2400

Longitudinal Evaluation of Cognitive Function Post-Stroke: A Scoping Review

Juan Pablo Saa[2,3], Tamara Tse[1], Carolyn Baum[3], Toby Cumming[2], Naomi Josman[4], Miranda Rose[1], Leeanne Carey[1,2]
[1]La Trobe University, School of Allied Health,, Melbourne, Australia, [2]Florey Institute of Neuroscience and Mental Health, Austin Site, Melbourne, Australia, [3]Washington University in St. Louis, Program in Occupational Therapy, MO, USA, [4]University of Haifa, Department of Occupational Therapy, Haifa, Israel, Israel

Introduction: Cognition is one of the areas more commonly affected by stroke, however the trajectory of recovery of cognitive function is relatively unexplored. Variability exists in clinical measures used to assess cognition post-stroke and over time.

Objectives: The aims of this scoping review were to identify studies that have investigated cognition longitudinally post-stroke, and to identify the instruments used. Methods: We searched the literature over the last decade (2005-2016). A total of 1,072 papers were identified using PubMed, PsycInfo, Medline, Cinahl, Cinahl Plus, Embase, and Web of Science.

Results: Sixty-two papers met our inclusion criteria. Through a preliminary analysis of these studies, we identified 172 instruments evaluating 82 different cognitive functions or domains over time. Memory, attention, and executive function were the cognitive domains more commonly evaluated. The Mini-Mental State Examination was the most frequently used instrument, with 33 studies (53%) using this assessment serially. Other findings indicate that most longitudinal and follow-up studies (76%) do not assess cognition beyond 12-months post-stroke; and that 73% of these papers used more than one assessment to evaluate cognition at multiple time points. There were no studies using performance-based assessments longitudinally.

Conclusion: our results show that there is still large variability in both the cognitive assessments used and the domains they target. Studies looking at post-stroke cognitive function beyond the one-year mark are scarce. These issues, combined with non-representative samples, dropouts, and practice effects, make identifying the true trajectory of post-stroke cognition from the current literature extremely difficult.