

Demography and clinical characteristics of young-onset type 2 diabetes mellitus in Johor: A 5-year cross-sectional study

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ABSTRACT

Introduction: Young-onset Type 2 Diabetes Mellitus (T2DM) is defined as T2DM diagnosed before age 40. Understanding young diabetics enables stakeholders to make better-informed decisions when planning long-term management. Our objective is to explore the demographic and clinical characteristics of young diabetics in Johor. **Methods:** This is a cross-sectional study of T2DM patients recorded into the National Diabetes Registry (NDR) audit data set between January 2017 to December 2021. Data from 3151 young diabetics were extracted and analysed. **Results:** The mean age for diagnosis was 32 years (s.d. 5.6). Sixty percent of the subjects were female, and a majority of the subjects were Malay (72%). Dyslipidaemia is the most common comorbidity (n=2759, 87.6%), with 1470 subjects (46.7%) having all three comorbidities (dyslipidaemia, hypertension, and obesity). Out of the 847 subjects who developed at least one macro-/microvascular complication, 63.8% of them had nephropathy. Only one-fifth of subjects recorded HbA1c levels below 7%, with the mean value being 9.2% (s.d. 2.38). The largest proportion of diabetes treatment combinations seen is insulin with at least one oral glucose-lowering drug (OGLD) (n=1138, 36.1%), and the most used antihypertensive agent is the angiotensin-converting enzyme (ACE)-inhibitor (n=1240, 39.4%). **Conclusion:** Young T2DM is a rising cause for concern for clinicians, as these patients live longer with T2DM, increasing their chances of developing complications. This study showed that more aggressive approaches should be implemented with the aim of reducing the mean HbA1c of this target group to prevent the development of new and worsening of existing complications.