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OBESITY AMONG MALAYSIAN ADULTS:

PREVALENCE, TREND, AND ITS ASSOCIATED FACTORS BASED ON BODY MASS INDEX CUT-OFF POINTS FOR MALAYSIAN

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INTRODUCTION

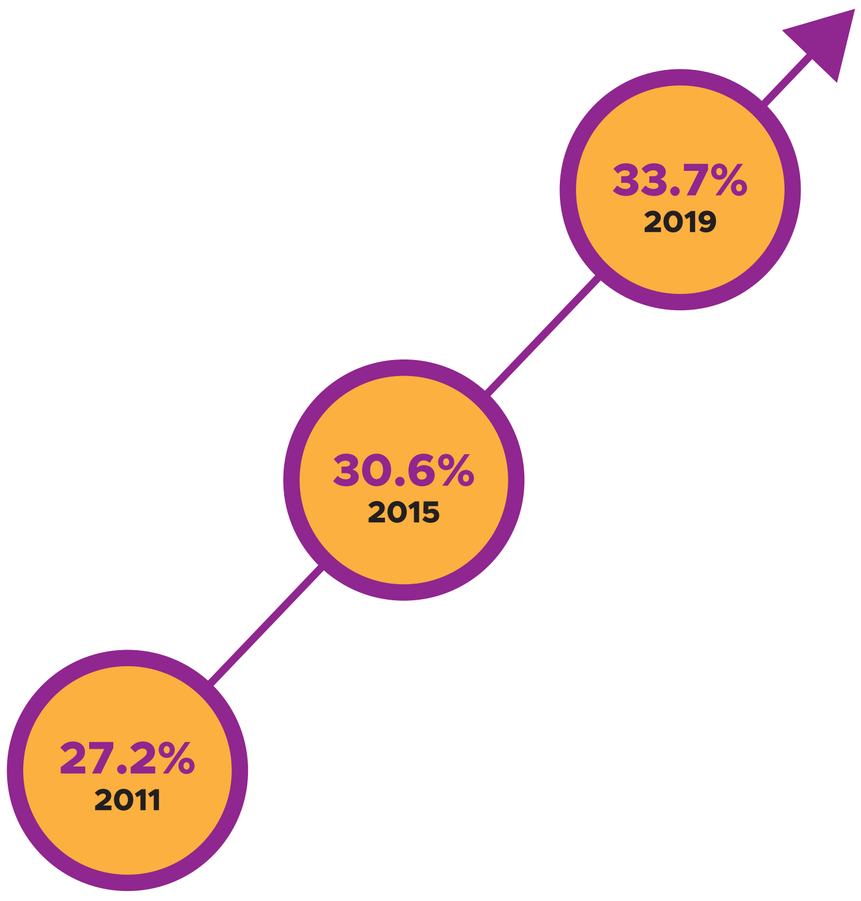
Obesity is a global epidemic and is an important risk factor for developing non-communicable diseases. World Health Organization (WHO) recommends defining Body Mass Index (BMI) cut-off points and associated risk levels for population-specific public health interventions. Hence, the objective of this study is to determine the prevalence trend of obesity and its associated factors among Malaysian adults based on Malaysian BMI cut-off points.

METHODOLOGY

Nationally representative samples aged 18 years and above from the National Health and Morbidity Survey Malaysia (NHMS) in year 2011, 2015 and 2019 were analysed for prevalence and trend of obesity. Obesity was defined as BMI ≥ 27.5 kg/m2, based on Malaysian BMI cut-off points. Data regarding sociodemographic characteristics (sex, locality, age, marital status, ethnicity, educational level, income level, and health literacy), non-communicable disease status (hypertension, diabetes, and hypercholesterolemia), and lifestyle behaviours (physical activity level, smoking status, and also fruit and vegetable consumption) were collected from 9782 Malaysian adults during the NHMS 2019 and were analysed to identify factors associated with obesity.

RESULT

i. Prevalence and trend of obesity among Malaysian Adults



ii. Factors associated with obesity among Malaysian adults

Variable	AOR [95% CI] *	P value
Sex		
- Male	Ref	
- Female	1.46 (1.22, 1.74)	<0.001
Age		
- 18 – 29	Ref	
- 30 – 59	1.44 (1.14, 1.83)	0.003
- ≥ 60	0.72 (0.50, 1.02)	0.066
Ethnicity		
- Malays	1.90 (1.44, 2.50)	<0.001
- Indians	2.89 (1.94, 4.29)	<0.001
- Other Bumiputras	2.24 (1.57, 3.19)	<0.001
- Others	1.48 (0.95, 2.31)	0.083
- Chinese	Ref	
Diabetes		
- No	Ref	
- Yes	1.70 (1.40, 2.06)	<0.001
Hypertension		
- No	Ref	
- Yes	2.33 (1.96, 2.77)	<0.001

*Multiple logistic regression was applied. The final model was adjusted for sex, age, ethnicity, educational level, marital status, working status, income level, health literacy, diabetes, hypertension, hypercholesterolemia, smoking status, physical activity, fruit and vegetable intake.

DISCUSSION

- The global prevalence of obesity has nearly tripled since 1975, affecting many countries, including those with low and moderate incomes[1].
- This resulted in a significant global health burden[2], contributing to higher rates of disability-adjusted life years and mortality[3].
- The increased financial independence, easy access to food, and availability of calorie-dense food in lower- and middle-income countries may contribute to the higher prevalence of overweight among adults[4].
- The increasing prevalence of overweight and obesity has been linked to the development of non-communicable diseases (NCDs), including stroke, cardiovascular disease, and diabetes[5].
- Weight control measures have been established as indispensable and effective strategies in the prevention and progression of non-communicable diseases, underscoring their significance in mitigating the global health impact of these conditions[6].

CONCLUSION

The increasing prevalence of obesity among Malaysian adults represents a significant concern. The study's results highlight the pressing need for targeted intervention programs aimed at high-risk populations in order to address the burden of obesity in Malaysia.

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