

## The prevalence of cardiovascular risk factors in the young and middle-aged rural population in Sarawak, Malaysia.

### ABSTRACT

Background: Coronary heart disease (CHD) was the second leading cause of death in Malaysia in 2006. CHD has known risk factors including hypertension, diabetes mellitus, and obesity. Methods: This cross-sectional study examined the prevalence of cardiovascular risk factors among 260 participants aged 20 to 65 years in a rural community in Sarawak. Results: The prevalences of overweight and obesity in this study were 39.6% and 11.9%, respectively. Approximately 13% of participants had hypertension, and 1.5% had a random blood sugar greater than 11.1 mmol/L. Chi-square tests showed significant associations between obesity and gender ( $P = 0.007$ ), low high-density lipoprotein cholesterol and race ( $P = 0.05$ ), high total cholesterol and age ( $P = 0.007$ ), age and hypertension ( $P = 0.011$ ), smoking and gender ( $P < 0.001$ ), and smoking and income ( $P = 0.050$ ). Age-adjusted logistic regression showed that women were 0.246 times more likely to be obese, that older participants ( $> 45$  years) were 0.395 times more likely to have high cholesterol and that those with a higher monthly household income ( $> \text{RM}830$ ) were 2.471 times more likely to smoke. Conclusion: These findings indicate that we should be concerned about the high rates of overweight in this rural community to prevent obesity.

**Keyword:** Adult; Cardiovascular diseases; Epidemiology; Obesity; Prevalence; Risk factors.