A24 Factors associated with body mass index among students in engineering major of public university in Selangor

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Prevalence of overweight and obesity has always become a concern in the world and recent data shows that the prevalence has increased among young adults. However, studies among young adults, especially among university students, are still limited. Therefore, this study was carried out to assess the factors associated with body mass index (BMI) among university students. A total of 284 participants aged 18 to 29 years from the Faculty of Engineering and Built Environment of University Kebangsaan Malaysia participated in this cross-sectional study but only completed data from 274 participants were analysed. Data collected including participants' height and weight that were based on self-reported, participants' socio-demographic (age, gender, date of birth, ethnicity, year and course of study, family income and household number), psychological (stress, depression and anxiety) and lifestyle (sedentary behaviour, physical activity, smoking status and sleep quality). In this study, results showed that most of the participants, 63.9% (n=175) were Malay, 32.1% (n=88) first year students and 55.5% (n=152) of participants were from the M40 group of family income. Results also showed 8.4% (n=23) of the participants were overweight and obese respectively. There were significant correlations between family income and physical activity with BMI (r=-0.227; r=-0.273; p<0.001). There was also a significant mean difference between course of study with BMI (F=3.426; p=0.009) which showed that mean±SD of BMI was highest among Mechanical Engineering students (25.59±5.32 kg/m^2). The mean of BMI was higher (23.58±3.99 kg/m^2) among current/never smoke group compared to current smoker (22.10±3.73 kg/m^2). Sleep quality also showed a significant association with BMI classification (χ^2 = 19.485; p<0.001) which indicated that the percentage of good sleepers were higher among overweight (81.6%) and obese (65.2%) participants. No significant association was observed between age, gender, ethnicity, depression, anxiety, stress and sedentary behaviour with BMI and BMI classification. This prevalence of overweight and obese was quite high among participants of this study. Health awareness and intervention programs should be done to prevent overweight and obesity among this group population, particularly during this current pandemic situation.