



# Dental health and attitudes in young adults aged 15–25 years with diabetes mellitus: a case-control study

Commencement Date: **Project No:** 018 March 2017 Chief Investigator A: A/Prof Christine Rodda June 2018 Completion Date:

Chief Investigator B: Pending ethics approval Prof Ivan Darby Status:

Chief Investigator C: Prof Bodil Rasmussen

Chief Investigator D: Dr Phyllis Lau **Associate Investigator:** Dr Jamie Robertson

Rotary Club of Footscray, Footscray Co-Health, Western Health and Melbourne University Support:

#### Introduction

Adults who have poorly controlled diabetes mellitus (DM) have more advanced gum disease and an increased risk of tooth decay. Moreover, people with poorer gum health have greater difficulty controlling DM. Self-efficacy in both oral health and Type 1 DM management are related to lifestyle habits typically established during adolescence. However, there are currently few published data in this age group. This study will provide insight into the oral health in young adults who have Type 1 DM, at a time when they are establishing potentially enduring lifestyle habits, potentially a critical time for early intervention to optimise long-term oral health and its impact on DM.

#### **Aims**

- Compare the oral health, as measured by decay experience and gum disease of young adults who have DM with the oral health of healthy young adults
- Assess attitudes to dental health in both groups
- Assess the need to include regular periodic oral health assessments within multidisciplinary young adult diabetes clinics

#### **Rationale**

This study seeks to determine whether there are additional oral health issues in young adults who have DM compared with healthy young adults. It also seeks to assess links between oral health and diabetes self-efficacy.

## Methodology

This study will be undertaken within the monthly multidisciplinary Young Adults Diabetes Service Clinic. Each case will recruit their own matched control from their friendship circle. It will consist of a case control study of 15 to 25-year-old patients (cases and controls) who will:

- Undergo a dental examination
- Attend their routine diabetes clinic visit at which long-term blood glucose control and blood pressure will be measured, together with height, weight and BMI calculated, in addition to annual complication screening
- Complete a short questionnaire on oral health behaviours and attitudes
- Attend an interview.

### What are the expected outcomes?

It is anticipated the results from the study will inform the need to include regular periodic oral health assessments within multidisciplinary young adult diabetes clinics to optimise long-term oral health and DM glycaemic control.