

Reproducibility of clinician-friendly physical performance measures in individuals with obesity.

N.A. Maffioletti, G. Tringali, A. Patrizi, F. Agosti, A. Sartorio

Journal of Rehabilitation Medicine 49: 677-681, 2017.

Objective: To evaluate the reproducibility (reliability and agreement) of different physical performance measures in individuals with obesity.

Methods: Forty subjects (20 men, 20 women), mean age 29 years, mean body mass index (BMI) 42 kg/m² completed several clinician-friendly performance based tests (walking, stair-climbing, sit-to-stand, static balance, flexibility and strength) on 2 different occasions (test-retest design). Intraclass correlation coefficients (reliability) and smallest detectable changes (agreement) were calculated for each outcome measure.

Results: Intraclass correlation coefficients were relatively high (range 0.84-0.94) for all the performance-based measures (i.e. acceptable reliability). Smallest detectable changes were overall quite high and beyond the arbitrarily-defined minimal clinically important changes (i.e. poor agreement) for 3 out of 8 variables (sit-to-stand time, time-in-balance with eyes closed, and sit-and-reach distance).

Conclusion: The clinician-friendly performance-based tests for individuals with obesity considered in this study appear legitimate for discriminative purposes, such as in cross-sectional studies. However, for longitudinal assessments (evaluative purposes), some measures should be used with greater caution due to limited agreement. Careful consideration should be given to the evaluation of physical performance in people with obesity, particularly in the context of conservative or surgical treatment for weight loss.

Se desidera avere la fotocopia di questo lavoro, per esclusivo uso personale, può fare richiesta per mail a: info@cresceresani.it indicando il titolo, gli autori, la rivista e il proprio recapito lavorativo (nome, cognome, indirizzo, CAP, città).