European Psychiatry S867

addition to other immunomodulators, such as cyclophosphamide or rituximab.

**Objectives:** To present a case of a 64 year-old patient who came to the emergency service of our hospital with long-standing anxiety. irritability, recurrent amnestic failures, visual hallucinations and recent-onset episodes of aggressiveness with his family. He required admission to the psychiatry department and was finally diagnosed with autoimmune anti-NMDA encephalitis by detecting antibodies in blood and CSF.

Methods: Clinical case presentation and literature review of cases, focusing on psychotic symptoms.

Results: A 65-year-old patient who was being studied by neurology and psychiatry departments for cognitive impairment and psychotic symptoms was admitted to Neurology after a positive lumbar puncture result for NMDA antibodies. During admission, the patient continued with a significant behavioral alteration that gradually remitted with the use of Quetiapine, corticosteroids and rituximab.

Conclusions: NMDA-encephalitis has a highly variable clinical presentation, which can lead to confusion with infectious etiology or psychiatric disorders, making the diagnosis difficult, which is only possible by detecting anti-NMDA antibodies in CSF. Recognition of the disease and coordination between services is essential for early diagnosis and treatment.

**Disclosure:** No significant relationships.

Keywords: Treatment; Encephalitis; Psychosis; Anti-NMDA

## **EPV1676**

## Efficacy of tPBM on ADHD symptoms and Executive Function Deficits in Adults with high-functioning **Autism Spectrum Disorder**

T.A. Ceranoglu\*, P. Cassano, C. Hutt Vater, A. Green, N. Dallenbach, M. Disalvo, J. Biederman and G. Joshi

Massachusetts General Hospital, Psychiatry, Boston, United States of America

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.2248

Introduction: Executive function (EF) deficits are often associated with Autism Spectrum Disorder (ASD), even in the absence of Attention Deficit Hyperactivity Disorder (ADHD) diagnosis. To date, no approved medication treatments exist for EF deficits associated with ASD.

**Objectives:** To assess the efficacy of transcranial photobiomodulation (tPBM) on EF in adults with ASD.

Methods: Adults (18-59) with high-functioning (HF)-ASD received twice a week tPBM for 8 weeks in an open-label single group design. ASD and EF deficits were assessed by clinician-rated Clinical Global Impression Scale and patient-rated scales of Behavior Rating Inventory of Executive Function-Adult (BRIEF-A).

Results: Eleven participants were enrolled. Ten participants completed the study. Nine participants who completed the study had comorbid ADHD diagnosis. All 10 participants were included in efficacy analyses of EF deficits. Statistically significant improvements in executive function deficits were found in BRIEF-A total score and in subdomains of Inhibition, Emotional Control, Planning and Organization, Organization of Materials, Behavioral Regulation, Metacognitive Index and Global Executive Control.

All participants were found to have mild to moderate improvement in their ADHD symptom severity per clinician rated CGIs. Statistically significant improvements in ADHD symptoms were noted in self-rated scales. No adverse events required changes in tPBM protocol.

**Conclusions:** tPBM is a safe and feasible treatment approach that has the potential to treat core features of ASD. Further research is necessary and warranted.

Disclosure: This work is funded by Alan and Lorraine Bressler Clinical and Research Program for Autism Spectrum Disorder and the MGH Pediatric Psychopharmacology Council Fund.

Keywords: Transcranial Photobiomodulation; Autism Spectrum Disorder; attention-deficit/hyperactivity disorder

## **EPV1678**

## Comparative analysis of impulsivity profiles in adult Attention Deficit Hyperactivity Disorder and **Borderline Personality Disorder**

E. Kenézlői<sup>1\*</sup>, L. Balogh<sup>1</sup>, S. Somogyi<sup>1</sup>, E. Lévay<sup>1</sup>, B. Bajzát<sup>1</sup>, Z. Halmai<sup>1</sup>, P. Soltész<sup>1</sup>, Z. Nemoda<sup>2</sup>, Z. Unoka<sup>1</sup>, R. Tóth<sup>3</sup> and J. Réthelvi<sup>1</sup>

<sup>1</sup>Semmelweis University, Department Of Psychiatry And Psychotherapy, Budapest, Hungary; <sup>2</sup>Semmelweis University, Department Of Biochemistry And Molecular Biology, Budapest, Hungary and <sup>3</sup>Hungarian Association for Behavioural, Cognitive and Schema Therapies, Psychology, Budapest, Hungary \*Corresponding author.

doi: 10.1192/j.eurpsy.2022.2249

Introduction: High levels of impulsive behavior represent a core symptom of different psychiatric conditions, such as Attention Deficit Hyperactivity Disorder (ADHD), Borderline Personality Disorder (BPD), impulse control and conduct disorders, bulimia nervosa, substance use disorders, and other maladaptive behaviors. Impulsivity is a multidimensional construct, having at least three factors.

**Objectives:** Our aim was to describe the impulsivity profile in adult ADHD and BPD patients in comparison with a healthy control group, taking into consideration the different impulsivity factors. **Methods:** aADHD (n=80) and BPD Patients (n=60) were recruited, based on the DSM-5 criteria. Control subjects (n=80) were screened using Derogatis Symptom Checklist (SCL-90). Comorbidities were assessed by structured clinical interviews. Participants were further investigated with online questionnaires including the Barratt Impulsiveness Scale (BIS-11), Difficulties in Emotion Regulation Scale (DERS), and neuropsychological tests, like Rogers' decision-making test.

Results: Based ont the BIS-11 and DERS results, significantly higher levels of impulsivity (motor, attentional, non-planning) and difficulties in emotion regulation were present both in the aADHD and BPD groups, compared to the control group. Impulsivity factors were more characteristic to aADHD, emotion dysregulation was more specific to BPD. In the Rogers test, aADHD group was significantly slower in decision-making, while in BPD decision quality and risk-taking were affected.

