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ORIGINAL PAPER

Validation and Cultural Adaptation of Persian Version of Multidimensional Health Assessment Questionnaire in Rheumatoid Arthritis Patients

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ABSTRACT

Background: Rheumatoid arthritis (RA) is a multidimensional disease. In addition to quantitative factors, qualitative factors play an important role in the progress and outcome of the diseases. One of the most effective methods of collecting qualitative information is questionnaires reported by patients. The data obtained from the questionnaires are as important as the clinical criteria. Multidimensional health assessment questionnaire (MDHAQ) is one of the latest questionnaires that provide useful information in a short time. **Objectives:** To investigate the reliability and validity of the Persian form of MDAHAQ for the use of Iranian patients. **Method:** Two groups of participants were selected for this study. The validity test group included 110 patients, and the reliability test group included 140 patients. Translation and adaption of MDHAQ were performed by using Guillemin guidelines. The reliability was tested by using test-retest and Cronbach's alpha for internal consistency. Persian version of the health assessment questionnaire (HAQ) was used for assessing the criterion validity. The correlation between the MDHAQ score and Disease Activity Score-28 (DAS28), Clinical Disease Activity Index (CDAI), and the Persian version of the health assessment questionnaire (HAQ) was evaluated using the Spearman coefficient. Discriminant validity was tested in groups of patients based on two varied disease activities based on CDAI and DAS28. **Results:** Test-retest with intra-class correlation coefficient (ICC) gave a coefficient of 0.865(95% CI: 0.809, 0.904) for physical function and 0.786(95% CI: 0.698, 0.848) for psychological items. Cronbach's alpha was 0.885 and 0.705 for physical function and psychological dimensions respectively. The Persian version of the MDHAQ had a good to strong correlation with the Persian version of the HAQ (ranging from 0.604 to 0.962) and also with CDAI (ranging from 0.616 to 0.838) and a moderate correlation with DAS28 (ranging from 0.415 to 0.439). **Conclusion:** The Persian form of MDHAQ is a reliable and valid instrument for the routine evaluation of RA patients in rheumatology clinics in Iranian RA patients.

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outcome of RA patients in rheumatology clinic in Iranian RA patients. Further research and more evidence are needed for the modification of the questionnaire based on different races and dialects of the Iranian population in different regions.

AUTHOR CONTRIBUTIONS

Elham Aflakie: study designing, reviewing, and editing, supervision. Faezeh Sehatpour: data collecting and analysis, writing original draft, reviewing, and editing. Sheida Banihashemi: reviewing and editing. All authors read and approved the final manuscript.

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AVAILABILITY OF DATA AND MATERIALS

The datasets used and analysed during the current study are available from the corresponding author on a reasonable request basis.

ETHICAL APPROVAL AND INFORMED CONSENT

Informed consent was obtained from all subjects or their legal guardians. All methods were carried out following relevant guidelines and regulations and approved by the ethics committee of SUMS with the contract number IR.SUMS.MED.REC.1398.248.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTEREST

The authors declare no competing interests.

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