

Concurrent validity and inter-rater reliability of 3 meter walk test for measuring

Prakriti Khatri

Mahidol University, Thailand



Abstract

Walking speed is referred to as the sixth vital sign, a predictor of functional dependence, and future adverse events such as falls, hospitalization, and mortality. To reflect the changes in walking performance of patients with stroke during the rehabilitation process, a reliable, and valid measurement tool is needed. The 3 Metre Walk Test (3MWT) is a performance measure used to assess walking speed and is a feasible option for clinicians working in the environment where space is limited. The objective of the study was to determine the inter-rater reliability of 3 MWT for measuring gait speed in post stroke survivors and to assess the concurrent validity of 3 MWT with Force Distribution Measurement (FDM). This is a cross-sectional study which recruited 6 chronic stroke survivors. Three consecutive trials of 3MWT and FDM were performed concurrently on the same walkway at participant's self-selected speed. In this study, the mean age was 61 (SD= 9.27) years with Male/Female ratio of 1:1. The average walking speed was 0.79-0.81 m/s as measured by 4 raters in 3MWT and 0.83m/s by FDM. The results demonstrated excellent reliability among 4 raters (ICC (2,1) = 0.99 (95% CI 0.98-1.00), p-value <0.001). Significant correlation between 3MWT and FDM was also demonstrated (r = 0.98-0.99, p-value < 0.001). Thus, 3MWT is a reliable and valid outcome measure to assess the gait speed among the individuals with stroke in the clinical settings.

Biography:

Prakriti Khatri is currently a first year student pursuing M.Sc. (Physical therapy) at Mahidol University, Thailand as a recipient of Faculty of Graduate Scholarship 2019. She has keen research interests in outcome measures in neuro-rehabilitation: validation, utility in low-income contexts and on functional rehabilitation.

3rd World Physical Medicine and Rehabilitation

Conference; Webinar- June 18-19, 2020

Abstract Citation:

Prakriti Khatri, Concurrent Validity and Inter-rater Reliability of 3 Meter Walk Test for Measuring, Rehabilitation Health 2020, 3rd World Physical Medicine and Rehabilitation Conference; Webinar- June 18-19, 2020.

(<https://rehabilitation.healthconferences.org/2020>)

