

## A national study on the prevalence of obesity among 16,127 Malaysians

### ABSTRACT

A population-based cross-sectional study was conducted in all states of Malaysia with the aim to determine the prevalence of obesity among Malaysians aged fifteen years and above and factors associated. A stratified two stage cluster sampling design with proportional allocation was used. Trained interviewers using a standardized protocol obtained the weight and height measurements and other relevant information. Subjects with a body mass index  $\times$  30 kg/m<sup>2</sup> were labelled as obese. The results show that the overall national prevalence of obesity among Malaysians aged 15 years old and above was 11.7% (95% CI = 11.1 - 12.4%). The prevalence of obesity was significantly higher in females (13.8%) as compared to 9.6% in males ( $p < 0.0001$ ). Prevalence of obesity was highest amongst the Malays (13.6%) and Indians (13.5%) followed by the indigenous group of "Sarawak Bumiputra" (10.8%) and the Chinese (8.5%). The indigenous group of "Sabah Bumiputra" had the lowest prevalence of 7.3%. These differences are statistically significant ( $p < 0.0001$ ). Logistic regression analysis results show that there was a significant association between obesity and age, gender, ethnicity urban/rural status and smoking status. The prevalence of obesity amongst those aged  $\times$  18 years old has markedly increased by 280% since the last National Health and Morbidity Survey in 1996. Conclusion: The overall prevalence of obesity in Malaysia is very high as compared to 1996. There is an urgent need for a comprehensive integrated population-based intervention program to ameliorate the growing problem of obesity in Malaysians.

**Keyword:** Prevalence; Obesity; Ethnicity; Malaysia