The Prevalence of Overweight and Obesity among Young Adults in Terengganu: A Cross-Sectional Study

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Abstract

Overweight and obesity are becoming increasingly prevalent in both industrialized and developing countries across the world [1]. Globally, over 1.9 billion adults aged 18 and above were overweight. Over 650 million of them seem to be obese in where 39% of people aged 18 and above were overweight, with 13% being obese (WHO, 2019). Meanwhile, the National Health and Morbidity Survey (NHMS) revealed that the prevalence of overweight and obesity among Malaysians aged 18 and older was 50.1% in 2019 [2]. The BMI classifications of overweight and obesity are as shown: ≥25.0 kg/m² as overweight; 25.0 to 29.2 kg/m² as pre-obese; 30.0 to 34.9 kg/m² as obesity class I; 35.0 to 39.9 kg/m² as obesity class II; and ≥40.0 kg/m² as obesity class III [3].

The objective of this cross-sectional study is to investigate the prevalence of overweight and obesity among adults in Terengganu. A total of 153 individuals aged 18–40 years old from Terengganu were involved in this study and the data were collected using pre-tested self-administered questionnaire from NHMS 2014. The survey was conducted online where all the answers was self-reported. The nutritional status of the participants was assessed using anthropometry measurements by self-measured height (cm) and weight (kg). The measurement was done by using their own measuring scales.

The respondents (mean age 22.2 ± 5.4 years) were predominantly female (76.5%), Malay (51.0%) and single (94.8%). Most of the participants are from B40 category (64.7%) where their monthly household income is less than RM 4,850. Meanwhile, most of the participants were staying in their own house (57.5%) and the other participants were staying at rental house (17.0%) and hostel (25.5%). The mean body weight and height of the participants were 59.4 kg and 160.0 cm respectively. The mean BMI of the participants is 23.0 kg/m² which is normal range. The participants were overweight (7.8% of male and 13.1% of female), and obesity was 3.3% among males and 4.6% among females.
Table 1: Body weight status of the respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Underweight</td>
<td>2 (1.3)</td>
<td>17 (11.1)</td>
<td>19 (12.4)</td>
</tr>
<tr>
<td>Normal</td>
<td>17 (11.2)</td>
<td>73 (47.7)</td>
<td>90 (58.8)</td>
</tr>
<tr>
<td>Overweight</td>
<td>12 (7.8)</td>
<td>20 (13.1)</td>
<td>32 (20.9)</td>
</tr>
<tr>
<td>Obesity</td>
<td>5 (3.3)</td>
<td>7 (4.6)</td>
<td>12 (7.8)</td>
</tr>
<tr>
<td>Total, n (%)</td>
<td>36 (23.5)</td>
<td>117 (76.5)</td>
<td>153 (100)</td>
</tr>
</tbody>
</table>

Similarly, in 2017–2018, the prevalence of severe obesity among adults in the United States (US) was 9.2 %, with women having a greater prevalence (11.5%) than men (6.9%). Participants aged 40–59 years old (11.5%) had the highest frequency of severe obesity. Moreover, obesity is prevalent in France, according to a few studies, with figures ranging from 15 to 17.2% of adults [4]. Obesity is a prominent health concern for a range of diseases and conditions, including cardiovascular disease, type 2 diabetes, some malignancies, and decreased life expectancy and death [5]. Hence, the rise in obesity in Malaysia highlights the necessity of public programs aimed at preventing obesity in adults and promoting healthy behaviours in Malaysian population.

Keywords
Overweight, obesity, adults

References