

Diabetes in children

BY CAROL NICHOLS

Every stage of a child's development has its own challenges for families but for families with children diagnosed with diabetes an extra burden is placed on parents' shoulders.

Until the advent of insulin therapy in the 1920s every child with diabetes died, but since that time the challenge has been to allow children to grow well and stay healthy. While Type 1 diabetes is rarely life-threatening in this country, it continues to be fatal in countries without access to insulin or specialist medical and nursing care.

The Royal Children's Hospital (RCH) diabetes clinic in Melbourne is one of the largest paediatric clinics in the world. It is at the forefront of paediatric diabetes care, due to a commitment to research, the use of emerging technologies, and collaborations with local and international centres.

More than 1,500 children currently attend the RCH diabetes clinic. About 97% have Type 1 diabetes, for which there is no known cause and no known cure. The number of children being diagnosed is rapidly increasing, with two or three new diagnoses each week.

The RCH diabetes clinic care team believes that every child should have access to a multidisciplinary team that includes, paediatric endocrinologists, diabetes nurse educators, dieticians, social workers and psychologists.

Andrew Boucher, a diabetes nurse educator with the clinic, says the key to caring for children living with diabetes is involving their entire

community from parents and siblings to school teachers and friends.

"We initially teach parents the fundamentals to enable them to care for their children safely," Andrew said.

"Many people are overwhelmed when a child is diagnosed with diabetes, including the teachers and carers who are often responsible for the child for as much as 30 or 40 hours a week. That's why it's important that we include them in the education process."

Andrew says often the most difficult times for families are during early childhood and teenage years. Toddlers, for example are notoriously finicky eaters and will refuse food or have unpredictable appetites making it difficult to achieve stable glucose levels.

"Teenagers often bitterly resent having diabetes as it makes them feel different to their friends, so they ignore their diabetes care activities. This is why they are over-represented in hospital admissions for life-threatening diabetic ketoacidosis," Andrew said.

"Good diabetes control is essential for healthy growth and good management means a reduced risk of life-threatening complications. But to achieve good diabetes control requires constant hard work. Our role as clinicians is to support families with this work.

Nurse Educators Andrew Boucher and Rebecca Gebert from RCH help families manage diabetes

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Diabetes and heart disease

BY JOHN ROLLEY, YENNA SALAMONSON AND PATRICIA DAVIDSON.

Diabetes is a chronic illness experienced globally and is the fourth leading cause of death from a chronic illness (WHO 2006). Risk factors contributing to the rising prevalence include physical inactivity, increasing rates of obesity and diets high in refined sugars, starch and saturated fats. In the United States, it has been estimated that 50-70% of people with a diagnosis of diabetes die of a cardiac-related disease (Gu et al 1998). In Australia the prevalence of diabetes is approximately 3.6% (AIHW 2006). Up to 20.4% of Australians report both a history of diabetes and cardiovascular disease (AIHW 2006). Cardiovascular disease was associated with 52.3% of diabetes related deaths reported in 2004 in Australia (AIHW 2006).

Diabetes remains a significant component of cardiovascular risk, underscoring the importance of timely diagnosis, effective management and accurate risk assessment.

In a recent study conducted at a tertiary referral hospital in metropolitan Sydney, patients receiving angiography or percutaneous coronary interventions (n=220) were asked to rate their perceived risk of further heart related problems. The sample was drawn from Greater Western Sydney: a socioeconomic, culturally and linguistically diverse region (ABS 2008).

Twenty nine percent (n=65) of the sample had a diagnosis of diabetes recorded in their medical record. In spite of the increased risk associated with diabetes, almost half of those with a diagnosis of diabetes in this study rated

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their likelihood of experiencing a future cardiac event as being 'low to moderate'. Although we are unable to unequivocally explain this finding, potential reasons may include the asymptomatic nature of diabetes in the early stages, lower levels of health literacy, socioeconomic disadvantage, cultural and linguistic barriers and lower levels of formal education (AIHW 2006). Some people with diabetes, particularly women, the elderly and those experiencing socioeconomic disadvantage are less likely to attend secondary prevention programs (Clark et al 2005).

Diabetes remains a significant component of cardiovascular risk, underscoring the importance of timely diagnosis, effective management and accurate risk assessment. Clinicians and researchers need to collaborate in developing evidence for effective interventions aimed not only at increasing the accuracy of risk perception but also engaging in effective strategies to modify deleterious health care behaviours. Reduced hospital length-of-stay for interventional cardiology procedures often means there is a reduced opportunity for nurses to engage in comprehensive patient education. Engaging in innovative strategies is important to address the need for ensuring accurate risk perception.

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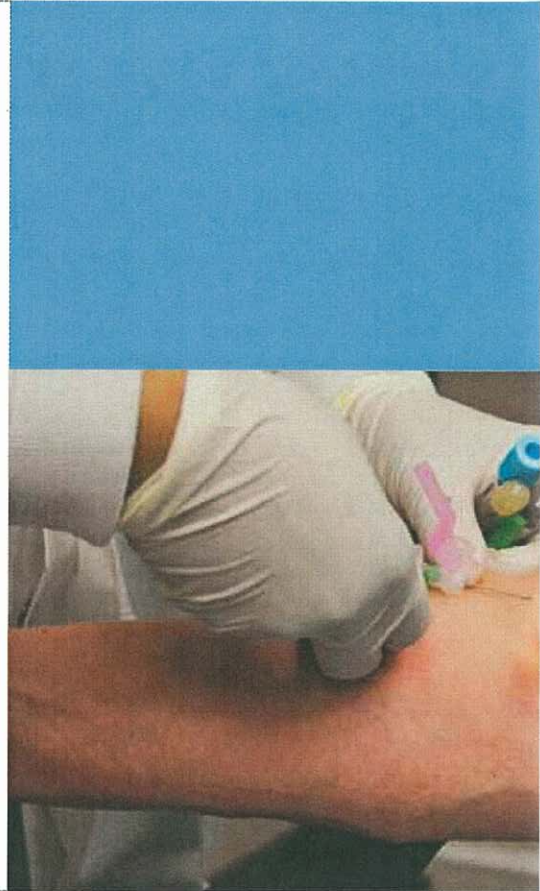
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