

# Punjabi Translation, Cross-cultural Adaptation, Validation and Reliability of the Western Ontario Rotator Cuff Index Questionnaire: A Study Protocol

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## ABSTRACT

**Introduction:** The Western Ontario Rotator Cuff (WORC) Index is a self-assessment instrument that has been developed to measure the quality of life of patients with rotator cuff disease. The WORC index was developed by Kirkley et al., 2003 to evaluate the disease-specific quality of life of patients with rotator cuff disease.

**Aim:** To translate the WORC index into Punjabi language (P-WORC) and to evaluate its adaptation, validation and reliability among patients with Rotator Cuff tendinopathy.

**Materials and Methods:** Beaton's guidelines have been followed for the translation process after obtaining approval from the original developer, then forward and backward translations by

two independent translators will be performed. Cultural adaptation was achieved through feedback from 30 outpatient participants regarding the scale's clarity. Content validation was conducted using the Delphi method, involving a panel of 10 experts with more than five years of experience. Experts evaluated each item for relevance and consistency, deeming it valid if at least 80% rated it as "valid." Reliability testing was performed on a sample of 51 patients. Ethical approval was granted by the Institutional Ethics Committees (IEC-2995) in June 2024, and the study was registered with the Clinical Trials Registry of India (CTRI/2024/08/072815) on August 21, 2024.

**Keywords:** Reliability testing, Rotator cuff tendinopathy, Validity.