Psychometric Properties of the 12-Item World Health Organization Disability Assessment Schedule (WHODAS 2.0) in Adult Patients with Motor Disabilities

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Abstract

To explore the psychometric properties of the Greek version of the World Health Organization Disability Assessment Schedule (WHODAS 2.0–12 item) in adult patients suffering from motor disabilities. The questionnaire of WHODAS 2.0–12 item was officially translated and cross-culturally adapted into Greek (WHODAS 2.0–12Gr).136 adult patients with motor disabilities included in the present observational study. A reliability study was carried out to explore WHODAS 2.0–12Gr's internal consistency (Cronbach's a), repeatability (Pearson's r) and test retest test-retest reliability between the WHODAS 2.0–12Gr outcomes of day-1 and day-8 [intra-class correlation coefficients with 95% confidence intervals (ICC 95%CI)], and the convergent validity (item-total correlation) of the questionnaire. Exploratory factor analysis (EFA) was used to explore the construct validity of the WHODAS 2.0–12Gr, while the concurrent validity of the questionnaire was testing against the Greek Medical Outcomes Study 36-item Short Form Health Survey version 1.0 (SF-36v1.0-Gr). Reliability properties: WHODAS 2.0–12Gr Cronbach's a was 0.814 ($p < 0.001$), Pearson's r value was 0.980 ($p < 0.001$) and ICC (95%CI) was 0.990 (0.985–0.993) ($p < 0.001$). Validity properties: Pearson's r values of item-total correlation were ranged from 0.376 to 0.736. EFA extracted a 3-factor model. Regarding concurrent validity, the significant correlations between the WHODAS 2.0–12Gr and the SF36v1.0-Gr ranged from −0.169 to −0.720. WHODAS 2.0–12Gr showed significant high to excellent reliability and significant weak to strong validity properties. Overall, it can be suggested that WHODAS 2.0–12Gr could be a reliable and valid tool for assessing patients with motor disabilities.