

## **Glycaemic control, lipid profile, blood pressure and body weight status among diabetics in rural Malaysia.**

### **ABSTRACT**

Diabetes is associated with a high risk of cardiovascular disease. The management of blood glucose, dyslipidaemia and other modifiable risk factor, is a key element in the multifactorial approach to prevent complications of type 2 diabetes. **Materials and Methods:** A cross sectional study was conducted to determine the level of glycaemic control, lipid profile, blood pressure and body weight status among type 2 diabetics in rural Malaysia. A total of 237 diabetic subjects participated in this study. Physical examination was carried out, including measurements of height, weight, waist and hip circumferences, and systolic and diastolic blood pressure. Fasting venous blood samples were collected to determine the glucose level and lipid profile. **Results:** About 70% of the subjects had a high body mass index (BMI), equal to or above 25 kg/ m<sup>2</sup>. More than 60% of the subjects had systolic blood pressure  $\geq$  140 mmHg and/or diastolic  $\geq$  90 mmHg. Mean fasting blood glucose was  $9.84 \pm 4.54$  mmol/L. Mean total cholesterol was  $5.18 \pm 1.35$  mmol/L. High density lipoprotein cholesterol (HDLC) and triglyceride (TG) and glucose levels were higher in male than in female, but not statistically significant ( $p > 0.05$ ). However, low density lipoprotein cholesterol (LDLC) was higher in females than males ( $p < 0.05$ ). Mean HDLC was below 1.0 mmol/L in all subjects. **Conclusion:** Glycaemic control, lipid profile, blood pressure and body weight status were not satisfactory and may increase the risk of microvascular and macrovascular complications among these subjects. Appropriate intervention programs should be implemented for better diabetes control among rural subjects.

**Keyword:** Diabetic control; Diabetes; Rural; Malaysia.