

Keyword 2: fluency

Keyword 3: verbal abilities

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7 Evaluating the Feasibility of a New Hybrid Teleneuropsychology Screening Service for Individuals with Opioid Use Disorders: Lessons Learned

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Objective: Opioid use disorder (OUD) has been declared a national public health emergency leading to increased enrollment in medication assisted treatment (MAT) programs. Cognitive deficits are seen among those with OUD which can persist even with MAT. Moreover, cognitive deficits predict poor community and treatment outcomes. Neuropsychological evaluations can identify, diagnose, and provide treatment recommendations, and are associated with improved outcomes in non-substance use patient populations. Yet, patients with OUD rarely undergo neuropsychological assessment when participating in opioid use treatment. Teleneuropsychology (TNP) may increase access to care but has not been evaluated with people with substance use disorders (SUDs). This project used a mixed-method design to evaluate the feasibility and impact of a pilot hybrid TNP service with new patients with OUDs entering a MAT program.

Participants and Methods: Participants were ≥18 years old and new patients enrolling in MAT for OUD. Participants were excluded if they planned to move out of town within six months or were pending incarceration. Participants were identified by triage questions at MAT intake based on frequency of relevant co-occurring conditions indicating those with greatest need. Positively triaged individuals were referred to the TNP service which was conducted by a hybrid approach (i.e., patient presents to the clinic and is evaluated from a separate room using video-conferencing technology). We aimed to schedule participants within two-weeks of 30-days from intake to the MAT program. Consented participants completed

questionnaires of feasibility and acceptability (e.g., satisfaction, usefulness) after undergoing a screening TNP evaluation and feedback of the results and recommendations. Participants also were invited to undergo a brief qualitative interview to further assess facilitators and barriers.

Results: Of 57 individuals screened positive, 51 were referred, and 14 were reached to offer TNP. Ten (71.4%) agreed to the TNP evaluation and scheduled an appointment, though 50% had the first appointment scheduled within two weeks of 30-days after intake to MAT. Seven (70%) did not keep the first appointment (no show or cancellation) or were rescheduled due to clinic scheduling. Three were reached to reschedule. All three were unable to keep the appointment, but one did reschedule and keep the third appointment. Of the 4 who attended TNP, only 1 (25%) was within two weeks of 30-days after intake. Of those who attended the TNP appointment, 100% completed the protocol, 75% were satisfied with the evaluation overall, 75% found the evaluation useful, and 67% would recommend TNP to others (one participant did not respond to this question).

Conclusions: Neuropsychological assessment may provide valuable information to improve treatment for those with OUDs. This pilot project revealed that individuals with OUDs can tolerate and are satisfied with a screening TNP evaluation and find the evaluation useful. The primary barrier was reaching referred patients. Treatment engagement among those with SUDs is a common challenge. Those with counselors who coordinated with the clinic schedulers were more likely to be reached and scheduled, suggesting support for regular case management. Other lessons learned and potential future steps are discussed.

Categories: Addiction/Dependence

Keyword 1: substance abuse treatments

Keyword 2: teleneuropsychology

Keyword 3: addiction or dependence

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8 The Battery for Executive Functions in Addiction: Validation of a Novel Screening Tool

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Objective: Executive functions (EF) are a primary mediator of both typical and atypical functioning, influencing the progression of psychopathology due to their role in supporting self-monitoring/regulation and top-down control of cognitive processes. According to recent models, EF impairments may contribute to the functional decline of patients with substance use disorder (SUD), exacerbating secondary affective and social symptoms. Despite these potential implications, the tools now commonly used to outline neurocognitive, and specifically EF, impairments in patients with addiction are not tailored to this clinical population, having been developed to assess cognitive or dysexecutive deficits in neurology or geriatric patients. Because of their different clinical focus, such tools are frequently unable to fully delineate the dysfunctional EF profile of addiction patients. We here present the development and validation of a novel specific screening battery for executive disorders in addiction: Battery for Executive Functions in Addiction (BFE-A).

Participants and Methods: 151 SUD patients and 55 control persons were recruited for the validation of the BFE-A battery. The battery consists of two computerized neurocognitive tasks (Stroop and Go/No-go tasks) and five digitalized neuropsychological tests (focus: short/long-term memory, working memory, focused attention, verbal/non-verbal cognitive flexibility). The tests are designed to assess executive control, inhibition mechanisms, and attention bias toward drugs of abuse.

Results: In tests of verbal memory, focused attention, and cognitive flexibility, as well as in computerized tasks, inferential statistical analyses revealed lower performance in SUD patients compared to control participants, indicating a lack of inhibitory processes and dysfunctional management of cognitive resources. The investigation of Cohen's *d* values

has revealed that inhibitory control, verbal/nonverbal fluency, and short/long-term memory are the areas with the most significant impairments.

Conclusions: While the evaluation of EF dysfunctions associated to addiction is a currently underrepresented component of the diagnostic procedure in drug assistance/treatment programs, is also an essential step for both profiling of patients and design of rehabilitation protocols. Clinical interviews should be complemented by early assessment of cognitive weaknesses and preserved EF skills in order to establishing personalized therapy strategy and perhaps organizing a concurrent phase of cognitive rehabilitation.

Categories: Addiction/Dependence

Keyword 1: addiction or dependence

Keyword 2: assessment

Keyword 3: test development

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9 Interoceptive Attentiveness: Evidence for Neurofunctional Correlates from an EEG Source Localization Study

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Objective: Since seminal work by Sherrington, the term interoception refers to the ability to sense modifications of internal bodily states as opposed to the ability to sense stimuli coming from outside the body itself. Despite conceptual changes regarding the afferent signals subserving this type of inner perception, the core of this definition is still valid and widely accepted. The critical contribution of internal state perception to self-regulation as well as higher-order cognitive processes has led to the