

UNIVERSITY OF SOUTHERN QUEENSLAND

What are the experiences of children aged 2–12 years with type 1 diabetes, adolescents aged 13–17 years with type 1 diabetes, and that of their parents when making the transition to insulin pump therapy?

A Dissertation submitted by

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ABSTRACT

Whilst researchers have identified an improvement in quality of life for families using insulin pump therapy there is little information about the experiences of children and/or adolescents and their parents when making the transition to insulin pump therapy. To gain an understanding of children and adolescents with type 1 diabetes and their parents' experiences making the transition to insulin pump therapy data were collected from families (n = 11 parents and n = 12 children/adolescents) making the transition to insulin pump therapy from the Mater Children's Hospital diabetes clinics (n = 50 starting insulin pump therapy) in 2008. Parents and their child/adolescent were interviewed and completed questionnaires before and approximately three months after starting insulin pump therapy. Families also recorded their thoughts and feelings about insulin pump therapy in diaries during the three months. The data were analysed using NVivo software Version 8. Three categories were identified with eleven themes emerging: 'The meaning of diabetes,' encompassed planning and constancy of diabetes care; worries and concerns which included hypoglycaemia, and long term health. 'Transition to insulin pump therapy,' related to 'starting over,' and effort required to manage insulin pump therapy. 'The meaning of insulin pump therapy,' included fewer needles, freedom, better control of blood glucose levels and being attached, which was related to feeling 'normal'. The findings suggest continuing insulin pump therapy depends on whether the child/ adolescent feels more or less normal being attached to a machine. The data suggest children/adolescents using the pump find they have more freedom and the pump is easier than using injections to manage their diabetes and they were happier. The findings can be used to make recommendations to improve the education process.

CERTIFICATION OF DISSERTATION

I certify that the ideas, experimental work, results, analyses, software and conclusions reported in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award, except where otherwise acknowledged.

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ENDORSEMENT

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DEFINITION OF TERMS

Basal – Small amount of insulin which is infused continuously

Bolus – Insulin, which is given immediately

Correction bolus – Insulin given when the blood glucose level is high

Meal bolus – Insulin, which is given to cover carbohydrate food

Hyperglycaemia – High blood glucose levels

Hypoglycaemia – Low blood glucose levels

Infusion cannula – Small plastic cannula inserted into subcutaneous fat

Ketones – Develop when insufficient insulin is available to move glucose into the cells to be used for energy. Fat is broken down to be used for energy and the by product of fat breakdown is ketones