Abstract

Background: There is a lack of questionnaires in Brazilian Portuguese to evaluate patient-reported lower limb function. Objective: To translate, cross-culturally adapt to the Brazilian population, and evaluate the psychometric properties of the Lower Extremity Functional Scale (LEFS). Method: The LEFS was translated by two independent assessors and back-translated to English. Then, the LEFS-Brazil was tested on 20 patients who answered the questionnaire in the cross-cultural adaptation phase. For the evaluation of the psychometric properties, 100 patients answered the questionnaire. The reliability was tested by two independent assessors. The Medical Outcomes Study 36-item from Health Survey (SF-36) was used as the criterion method for construct validity. The sensitivity to change was tested for four consecutive weeks. Results: The internal consistency was $\alpha = 0.96$. The intra-observer reliability was CCI (intraclass correlation coefficient) $= 0.96$ and CCI interobserver $= 0.98$; the Bland and Altman mean difference ($d$) intra-observer $= -1.52$ and $d$ interobserver $= 0.46$. The correlation between the LEFS and SF-36 in the first week was the following: physical function $r=0.82$, physical role $r=0.57$, emotional role $r=0.43$ and mental health $r=0.33$. The LEFS was responsive when comparing the mean of the first week to the second, third and fourth weeks and comparing the second to the fourth week. The cut-off point was 11, and the area under the receiving operator curve was 0.96 95% CI [0.88;0.99], with sensitivity $= 0.96$, 1-specificity $= 0$ and standard error $= 0.02$. Conclusion: The LEFS-Brazil is reliable, valid and responsive.

Keywords

Questionnaires, physical therapy, rehabilitation, validity, reliability, responsiveness.