## Association of Smoking with Overall Obesity and Central Obesity among Malaysian Adults

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## **ABSTRACT**

Introduction: Smoking and obesity are major public health problems in Malaysia. A study in Korea showed that current smokers were more likely to be centrally obese than never smokers. While, other studies showed different results. This study aimed to examine the association between smoking status and obesity among Malaysian adults. Methods: This study was using data from the 2015 NHMS. Respondents aged 18 years and above (n=18,366) were included in the analysis. Respondents with no information about weight, height, body mass index, waist circumference and smoking status were excluded in the analysis. Smoking was examined in term of smoking status and the quantity of cigarettes smoked by current smokers. Overall obesity was defined as BMI  $\geq 25$  kg/m2 and central obesity was a waist circumference  $\geq 95$  cm for males and  $\geq 85$  cm for females. Descriptive and multiple logistic regression analyses were used to assess the association between smoking status and obesity. Results: A statistically significant difference was found in overall obesity and central obesity with smoking status. Current smokers were less likely to be obese (BMI) than never smokers (adjusted odds ratio, 0.73; 95% CI, 0.64 to 0.82) and also were less likely to be central obesity than never smokers (adjusted odds ratio, 0.76; 95% CI, 0.66 to 0.88). However, among current smokers, there was no statistically significant association found between the daily amount of smoking (cigarettes) with overall obesity or central obesity. Conclusion: Smoking was positively associated with overall obesity and central obesity. Further study should be done to see whether categories of current smokers (light/moderate/heavy) will give a different result.

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## Assessment of association between smoking and allcause mortality among Malaysian adult population- A finding from retrospective cohort study

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## **ABSTRACT**

Introduction: Smoking is a known risk factor for many chronic diseases. Illness and death due to smoking are a major public health burden in many countries. This study aimed to address the information gap in smoking-related mortality in Malaysia by estimating the risk of cardiovascular disease and all-cause mortalities due to smoking among Malaysian adults. Methods: We analysed data on 2525 respondents of the Non-Communicable Disease Surveillance (MyNCDS-1) 2005/2006 survey, aged between 24-64 years. Mortality records from the Malaysian National Registration Department were linked to the MYNCDS-1 data to determine respondents' mortality status over 12 years from the year 2006 to 2018. Associations between smoking and risk all-cause mortalities were assessed using Cox proportional hazards regression with adjustments for non-communicable diseases and, sociodemographic and lifestyle factors. and attribute fraction was also calculated to determine the proportion of death if smoking is circumvented among Malaysian. Results: The prevalence of daily smoking was 21.2% (95% confidence interval: 19.0, 23.7). During the 31,668 person-years follow-up, 213 deaths from all-causes occurred (68 deaths among daily smokers (13.2%) and 452 among non-daily smokers (6.3%). Smoking was associated with a significantly increased risk all-cause mortality (adjusted HR: 1.68 (95% CI: 1.05, 2.69). These associations remained significant after excluding mortalities in the first two years of follow-up. In addition, attribute fractions for all-cause mortality calculated among Malaysian adults were 40.5%. Conclusion: Daily smoking is associated with significantly higher risk of all-causes death. Behavioural and pharmacological smoking cessation interventions should be intensified among smokers to reduce the risk of mortality from this behaviour.