A Systematic Review: Evaluating the Effectiveness of Cognitive Standardized Assessments Following Stroke in Acute Care
Gina Benedetto, Jordan Bernhard, & Lauren Henriques
Teal Benevides, PhD, MS, OTR/L; E. Adel Herge, OTD, OTR/L, FAOTA; Gary Kaplan- Senior Information Services Librarian; Paul Hunter- Clinical Informatics Librarian

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Objectives of Presentation: Upon conclusion of this presentation, participants will be able to:
- Identify valid, reliable, and sensitive standardized cognitive assessments found within our systematic review that can be utilized within the acute care setting with adults following stroke.
- Describe how the current literature presented from this systematic search of standardized cognitive assessments influences safe discharge planning in acute care.
- Discuss the feasibility of implementing standardized assessments into daily practice.

Clinical Question: What is the evidence supporting the use of standardized cognitive assessments in acute care for patients who have experienced a stroke?

Methods:
- Databases: CINAHL and PubMed; Searched completed with population and outcome terms (i.e. cognitive, stroke, CVA)
- The PRISMA diagram was used and 9 out of the 153 articles were used for our systematic review based off of our inclusion/exclusion criteria
- Appraisal of articles: Quality Appraisal for Clinical Measurement Research Evaluation
- Appraisal of assessments: Adapted Outcome Measure Rating

Psychometrics Properties Defined:
- Reliability: the overall consistency of a measure
- Inter-rater reliability: assesses the degree of agreement between two or more raters in their appraisals
- Internal consistency reliability: assesses the consistency of results across items within a test
- Test-retest: is a measure of how consistent the results of a test are over time
- Validity: refers to the extent to which a study actually captures or measures what it claims to examine
- Sensitivity: refers to the ability of a tool to detect a disease or condition when it is actually present
- Specificity: refers to the ability of a tool to exclude a condition when it is not present

Results:

| Theme #1- Psychometric Properties: Sensitivity, Specificity, Validity & Reliability | MoCA & TCT have large sensitivity and small specificity | MoCA is more sensitive than MMSE with published norms, MoCA and MMSE similar sensitivity with educationally adjusted cut off scores | MoCA valid for detection of cognitive impairment, MMSE has adequate construct validity | MoCA has high internal consistency & excellent test-retest, MMSE has excellent inter-rater reliability |
| Theme #2- Client Factors Measured by Assessments | MoCA measures the most client factors. Executive function is unique to the MoCA | The Clock test main focus is on visuospatial planning skills | *The chart below provides client factors measured through respected assessments, as identified per the literature. |
| Theme #3- Feasibility | MoCA: Free, ~ 8 mins, address most client factors | MMSE: Costs $155, addresses variety of client factors | The Clock Test: Free, ~ 5 mins, looks at only one client factors (visuospatial) |
| Theme #4- Identify and Predict Outcomes | MoCA: effective measure of cognitive outcome for examining impact of safe discharge after stroke | FIB: identified standardized cognitive assessments are effective in detecting cognitive impairments when compared to skilled observations | TCT: effective screening tool before making treatment recommendations and identifies if patient needs comprehensive evaluation |

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<thead>
<tr>
<th>Cognitive Client Factors</th>
<th>Montreal Cognitive Assessment (MoCA)</th>
<th>Mini Mental State Examination (MMSE)</th>
<th>Three Cities Test (TCT)</th>
<th>Clock Test</th>
<th>Functional Impairment Battery (FIB)</th>
<th>Lownestein’s Occupational Therapy Cognitive Assessment (LOTCA)</th>
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References