Cross-cultural adaptation and validity of the patient rated michigan hand uutcome questionnaire in Bahasa Melayu for Malaysian patients

Background: The Michigan Hand Outcomes Questionnaire (MHQ) was designed in 1998 by Chung and colleagues at the University of Michigan in 1998. It is a hand-specific patientrated outcome (PRO) instrument used to measure patients' outcome with conditions of, or injury to, the hand and/or wrist. This study is aimed at translating and cross-culturally adapting the MHQ into Bahasa Melayu (BM), examining the validity and reliability of the MHQ-BM version for our local population to be used as a patient-rated outcome measurement in Malaysian patients with hand injuries. Methods: This study was performed in two phases. Phase 1 involved the translation of the MHQ into BM using Beaton Protocol. In Phase 2, we administered the final version of the MHQ-BM in patients with hand and/or wrist injuries to test its stability (n = 50) and validity (n = 185). Results: The MHQ-BM showed good content and face validity. Cronbach α totalled 0.821 for the MHQ-BM. The Intra-class Correlation Coefficient (ICC) of the test-retest reliability for the six domains ranged from 0.960 to 0.984 with excellent correlation (ICC = 0.984) for the total score. The BM version of MHQ-BM showed excellent test-retest reliability. Conclusions: The MHQ-BM is welltranslated and culturally well-adapted to maintain the reliability and content validity of the instrument (MHQ) at a conceptual level across Malaysia. We found the application and evaluation of the instrument to be feasible and understandable among patients with hand and/or wrist injuries in Malaysia.

Keyword: MHQ; Bahasa; Melayu; Malaysia; Adaptation