

Effects of body mass index (BMI), eating attitude and physical activity on bone health among undergraduate students in Malaysia

ABSTRACT

Healthy and strong bones form the basis for a dynamic and energetic life. However, Malaysian university students still lack of knowledge towards positive bone health status and osteoporosis prevention and show a poor practice of healthy lifestyle. Therefore, this study was done to examine the relationship of eating attitude and physical activity on bone health among undergraduate students from the Faculty of Educational Studies in Universiti Putra Malaysia. A correlational study design was conducted to 281 undergraduate students aged 18 to 27 years old. The respondents were randomly chosen based on the stratified and cluster sampling technique. In this study, the eating attitudes were assessed using EAT-26 while, the physical activity level of the respondents was evaluated by using a shorter version of the International Physical Activity Questionnaire (IPAQ-SF). Bone Mineral Density (BMD) of the respondents was measured using calcaneal quantitative ultrasound (QUS) by using Sonost-3000 machine. From the Pearson correlation analysis, there was a negative and weak relationship of eating attitude and BMD ($r = -.218$) and strong relationship between physical activity and BMD ($r = .731$). Thus, the result of this study gives better information on how physical activities are essential to promote an improvement in BMD. A better understanding of the interactions of all these variables in this study will relate to positive bone health status and osteoporosis prevention among young adults, especially among the university students.

Keyword: Bone mineral density (BMD); Eating attitude; Physical activity; Osteoporosis