

## **Knowledge and practice of laptop ergonomics and prevalence of musculoskeletal symptoms among university students**

### **ABSTRACT**

**Objective:** This study aimed to assess the knowledge and practice of laptop ergonomics and prevalence of musculoskeletal symptoms among university students. **Method:** This cross-sectional study was conducted on 197 volunteers from a public university student in Selangor. Volunteers were 101 health science and 96 non-science students who completed a self-administered questionnaires consisting of general information, knowledge and practice of laptop ergonomics and self-reported musculoskeletal symptoms. **Result:** Overall, the students had knowledge scores of 74.1% and practice scores of 70% on laptop ergonomics. However, the knowledge among health science students was significantly higher than the non-science students ( $p < 0.01$ ). Meanwhile, there was no significant difference observed in the practice between health science and non-science students. There were 67% of the students who experienced musculoskeletal symptoms (MSS) in at least one part of their body and the most common musculoskeletal symptom were shoulder pain (46.2%), neck pain (41.1%), upper back pain (39.1%) and lower back pain (34.5%). There was no significant association between knowledge and practice of laptop ergonomics with the prevalence of MSS. No association was found between age, gender, BMI category, physical activity and duration of laptop use with prevalence of MSS. **Conclusion:** Although there was no association found between knowledge, practice and other contributing factors with MSS, the prevalence of musculoskeletal symptoms among UPM students was 67%. Hence, this study emphasized the need to promote ergonomics awareness program on musculoskeletal pain and healthy postures while using laptop in order to minimize the prevalence of musculoskeletal symptoms among the students.

**Keyword:** Knowledge; Practice; Laptop ergonomics; Musculoskeletal symptoms