

and weaknesses of different device types. Aggregated data allow for monitoring behavioral patterns over time, whereas raw data provided the resolution to discern symptoms.

P66: A systematic review of measures of social connection for people living in long-term care homes

Authors:

Hannah Chapman, Division of Psychiatry, University College London, United Kingdom

Neha Dewan, KITE-Toronto Rehabilitation Institute – University Health Network, Toronto, Canada

Jennifer Bethell, KITE-Toronto Rehabilitation Institute – University Health Network, Toronto, Canada / Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, Canada

Madalena Liougas, Rehabilitation Sciences Institute, Temerty Faculty of Medicine, University of Toronto, Toronto, Canada

Gill Livingston, Division of Psychiatry, University College London, United Kingdom

Katherine S. McGilton, KITE Research Institute, Toronto Rehabilitation Institute – University Health Network, Toronto, Canada

Andrew Sommerlad, Division of Psychiatry, University College London, United Kingdom

Background: Social connection is important for health, quality of life and care in long-term care (LTC) homes. However, research on how to improve social connection in LTC has been limited by lack of consensus on best approaches to measurement.

Research Objective: We will present a systematic review of measures of social connection developed for use in LTC residents, which aims to identify all existing measures and evaluate their measurement properties including structural validity, internal consistency, reliability and construct validity.

Method: We are following Consensus-based Standards for the selection of health Measurement Instruments (COSMIN) systematic review methods. We searched multiple bibliographic databases from inception to November 2021 for studies that were conducted in LTC resident populations, quantified any aspect(s) of social connection, and reported at least one psychometric property for the measure(s) of social connection. We conducted a second targeted search in April 2022 based on our list of identified measures, supplemented with a list of measures used in previous research in this population. We are currently evaluating the measurement properties reported for each identified measure in accordance with COSMIN guidelines.

Preliminary results of the ongoing study: We have identified 68 studies reporting on 35 measures used to assess multiple aspects of social connection in LTC homes. The majority (n=25) were measures of quality of life, wellbeing or life satisfaction, which included a social connection subdomain, whilst only 10 measures specifically target social connection. From our pooled evaluation of 20 measures to date, we have found that 20% (n=4) have sufficient evidence of structural validity, 15% (n=3) have sufficient internal consistency, 25% (n=5) have sufficient reliability, and 15% (n=3) have sufficient construct validity.

Conclusion: Many measures have been used to assess social connection in LTC settings, but few are specifically designed for this purpose and they often have insufficient evidence for psychometric properties. This review will provide detailed evidence of the quality of these measures to enable future researchers to prioritise higher

quality tools and will inform our development of a new person-centred social connection measurement tool for LTC residents in the Social Connection in Long-Term Care Home Residents (SONNET) study.

P71: Predicting amyloid- β deposition status in amnesic mild cognitive impairment using neuropsychological profiles.

Authors: Hyunji Lee, M.D.¹, Young Min Lee, M.D., Ph.D.^{1,2}, Je-Min Park, M.D., Ph.D.^{1,2}, Byung-Dae Lee, M.D., Ph.D.^{1,2}, Eunsoo Moon, M.D., Ph.D.^{1,2}, Hwagyu Suh, M.D., Ph.D.^{1,2}, Kyungwon Kim, M.D., Ph.D.^{1,2}, Yoo Jun Kim, M.D.¹

¹ Department of Psychiatry, Pusan National University School of Medicine, Busan, Korea ² Biomedical Research Institute, Pusan National University Hospital, Busan, Korea

*Correspondence to : Dr. Young Min Lee, Department of Psychiatry, Pusan National University School of Medicine, 179 Gudeok-Ro, Seo-Gu, Busan, Korea, 49241

Objective: Previous studies investigating neuropsychological profiles of cognitive impairment people have found a learning curve can be a useful indicator of AD diagnosis or progression. However, the data on the relationship between amyloid β ($A\beta$) deposition status and the learning curve in amnesic mild cognitive impairment (aMCI) are limited. In this study, we investigate the role of the learning curve in predicting $A\beta$ deposition status in patients with aMCI.

Methods: This is a cross-sectional study of 67 aMCI patients (N = 67; 33 aMCI with amyloid positive ($A\beta$ -PET (+)), and 34 aMCI with amyloid negative ($A\beta$ -PET (-))). All participants underwent Seoul Neuropsychological Screening Battery for a comprehensive neuropsychological test battery and brain MRI. To determine $A\beta$ deposition status, each participant underwent amyloid PET scans using 18F-florbetaben. The learning curve was obtained using immediate recall of Seoul Verbal Learning Test-learning curve (SVLT-learning curve). The association of cognitive test scores and dichotomized $A\beta$ deposition status was examined using logistic regression models in patients with aMCI. Receiver operating characteristic (ROC) curves were used to examine the predictive ability of cognitive test to detect $A\beta$ deposition status in aMCI.

Results: Logistic regression models showed that SVLT-learning curve and Rey Complex Figure Test- delayed recall (RCFT-delayed recall) scores were significantly associated with $A\beta$ deposition status. In ROC analysis to assess the predictive power, SVLT-learning curve (area under the curve (AUC) = 0.734, P = 0.001) and RCFT-delayed recall (AUC = 0.739, P = 0.001) independently discriminated $A\beta$ -PET (+) and $A\beta$ -PET (-). The combination of these clinical markers (SVLT-learning curve and RCFT-delayed recall) improved the predictive accuracy of $A\beta$ -PET (+) (AUC = 0.833, P < 0.001).

Conclusions: Our findings of association of $A\beta$ deposition status with SVLT-learning curve and RCFT- delayed recall suggest that these cognitive tests could be a useful screening tool for $A\beta$ deposition status among aMCI patients in resource-limited clinics.