Cognitive Bias Modification (CBM)-training to focus attention on positive information is thought to improve emotional processing and depressive symptoms. Some studies imply reduced duration and occurrence of microstate D in MDD compared to healthy controls. However, the effect of CBM on microstates is still unclear.
Objectives: (1) To replicate previous findings that duration and occurrence of microstate D is reduced in patients with MDD compared to healthy controls in an independent sample and (2) to investigate the effect of an active CBM-training versus a control-training on microstates and its association with symptom improvements.
Methods: Thirty patients receiving outpatient treatment with MDD according to DSM V (aged 18-60) will be recruited in Essen and Aachen. The control group will consist of 30 healthy age-and-sex-matched participants. Psychological testing will be administered and all participants will be randomized to either an active or a control training. During the next visit, resting state EEG and a GoNoGo Task with positive, neutral and negative pictures will be measured. The participants will take a tablet home to undergo 10 sessions of CBM within 14 days. The training will be consisted of a dot-probe-task. In the active condition the probe will be more likely to appear behind a positive versus a neutral picture, while appearing randomly in the control condition. After 14 days, a second EEG will be recorded.
Results: Differences in duration and occurrence of microstate D between patients and healthy controls will be analyzed by conducting ANCOVAs with age and sex as covariates. ANCOVAs for repeated measurements will be calculated to study effects of time (pre- vs. post-training) and group (patients vs. healthy controls in active training; patients in active vs. patients in control-training), on duration and occurrence of microstate D.
Conclusions: CBM-training is proposed to be an effective treatment option for MDD patients, reflected in a reduced topographical bias of microstate D in EEG.

Disclosure of Interest: None Declared

EPV0407

Larks under pressure: The genetic background of the morning chronotype may contribute to depression in interaction with stress

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doi: 10.1192/j.eurpsy.2024.1117

Introduction: Depression is a highly prevalent, multifactorial, complex disorder, its etiology is assumed to involve both genetic and environmental factors. Genetic factors, including biological clock genes such as *CLOCK* and *SIRT1*, have been linked to depression, particularly its symptom related sleep disturbances. Environmental factors also play a crucial role in the background of depression, particularly in interaction with genetic factors. Known environmental stress factors include stress caused negative life events or childhood adversities.
Objectives: This study aims to delve into the chronotype-specific impacts of genes previously correlated with circadian functionality on the pathomechanism of depression in interaction with environmental stress factors.
Methods: A genome-wide association study on the 'morning chronotype' phenotype was conducted with Plink2, utilizing data from the UK Biobank discovery sample (N = 139135). Using LDPred2we derived a polygenic risk score (PRS) for the NewMood Hungarian dataset (N = 1820). We performed pathway-specific analyses including genes implicated within the genetic pathway, drawing on prior research findings. Specifically, we selected the top genes (with a false discovery rate-corrected p-value < 0.05) from the "responders vs. non-responders" analysis conducted by Jerome C. Foo et al.Transl Psychiatry 2019; 9 343). We performed a main effect analysis investigating the pathway specific PRS's effect on BSI depression scores and interaction analyses using life course (number of negative life events in the past life) and recent (number of negative life events in the past year) stress scores to investigate how the interaction term predicts depression in our target sample.
Results: Our primary analysis revealed a nominally significant protective effect (beta = -20.90938, p = 0.070218). Subsequently, in the context of our interaction analysis, we identified significant risk associations, both with lifetime stress (beta = 13.7416, p = 0.0171) and recent stress (beta = 24.6034, p = 0.0038)
Conclusions: Our study unveiled a protective role in our primary analysis, juxtaposed with risk associations in our interaction analyses. This intriguing dichotomy underscores that this genetic pathway, associated with circadian dysregulation, exerts a protective influence in association with the morning chronotype. However, it transitions into a predisposing factor for depression when influenced by environmental stress factors.
Considering these findings, our study substantiates the hypothesis that both circadian genes and chronotype contribute to the pathogenesis and clinical manifestation of depression. Additionally, it underscores the pivotal role of stress as a contributing factor in the intricate pathogenesis of depression.

Disclosure of Interest: None Declared

EPV0408

Depression: Biological Non-Pharmacological Interventions. A Review.

