Validation of Arabic version of Multiple Sclerosis Impact Scale (MSIS-29): A factor analysis study

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Abstract

Multiple sclerosis is a potentially disabling disease of the brain and spinal cord. This study aims to validate the Arabic version of the MSIS-29 using Rasch analysis to assess the quality of life in Jordanian MS patients. A total of 301 MS patients enrolled in the study. Significant Likelihood ratios for all three scales (MSIS-29-PHYSICAL, MSIS-29-PSYCHOLOGICAL, and MSIS-29-TOTAL) supported the use of a partial credit Rasch model. The disordered threshold problem was resolved by collapsing adjacent response categories and model fit was assessed by computing item/person separation reliability, Infit and outfit mean square, Cronbach's, and AIC. The Wright map also indicated that most of the items were considered relatively easy by the respondents with different difficulty levels on the latent scale. In conclusion, MSIS-29 is valid and reliable to use for evaluating the quality of life in MS Jordanian patients.

Keywords: Quality of life, Arabic language, validation, MSIS-29.