

Submission Id: 3101

Title

Assessing the mechanisms contributing to self-care behaviours in young and usual-onset diabetes

Priority 1 (Research Category)

Diabetes and endocrine disease

Presenters

Sabrina Wong, MBBS, M.Med(Family Medicine), FCFP (Singapore), Elya Chen, Helen Smith, Konstadina Griva

Abstract

Context: Young-onset diabetes (YOD) (age of onset 21-39 years) is associated with a poorer metabolic profile and a higher risk of complications, and poor self-care behaviours play a significant role. However, few studies have comprehensively examined the mechanisms (self-efficacy, dietary barriers, illness perceptions, knowledge, diabetes-related distress) that may contribute to poor self-care behaviours in YOD. Objectives: Our study aims to compare these mechanisms and self-care behaviours between participants with YOD and usual-onset diabetes (age of onset 40-59 years). Study design: A cross-sectional survey was conducted in primary care clinics in participants with YOD or UOD, and type 2 diabetes for 10 years or less. Survey tools included the Diabetes Empowerment Scale short-form (DES-SF), dietary barriers of the Personal Diabetes Questionnaire (PDQ-DB), Brief Illness Perceptions Questionnaire (BIPQ), revised Michigan Diabetes Knowledge Test (DKT), diabetes distress scale (DDS), Summary of Diabetes Self-care Activities (SDSCA), International Physical Activity Questionnaire (IPAQ-SF) and medication adherence report scale (MARS-5), and means of both groups were compared using independent T-tests and effect sizes were analysed (Cohen's d). Results: 97 participants with YOD and 312 with UOD completed the survey. Compared with UOD, participants with YOD reported a lower adherence to a specific diet ($d=0.45$), with no significant differences in levels of physical activity or medication adherence. Participants with YOD experienced greater diabetes-related distress ($d=0.35$), especially with emotional ($d=0.37$), regimen-related ($d=0.43$) and interpersonal ($d=0.39$) distress. At the same time, perception of self-efficacy was significantly lower ($d=0.27$) and more dietary barriers were perceived ($d=0.76$). Participants with YOD also perceived that diabetes affected their lives more severely (consequence) ($d=0.26$), had a larger effect on their emotions (emotional representation) ($d=0.28$), will last longer (timeline) ($d=0.37$), and perceived that treatment was less likely help their diabetes (treatment control) ($d=0.26$). Conclusions: Participants with YOD experienced greater diabetes-related distress, lower self-efficacy and reported lower dietary adherence with more dietary barriers than those with UOD. Patients with YOD have distinctly different issues from UOD, and in providing care for YOD, clinicians should actively seek to identify and address these issues.