## **RESEARCH ARTICLE**



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## Poor glycemic control in younger women attending Malaysian public primary care clinics: findings from adults diabetes control and management registry

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## Abstract

**Background:** Women of reproductive age are a group of particular concern as diabetes may affect their pregnancy outcome as well as long-term morbidity and mortality. This study aimed to compare the clinical profiles and glycemic control of reproductive and non-reproductive age women with type 2 diabetes (T2D) in primary care settings, and to determine the associated factors of poor glycemic control in the reproductive age group women.

**Methods:** This was a cross-sectional study using cases reported by public primary care clinics to the Adult Diabetes Control and Management registry from 1st January to 31st December 2009. All Malaysian women aged 18 years old and above and diagnosed with T2D for at least 1 year were included in the analysis. The target for glycemic control (HbA1c < 6.5%) is in accordance to the recommended national guidelines. Both univariate and multivariate approaches of logistic regression were applied to determine whether reproductive age women have an association with poor glycemic control.

**Results:** Data from a total of 30,427 women were analyzed and 21.8% (6,622) were of reproductive age. There were 12.5% of reproductive age women and 18.0% of non-reproductive age women that achieved glycemic control. Reproductive age group women were associated with poorer glycemic control (OR = 1.5, 95% CI = 1.2-1.8). The risk factors associated with poor glycemic control in the reproductive age women were being of Malay and Indian race, longer duration of diabetes, patients on anti-diabetic agents, and those who had not achieved the target total cholesterol and triglycerides.

**Conclusion:** Women with T2D have poor glycemic control, but being of reproductive age was associated with even poorer control. Health care providers need to pay more attention to this group of patients especially for those with risk factors. More aggressive therapeutic strategies to improve their cardiometabolic control and pregnancy outcome are warranted.

Keywords: Type 2 diabetes mellitus, Reproductive age women, Glycemic control, Registry

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