity Bliss has released a resource to support parents taking their sick or premature baby home from hospital over the coming months. *Common winter illnesses*, supported by Abbott, is a common sense guide to help parents through the autumn and winter months.

The booklet covers the common cold, respiratory syncytial virus (RSV), 'flu – including swine 'flu, pneumonia and bronchiolitis. There is a section on general hygiene, what a fever is, reducing the risk of infection, prevention and immunisation.

The booklet is available to parents through NICUs, to order copies visit www.bliss.org.uk



Down's syndrome: how to deliver the news?

Telling an expectant couple that their child will be born with Down's syndrome (DS) is a task very few physicians are trained for, claims research published in the *American Journal of Medical Genetics*. The study offers several recommendations for how physicians can best deliver the news.

The team found that while many sources are available, expectant couples prefer to receive the news from the healthcare professional with the most knowledge – the physician.

Women who decided to undergo definitive prenatal testing for DS preferred to receive the diagnosis as soon as possible in the company of their partner, while women who arranged for the diagnosis to be delivered by a phone call were better prepared than those who received the news from an unarranged call.

Mothers emphasised that they should be

provided with up-to-date information about DS, its causes and the expectations for a child living with DS today. This should include descriptions of common or anticipated health conditions.

Parents found that they benefited from personal stories demonstrating the potential and possibilities for children with DS and, if possible, contact information for other parents of children with DS should be made available.

Ultimately the research review found that mothers who received the diagnosis prenatally and continued their pregnancy were happier with the birth of their child than those who received the diagnosis after the baby had been born. Receiving the diagnosis in advance seemed to allow parents the time needed to overcome the initial shock of the diagnosis and begin preparing for the birth.

Tot it up: a balanced view of toddler nutrition

The Infant & Toddler Forum has launched an online resource – the Tot It Up food calculator www.littlepeoplesplates/totup – to help healthcare professionals and parents assess toddlers' weekly nutritional intake and identify where improvements can be made.

A recent Infant & Toddler Forum poll showed that UK families are increasingly relying on convenience foods at meal times and there is general confusion about what constitutes a balanced diet for toddlers. The survey revealed that 31% of mothers described feeling 'tense, anxious, frustrated or angry' at meal times.

Using Tot It Up, healthcare professionals can help parents to adopt a healthy lifestyle for their toddler by:

- Encouraging greater awareness of a balanced diet for toddlers
- Encouraging a positive approach towards healthy eating
- Encouraging active play

Practising health visitor Dipti Aistrop says: “Government guidance suggests that children eat 'family foods' once weaned. But if the family diet is not nutritious, toddlers will be missing out on the nutrients they need. Tot It Up can assess if there is an excess of high fat/high sugar foods and is an excellent resource to facilitate dialogue between HCPs and parents.”