**Conclusions:** Impulsivity profiles of the two disorders are different, which leads to the assumption of potentially altered pathway of developing impulsive behavior. As a neuropsychiatric condition,

S868 E-Poster Viewing

impulsivity in aADHD is related to neurobiological dysinhibition, in BPD impulsive behavior is attached to emotionally involving situations, and emotional dysregulation rooted in childhood adverse events.

Disclosure: No significant relationships.

**Keywords:** Impulsivity; borderline personality disorder; decision

making; Attention Deficit Hyperactivity Disorder

### **EPV1679**

Effectiveness and implementation of a MUltidisciplinary Lifestyle focused approach in the Treatment of Inpatients with mental illness (MULTI+): a stepped wedge study protocol

M. Van Schothorst<sup>1</sup>, N. Den Bleijker<sup>1</sup>\*, I. Hendriksen<sup>2</sup>, W. Cahn<sup>3</sup>, N. De Vries<sup>4</sup>, P. Van Harten<sup>1</sup> and J. Deenik<sup>1</sup>

<sup>1</sup>GGz Centraal, Scientific Research Department, Amersfoort,
Netherlands; <sup>2</sup>LivIng Active, -, Santpoort-Zuid, Netherlands;
<sup>3</sup>University Medical Centre Utrecht, Psychiatry, Utrecht, Netherlands and <sup>4</sup>Maastricht University, School For Mental Health And
Neuroscience, Maastricht, Netherlands

\*Corresponding author. doi: 10.1192/j.eurpsy.2022.2250

**Introduction:** People with mental illness (MI) have a reduced life expectancy compared to the general population, mostly attributable to somatic diseases caused by poor physical health. Modifiable lifestyle factors are increasingly associated with the onset of somatic diseases in people with MI. Despite the increasing evidence for the efficacy of lifestyle interventions there is little change in routine clinical care. This discrepancy is referred to as the implementation gap and has caused a need for effectiveness and implementation research in real-world settings.

**Objectives:** This study investigates the health outcomes and implementation of a multidisciplinary lifestyle focused approach in treatment of inpatients with mental illness (MULTI+).

Methods: This is an open cohort stepped wedge cluster randomized trial in inpatients psychiatric wards of GGz Centraal. Three clusters are randomly allocated to one of the three pre-defined steps to integrate MULTI+. MULTI+ can be tailored to fit individual psychiatric wards and includes 10 core components aimed at improving lifestyle factors. The primary outcome is to investigate whether there is a greater decrease in the QRISK3 cardiovascular risk score after receiving MULTI+ as compared to treatment as usual. Secondary outcomes include somatic and mental health outcomes, lifestyle factors, and implementation factors.

Results: First results expected in 2022.

**Conclusions:** To our knowledge, this will be the first large-scale study evaluating the long-term effects of a multidisciplinary, multicomponent approach aimed at improving lifestyle factors. We expect that this approach will increase long-term sustainability and can serve as a potential blueprint for future implementation of lifestyle interventions to improve routine clinical care.

Disclosure: No significant relationships.

**Keywords:** Health outcomes; Implementation; mental illness; protocol

### **EPV1680**

# Virtual reality-based and eye tracking-assisted attention refocusing training for adult Attention-Deficit/Hyperactivity Disorder

B. Selaskowski\*, L. Asché, A. Wiebe, K. Kannen, B. Aslan, D. Sanchéz, S. Lux, A. Philipsen and N. Braun

University Hospital Bonn, Department Of Psychiatry And Psychotherapy, Bonn, Germany \*Corresponding author.

doi: 10.1192/j.eurpsy.2022.2251

**Introduction:** Neurofeedback regimes in the treatment of adult ADHD are commonly EEG-based and have several shortcomings, including a weak signal-to-noise ratio, low transfer rates from laboratory to everyday environments and ambiguous evidence in respect to adequate brain signals of interest.

**Objectives:** To investigate, if an eyetracking-based real-time feedback in a virtual environment can enhance attentional performance, as measured by behavioral, EEG and eyetracking parameters. Methods: Overall, n=18 adult patients with ADHD and n=18 healthy controls (HC) performed a continuous performance task (CPT) in a virtual seminar room, while distracting virtual events occurred. In case the participant's gaze drifted away from the task an automated audiovisual feedback indicated the participant to refocus on the task. Three 20-minutes blocks were presented in counter-balanced order, that differed in respect to whether real feedback, sham feedback or no feedback was additionally provided. Results: Mixed ANOVAs with within-subject factors 'Condition' (real feedback, sham feedback, no feedback) and 'Phase' (distractor phases vs. non-distractor phases) and a between-factor 'Group' (ADHD patients vs. HC) revealed better task performances in HC than ADHD patients in respect to omission errors (p = .023), mean reaction times (p = .042) and reaction time variabilities (p = .007; cf. Figure 1). Moreover, omission errors turned to be higher during distractorpresent than distractor-absent trials (p = .007), especially in ADHD.

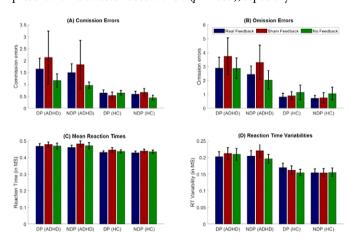


Figure 1. CPT results. DP=distractor-phases, NDP=non-distractor-phases

**Conclusions:** While the virtual CPT turns out to discriminate well between patients with ADHD and HC, the behavioral results do not indicate an attentional performance enhancement based on the gaze-dependent feedback.

**Disclosure:** No significant relationships.

**Keywords:** attention-deficit/hyperactivity disorder; virtual reality; adults