

Old problems, new problems, problems to be solved...



Helen Thornton

Welcome to the first Paediatric & Adolescent Diabetes Nursing Supplement for 2009. As we embark upon a new year, we will continue to encounter problems in managing children and young people with diabetes, and, as teams, will have to work with families and other groups to help find solutions.

Old problems: New solutions

On 18 November 2008, 200 children and their families attended a lobby of Parliament to give MPs the message that “we matter”, to show that they require better support in managing their diabetes when in school, and Diabetes UK have released a report *Making all children matter: Support for children with diabetes in schools* (Diabetes UK, 2008), which can be obtained via the Diabetes UK website (www.diabetes.org.uk). Schools continue to be the old chestnut of a problem, hard to crack, but when you do you can provide a more positive experience for children and young people with diabetes. The information within the Diabetes UK document summarises the legislation and guidance that you can draw upon to help support your activities with schools. Jonathan Mimmagh’s article (see page 20) highlights the additional difficulties that can be encountered when managing a young person who has special educational needs as well as diabetes, and discusses how this guidance can be used to support this population.

A linked issue is the management of insulin in schools. The increasing use of insulin pump therapy, although requiring staff training, can be a suitable solution to the intensification of insulin regimens as it avoids lunchtime injections. Staff seem, after training, to be willing either to button-push or to supervise button-pushing, in preference to administering an insulin injection.

In July 2008, NICE updated its technology appraisal on insulin pump therapy (NICE,

2008). Readers of this journal will have seen detailed coverage of the revised guidance in the last issue; herein, Rebecca Thompson considers the implications for paediatric practice (see page 23). With between 8% and 50% of our clinic populations being eligible for insulin pump therapy (Campbell, 2008), we, as teams, are going to have to consider this change in practice and how it will impact on our workload. We need to ensure that we enter discussions with our commissioners when developing diabetes service specifications to ensure services are fully funded, and staffed by appropriately trained individuals. But what if you have never initiated insulin pump therapy before, how do you start? Locally to you, there may be teams at either a tertiary unit or another larger district general hospital who may be willing to support you with a shared-care arrangement. In my experience, the insulin pump device manufacturers are more than willing to support teams who start insulin pump therapy, and employ dedicated nurses to support you in the process. There are various insulin pump courses available, ranging from basic 3-day courses, to certificated courses, and you can even study a module at Master’s level at some organisations. With 29.55% of children with type 1 diabetes still being reported as having an HbA_{1c} level greater than 9.5% (The Information Centre, 2008) we, as teams, must embrace the opportunities given by this new NICE guidance and ensure we can offer it in our portfolio of care.

Another old problem needing new solutions is childhood obesity. It is now predicted that 90% of children will be overweight or clinically obese by 2050 (Department of Health, 2008). The Department of Health has adopted “Morph-like” figures to support their campaign “Change4life” (see *Figure 1*). The key messages are: eat well, move more, live longer. The campaign’s television advertising can now be seen, and

Helen Thornton is a Clinical Nurse Specialist in Paediatric and Adolescent Diabetes at St Helens and Knowsley Hospitals Trust, Merseyside.

there is a very good website to direct families to (<http://www.nhs.uk/change4life>). In addition, there are lots of support materials available that are suitable for us to utilise in any diabetes prevention initiatives that we are conducting in our localities, or with people with type 1 diabetes. These materials can be downloaded or ordered from the Department of Health website (<http://www.dh.gov.uk/en/News/Currentcampaigns/Change4Life/index.htm>).

New problems

A new problem that we may have to consider is an increase in hypoglycaemia in some individuals next time we see them in clinic.

My family purchased a games console at Christmas, which claimed to have a fitness element to it. Being highly sceptical about this (and also highly unfit!) I have conducted a not-so-scientific test by using it myself. I have been surprised that taking a daily fitness test has made me more aware of my body mass index, and I have certainly worked out using several of the programmes, with the resulting aching muscles! The results of a study at Liverpool John Moores University showed that use of these sports-based games could increase heart rate to 130–140 beats per minute in adolescents, and that calories would be burned (Graves et al, 2007). So when faced with an individual, especially one who does not take part in traditional sports, with unexplained nocturnal hypoglycaemia check out what they have been doing and what they got for Christmas.

The other thing we need to be very aware of is the credit crunch and its effect on people's food choices. Shopping in my local supermarket for bread recently, I encountered a family discussing their choice of bread based solely on price. The shop's own refined brand had 13.9g carbohydrate per slice in comparison with the 19.8g in the seeded loaf I was buying. For those who are not on carbohydrate counting, an adolescent boy who usually eats 4 slices of toast for breakfast would be eating less than the equivalent of 3 slices, which could be contributing, along with a lack of fibre, to his mid-morning hypoglycaemia and hunger in school... back to the schools issue again. Happy problem solving! ■

Campbell F (2008) Identifying paediatric patients for CSII therapy. *Diabetes Digest* 7(3 Suppl): 6

Department of Health (2008) *Joint letter from CMO and CNO inviting health care professionals to order Change4Life support materials*. Department of Health, London

Diabetes UK (2008) *Making all children matter: Support for children with diabetes in schools*. Diabetes UK, London. Available from: http://www.diabetes.org.uk/Professionals/Information_resources/Reports/Making-all-children-matter/ (Accessed on: 22/01/09)

Graves L, Stratton G, Ridgers ND, Cable NT (2007) Comparison of energy expenditure in adolescents when playing new generation and sedentary computer games: cross sectional study. *BMJ* 335: 1282–4

Information Centre, The (2008) *National Diabetes Audit Executive Summary. Key findings about the quality of care for people with diabetes. Report for audit period 2006–2007*. The Information Centre, Leeds

NICE (2008) *Continuous subcutaneous insulin infusion for the treatment of diabetes mellitus: Review of technology appraisal guidance 57*. NICE, London



Figure 1. A graphic from the Government's Change4Life campaign.