## The bahasa Melayu version of cornell musculoskeletal discomfort questionnaire (CMDQ): reliability and validity study in Malaysia

## **ABSTRACT**

BACKGROUND: The Cornell Musculoskeletal Discomfort Questionnaire (CMDQ) was developed to assess the level of musculoskeletal discomfort among office workers related to their ergonomic situation. OBJECTIVE: The primary objective of this initial study is to analyze the validity and dependability of the Malay translation of the Cornell Musculoskeletal Discomfort Questionnaire. METHODS: The questionnaire was self-administered two times, with an interval of two weeks in order to evaluate the accuracy of the original findings with a retest. The study involved 115 participants. RESULTS: The range of Cronbach Alpha coefficient showed a considerable consistency of the items for each subscale (Cronbach's a>0.95). The range of Kappa coefficients was between (ICC=0.690–0.949, p<0.001), (ICC=0.801–0.979, p<0.001) and (ICC=0.778–0.944, p<0.001) for frequency, severity and interference scales. CONCLUSIONS: This research, introduced the Malay-language version of the CMDQ (CMDQ-M) as the first formal validation of the CMDQ, and confirmed a high reliability and validity for the evaluation of musculoskeletal discomfort among the study population.

**Keyword:** Office ergonomics; Musculoskeletal disorders; Physical conditioning; Anatomy