Abstract

Objectives: To assess the validity (convergent and construct) and reliability of the Short Physical Performance Battery (SPPB) among non-disabled adults between 65 to 74 years of age residing in the Andes Mountains of Colombia. Methods: Design: Validation study; Participants: 150 subjects aged 65 to 74 years recruited from elderly associations (day-centers) in Manizales, Colombia. Measurements: The SPPB tests of balance, including time to walk 4 meters and time required to stand from a chair 5 times were administered to all participants. Reliability was analyzed with a 7-day interval between assessments and use of repeated ANOVA testing. Construct validity was assessed using factor analysis and by testing the relationship between SPPB and depressive symptoms, cognitive function, and self-rated health (SRH), while the concurrent validity was measured through relationships with mobility limitations and disability in Activities of Daily Living (ADL). ANOVA tests were used to establish these associations. Results: Test-retest reliability of the SPPB was high: 0.87 (CI95%: 0.77-0.96). A one factor solution was found with three SPPB tests. SPPB was related to self-rated health, limitations in walking and climbing steps and to indicators of disability, as well as to cognitive function and depression. There was a graded decrease in the mean SPPB score with increasing disability and poor health. Conclusion: The Spanish version of SPPB is reliable and valid to assess physical performance among older adults from our region. Future studies should establish their clinical applications and explore usage in population studies.

Keywords

SPPB, aging, reliability, validity, validation studies, disability, Colombia.