Report Measure to Detect Disability Risk in Older Adults

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Objective: Functional disability is a foreseeable consequence of neurodegenerative diseases affecting cognition, yet there are few validated instruments that assess functional capacity for use in pre-clinical and clinical dementia conditions. To our knowledge, the existing instruments do not comprehensively assess decision-making capacity across the numerous functional domains of daily life. We developed and evaluated the utility of an informant-report measure, the Assessment of Functional Capacity Interview (AFCI), within a sample of cognitively unimpaired and preclinical dementia groups.

Participants and Methods: Based on a comprehensive literature review, analysis of existing measures, and clinical experience, we generated >40 items consisting of open-ended questions assessing crucial aspects of daily functioning. These items were presented to 12 experts in the field of geriatrics and neuropsychology, through a graded approach (4 rounds of feedback and alterations), resulting in item modification or rejection, as well as addition of new items. The remaining items were piloted on three informants at the time of outpatient clinical evaluations, leading to further item refinement. The final version of the AFCI evaluated capacity across domains of financial affairs and management, medical affairs and healthcare management, home and personal safety, and social behaviors and community functioning. The AFCI contained 6 items per domain with response items that ranged from 0=no difficulty to 3=severe difficulty (scores ranged from 0 to 72).

Results: Participants (N = 58; Age$_{mean}$ = 76; Education$_{mean}$ = 16) were classified as cognitively unimpaired (CU, n = 17), subjective cognitive decline (SCD, n = 24), or mild cognitive impairment (MCI, n = 17) based on established criteria. All participants had a knowledgeable informant who completed the AFCI. We found statistically significant moderate to large correlations between the AFCI total score and an informant report measure of cognitive functioning (Brief Informant Form of Neurobehavioral Symptomatology total score), $rs(42) = .73$, $p < .001$, Test of Practical Judgment-informant total score $rs(42) = .87$, $p < .001$, and Montreal Cognitive Assessment total score $rs(41) = -.34$, $p = .027$. A Kruskal-Wallis H test revealed significant differences in AFCI total score between the three diagnostic groups, $H(2) = 12.30$, $p = .002$. Pairwise post-hoc analysis with Bonferroni correction showed a significant difference between CU and MCI ($p = .001$). The difference in AFCI total score between SCD and MCI was in the expected direction, but did not achieve statistical significance with correction, ($p = .068$). As expected, there was no statistically significant difference between CU and SCD ($p = .353$).

Conclusions: In this pilot sample (data collection is ongoing), the AFCI showed promise as a brief, clinically useful functional capacity instrument that is easily administered during a clinical interview or completed by knowledgeable informants. Results can help identify compromised decision-making in at-risk older adults to aid the prevention of common safety issues within this vulnerable population. Ongoing research will extend preliminary investigation of validity and further inform the utility of AFCI in both diagnostic and interventional contexts

Categories: MCI (Mild Cognitive Impairment)
Keyword 1: test development
Keyword 2: memory disorders
Keyword 3: aging disorders
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5 min. break

11:40 - 11:45am
Friday, 3rd February, 2023

Plenary E: Learning from patients: people who have changed my way of thinking

Presenter: Barbara Wilson

11:45am - 12:45pm
Friday, 3rd February, 2023
Pacific Ballroom A

Abstract & Learning Objectives:
This presentation discusses six patients with different problems, referred for rehabilitation, who challenged my views on how to apply neuropsychological principles to their treatment. We begin with Derek, who had sustained a traumatic brain injury from a gunshot wound. I was asked to reduce his weight, but he could not read or write because of the brain injury so I had to find another way to achieve the weight loss. This made me realize that neuropsychologists have to "think on their feet" and be flexible. The second patient is Kate, who developed brain stem encephalitis. Expected to die, and unable to speak, she convinced me that, however severe the injury, we should not give up and recovery can continue for many years. Kate, managed to speak intelligibly fourteen years after her illness! The next patient, Claire, a school nurse, had herpes simplex encephalitis which left her with prosopagnosia and extreme anxiety. Her story made me realize the personal consequences of prosopagnosia that is typically overlooked by most neuropsychologists. The fourth patient, Gary, was attacked by a gang while saving his father. He remained in a state of unconsciousness for 19 months and, thus, had a very poor prognosis. Nevertheless, he defied the predictions of all medical staff, woke up and did very well. The penultimate patient is Natasha, who, as far as we know is the only person in the world to have two syndromes, "Sheehans Syndrome" which is very rare in developed countries and "Sickle cell disease" which is not rare. As a result of the Sheehan's she developed Balint's Syndrome. Her case made me learn about Sheehan's Syndrome and accept that Natasha's main goal in life, was not what I expected it to be. The final patient is Paul, an opera singer, who was diagnosed with" Locked-in Syndrome" following a brain stem stroke. Not only was he a good communicator once a good system was found, but he felt he had a good quality of life by" living within his head". Although many of us feel that to be fully conscious but totally dependent on others, is a very cruel situation to be in, Paul did not feel this. All these patients taught me a great deal and I thank them for this.
Upon conclusion of this course, learners will be able to:

1. Describe the main purposes of neuropsychological rehabilitation
2. Discuss about six patients who challenged typical concepts about neuropsychological rehabilitation
3. Gain some knowledge about Sheehan's syndrome
4. Explain the three components of Balint's syndrome
5. Summarize the difference between Locked-in syndrome and the minimally conscious state
6. Recognize some of the anatomy associated with these syndromes

Lunch (on own)

12:45 - 1:45pm
Friday, 3rd February, 2023

INS Student Liaison Committee Panel 02: Navigating Professional Transitions in Neuropsychology: The Journey from Student to Professional

Presenters: Cady Block, Christine DiBlasio, Jason Soble and Talia Robinson

1:45 - 3:15pm
Friday, 3rd February, 2023
Pacific Ballroom A

Symposium 09: Neuropsychological Test Translation, Adaptation, and Development Part 2: Lessons learned from Vietnam, India, Australia, and the INS Cultural SIG

1:45 - 3:15pm
Friday, 3rd February, 2023
Town & Country Ballroom B

Chair