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doi: 10.1192/j.eurpsy.2024.1118

Introduction: Major depressive disorder stands as one of the most significant mental health issues in the general population. It impacts the patients' quality of life and increases both morbidity and mortality. Response and tolerability to available

pharmacological treatments are often inefficient, sometimes requiring extended periods to achieve acceptable remission through combinations or augmentations. Non-pharmacological approaches constitute an element in the therapeutic options for this mental disorder. In recent years, there has been a growing interest in non-pharmacological biological treatment interventions. Among the principal ones are Electroconvulsive Therapy (ECT), Transcranial Magnetic Stimulation (TMS), Deep Brain Stimulation (DBS), and Vagus Nerve Stimulation (VNS).
Objectives: The aim of this paper is to review the current available literature to expand our knowledge about biological non-pharmacological treatment in depression, particularly ECT, TMS, DBS, and VNS.
Methods: A qualitative review was conducted over the last 5 years, using the Medline database through PubMed. We selected studies in English or Spanish that met the objectives of the review, excluding references in other languages. The scientific evidence obtained was analyzed and synthesized.
Results: There is growing evidence in this area. TMS, whose place in clinical guidelines remains unclear, is a less available treatment but might be considered in patients with moderate to severe depression who cannot receive pharmacological treatment. DBS, which shows good results in treatment-resistant major depressive disorder, achieves response rates greater than 50%. VNS has accumulated studies since its approval for treatment-resistant depression, showing some latency of response but demonstrating improvement persistence for at least two years, although some studies have not clearly shown a benefit. We also found studies demonstrating the effectiveness and favorable cost-benefit balance of ECT.
Conclusions: This review highlights the importance of increasing knowledge in these types of treatments. They have shown significant progress in recent years. We have a better understanding and use of the technique of ECT, while newer options have gained evidence in effectiveness over these years, with improvements facilitating their use in patients with treatment-resistant depression.

Disclosure of Interest: None Declared

EPV0409

Neurocognitive Targets for Psychological Assistance in Patients with the Anhedonia Phenomenon within the Framework of Affective Pathology

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doi: 10.1192/j.eurpsy.2024.1119

Introduction: Anhedonia is a transdiagnostic psychopathological phenomenon that is considered a key feature for several disorders, primarily affective spectrum disorders. It exhibits a significant association with social and occupational maladjustment, reduced quality of life, and increased suicidal risk among psychiatric patients.
Objectives: The aim of this study is to identify recommendations for psychotherapeutic assistance for patients with affective spectrum disorders.
Methods: A total of 26 patients with affective spectrum disorders (ICD-10 code - F33, F31) and the phenomenon of anhedonia were examined. We utilized neuropsychological methods aimed at investigating a wide range of cognitive functions (Dynamic praxis; Color interference test; Arithmetic Tasks; Number of skips and impulsive errors; Reverse and straight rows; Verbal fluency; Design fluency; Rey-Osterritz figure) and psychometric methods designed to diagnose various types of anhedonia (consummatory (TEPS), anticipatory (TEPS), social (RSAS), and physical (PAS)).
Results: Among patients with depression, the consummatory type of anhedonia was the most pronounced. A relationship was found between anticipatory anhedonia and phonetic verbal fluency ($r = 0.487$; $p < 0.01$). Additionally, there were correlations between immediate (consummatory) pleasure experience and Rey figure errors ($r = -0.349$; $p < 0.05$). Social anhedonia was associated with phonetic verbal fluency productivity ($r = -0.509$; $p < 0.01$) and performance in visual fluency productivity ($r = -0.473$; $p < 0.01$).
Conclusions: The obtained results allow us to hypothesize that anhedonia is associated with difficulties both in evaluating and imagining possible positive stimuli, which leads to a lack of emotional response to the current stimulus. Thus, the availability of current pleasure may be linked to memory accessibility and regulatory function. When these domains are weakened, the respondent loses the ability to associate the current stimulus with positive past experiences, making it challenging to generate an emotional response in the current stimulus situation and disrupting the anticipation of pleasure. Based on the results, we propose the effective use of behavioral activation and work on the actualization of past experiences. Behavioral activation can be implemented by gradually introducing behaviors associated with past pleasures into the patient's life, followed by cognitive restructuring aimed at focusing the emotional response on past and current stimuli. In addition to this, from a neurocognitive perspective, an additional element of therapy could involve training various types of cognitive functions, with an emphasis on the auditory modality.

Disclosure of Interest: None Declared

EPV0410

Sexual dysfunction, depression, and the impact of antidepressants

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doi: 10.1192/j.eurpsy.2024.1120

Introduction: Sexual dysfunction is a common side effect of antidepressants and can have significant impact on the person's quality of life, relationships, mental health, and recovery. The reported incidence of sexual dysfunction associated with antidepressant medication varies considerably between studies, making it difficult to estimate the exact incidence or prevalence.

https://doi.org/10.1192/j.eurpsy.2024.1118 Published online by Cambridge University Press