

Improve care of pregnant women with diabetes



Daniel Flanagan,
Consultant Physician,
Derriford Hospital,
Plymouth

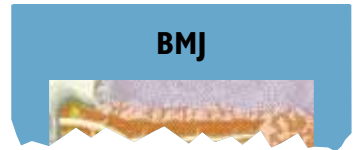
We are living through uncertain times. Diabetes care is under close scrutiny with strong opinions about what the future should hold over the next few years. The often-repeated phrase is that long-term conditions, including diabetes, should be managed in primary care.

I do not think that anyone would disagree that we must offer a fair and equitable service for all our patients. It is not fair, for example, that some people with type 2 diabetes are offered continuing input from a secondary care clinician with support from a variety of other specialists, while others are not.

This absolutely does not mean that we do not need secondary care services. The Confidential Enquiry into Maternal and Child Health (CEMACH) set out to assess the quality of maternity care for women with diabetes in England, Wales and Northern Ireland (see paper summarised on right). The conclusion is that this group of women continue to have perinatal mortality rates four times greater than

the general population, with congenital anomaly rates twice as high in the offspring. There is good evidence that if optimal care is provided we can reduce this, but we are clearly not succeeding with the present system. The paper does not address the question of how services should change to improve outcomes, but clearly more intensive support preconception is needed. This is a strong argument for increasing, not decreasing, the expertise available in secondary care.

The concern must be that in redistributing diabetes services to primary care the critical mass of expertise will be lost from secondary care. It would be pointless and wrong to try to defend a system that has served us well in the past but is now outdated. Only specific groups of individuals need to be seen in secondary care. We must now discuss how we can set up a system that is able to identify those that need specialist services and that is able to provide the necessary care for those subgroups of people (including women planning pregnancy) that need it. We will certainly be held to account in the next CEMACH report.



Perinatal mortality and congenital abnormalities raised when mother has diabetes

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓

- The purpose of the study was to determine perinatal mortality and congenital anomaly rates for babies born to mothers with type 1 or 2 diabetes living in England, Wales or Northern Ireland.
- Between March 2002 and February 2003 2359 pregnancies at 231 maternity units were followed (1707 of the mothers had type 1 diabetes and 652 had type 2 diabetes).
- The study recorded stillbirths, perinatal and neonatal mortality, and congenital anomalies.
- The rate of perinatal mortality was 31.8/1000 births. This is four times higher than in the general population. The results were similar for mothers with type 1 and 2 diabetes.
- The prevalence of major congenital abnormalities was 46/1000 births. This is twice the rate of the general population, and the increases in neural tube defects and congenital heart disease were most significant.
- The authors conclude that there are higher rates of perinatal mortality and congenital abnormalities in the babies of mothers with type 1 or 2 diabetes. This is of particular concern as, with the increasing prevalence of diabetes, the number of pregnant women with diabetes is expected to increase.

Macintosh MCM, Fleming KM, Bailey JA et al (2006) Perinatal mortality and congenital anomalies in babies of women with type 1 or type 2 diabetes in England, Wales, and Northern Ireland: population based study. *BMJ* doi:10.1136/bmj.38856.692986.AE (published 16 June 2006)



Improving glycaemic control reduces macrovascular disease in diabetes

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓

- This paper reports on a systematic review and meta-analysis of randomised controlled trials comparing interventions to improve glycaemic control in terms of effect on incidence of macrovascular events in people with type 1 and 2 diabetes.

- The analysis is based on the results of eight trials in 1800 people with type 1 disease and six trials involving 4472 people with type 2 disease.
- People were classified by the investigators as either receiving conventional or intensified treatment for glycaemic control.
- The ratio of macrovascular events in people receiving intensified versus standard glycaemic control was 0.38 (95% confidence interval [CI] 0.26–0.56) in type 1 diabetes and 0.81 (95% CI 0.73–0.91) in type 2 disease.
- The authors concluded that attempts to improve glycaemic control in people with type 1 and 2 diabetes reduced the incidence of macrovascular events.

Stettler C, Allemann S, Juni P et al (2006) Glycemic control and macrovascular disease in types 1 and 2 diabetes mellitus: meta-analysis of randomized trials. *American Heart Journal* **152**: 27–38