

Factors associated with the risk of type 2 Diabetes in women of childbearing age in a selected community in Malaysia

ABSTRACT

Women of childbearing age are at increased risk of type 2 diabetes (T2D), possibly due to metabolic alterations during pregnancy that contributes towards insulin resistance. However, limited studies assessed T2D risk specifically in Malaysian women of childbearing age. Hence, this study was conducted to determine factors associated with T2D risk in women of childbearing age at a selected public university in Malaysia. This cross-sectional study involved 83 childbearing-age women in Universiti Putra Malaysia (mean age: 37.7 ± 5.7 years; BMI: 26.6 ± 6.0 kg/m²). Weight, height and waist circumference were measured, and body mass index was calculated. Dietary intake and diabetes knowledge were assessed using a food frequency questionnaire and Diabetes Knowledge Questionnaire (DKQ-24), respectively. The Finnish Diabetes Risk Score (FINDRISC) tool predicted T2D risk within 10 years. A total of 66.3% (n = 55) respondents were at risk of T2D. The majority of the subjects (74%) had poor diabetes knowledge scores. Fibre intake was inadequate compared to the recommended range. Waist circumference, first- and second-degree family history of diabetes was significantly associated with increased T2D risk (p = 0.016, 0.001 and 0.009, respectively), whereas a daily consumption of fruits and vegetables was associated with reduced T2D risk (p = 0.024). The findings highlight the importance of public health action, including nutrition education, after delivery to prevent or delay their progression towards T2D.

Keyword: Childbearing-age women; Type 2 Diabetes; Dietary intake