

Abstract

Objective: Many frailty assessments such as the Clinical Frailty Scale (CFS) have been developed for early detection of frailty to effectively provide care. Two versions of the CFS have been adapted and validated in the local setting –CFS-Fast and CFS-A. At present, there are no local studies comparing the associations between these frailty screening tools with physical performance measures. We thus aim to examine CFS-Fast and CFS-A and their associations on functional outcome measures.

Design and Methods: A retrospective analysis of 230 community-dwelling older adults (mean age 67.2 years \pm 7.4 years, 72.6% female) from the GeriLABS 2 study cohort was conducted. Patients were categorized into non-frail (CFS 1-2), pre-frail (CFS 3-4) and frail (CFS 5-9). CFS-A and CFS-Fast were scored by independent raters with standardised protocol. Inter-rater reliability was verified for the first 20 patients for each protocol. The associations of CFS-Fast and CFS-A with functional outcome measures including the Short Physical Performance Battery (SPPB), 5 Times Sit to Stand (FTSTS), Gait Speed and Handgrip Strength were compared.

Results: Low agreement between CFS-Fast and CFS-A were observed ($\kappa = 0.031$). No patients were identified as frail when scored using CFS-Fast. More patients were identified as pre-frail or frail with CFS-A compared to CFS-Fast (113 patients were scored pre-frail using CFS-A but non-frail using CFS-Fast; 46 patients were scored frail with CFS-A but were non-frail with CFS-Fast). Although CFS-A was found to be significantly associated with gait speed only ($p=0.049$), CFS-Fast was not associated with any of the functional outcome measures.

Conclusion: Compared to CFS-Fast, CFS-A is likely to better detect frailty in a community-dwelling population. CFS-Fast and CFS-A remain as distinct frailty screening tools with inherent differences in their scoring algorithms. Careful selection of the appropriate tool relevant to the study population is needed to ensure accuracy and applicability.