

Conclusions: In conclusion, our study investigated the characteristics of verbal fluency in a transdiagnostic approach. While phonemic fluency did not reveal significant differences among the three groups, our analysis of semantic fluency unveiled a distinction. Specifically, individuals with schizophrenia exhibited impaired semantic word productivity. Our study highlights the complex nature of verbal fluency impairments in different conditions and the importance of considering more nuanced methods when assessing cognitive functions.

Disclosure of Interest: None Declared

O0105

Evaluation of The Relationship of Circular RNA With Suicide Behavior In Patients Diagnosed With Schizophrenia and Other Psychotic Disorder

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doi: 10.1192/j.eurpsy.2024.227

Introduction: Schizophrenia is a major mental disorder with a high risk of suicide, which is one of the leading causes of early death in schizophrenia patients. It is known that suicidal behavior is 20-50 times higher in schizophrenia patients compared to the general population. Clinical features makes it difficult to determine the risk of suicide in this patient group. Since genetic studies on suicides of patients with schizophrenia are limited, this area was deemed worthy of research.

Objectives: CircRNAs can potentially serve as minimally invasive biomarkers because they can freely cross the blood-brain barrier. It is aimed to define the effect of circRNA molecules on suicidal behavior in patients diagnosed with schizophrenia and other schizophrenia spectrum psychotic disorders, and to increase protective and preventive approaches by predicting possible consequences of suicidal behavior.

Methods: 104 patients followed up with the diagnosis of schizophrenia and other schizophrenia spectrum psychotic disorders were included in the study. RNA was isolated from the blood taken into a hemogram tube, and three circRNA molecules were identified using a number of RNA sequencing techniques. In addition, socio-demographic characteristics of the participants, clinical features of the disease, suicidal behavior history, current treatment status were questioned in detail. Simultaneously, the current clinical status was evaluated with clinical evaluation scales as Positive and Negative Syndrome Scale (PANSS), Calgary depression scale for schizophrenia (CDSS), Suicide Probability Scale (SPS), Beck Suicidal Intent Scale (BSIS).

Results: Three circRNA molecules were identified, chr3_196488683, chr5_69175537 and hsa_circ_0084021. No significant difference was found between these molecules and past suicide attempts. It was found that chr5_69175537 was negatively associated with the age of onset of psychotic disorder negative symptoms, and hsa_circ_0084021 was negatively associated with the age of onset of both negative and positive symptoms. When the relationship between the clinical assessment scales and suicidal behavior was evaluated, the PANSS general symptoms subscale score was significantly higher in the group with suicidal behavior

($p < 0.05$). CDSS mean scores and BSIS scores were also found to be significantly higher in the group with previous suicide attempts ($p < 0.01$).

Conclusions: Although our findings do not allow definitive conclusions due to the complex interaction between epidemiological and clinical factors and limited literature, it has shown that schizophrenia contains many risks that increase suicidal behavior. To predict suicide, circRNA molecules need to be supported by prospective studies with large sample groups and comparison with control groups.

Disclosure of Interest: None Declared

O0106

Serum d-serine and d-amino acid oxidase (DAO) levels in schizophrenia and related psychotic disorders: a 6-month follow-up study

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doi: 10.1192/j.eurpsy.2024.228

Introduction: D-serine and the DAO enzyme may impact the NMDA receptor and contribute to schizophrenia, but the exact role and outcomes are not fully understood due to the complexity of the disorder.

Objectives: We analyzed serum levels of d-serine and DAO in untreated individuals with schizophrenia during acute psychotic episodes. We correlated these factors with clinical characteristics and compared results to a healthy control group. We also examined any differences after six months of treatment.

Methods: The study involved 89 patients with schizophrenia or related psychotic disorders who were hospitalized due to psychotic episodes. Also, the study had 81 healthy participants matched in terms of gender, age, and smoking status with the patient group. PANSS, CGI, GAS, CDSS, and MoCA were applied to determine the severity of the disease. Serum d-serine and DAO levels were measured by ELISA kits.

Results: During an acute psychotic episode, patients had significantly lower levels of D-serine, DAO, and D-serine/DAO ratio compared to healthy individuals ($Z=6.52$, $p < 0.001$; $Z=4.54$, $p < 0.001$; $Z=2.90$, $p=0.004$). Although DAO and D-serine levels increased with symptom regression after six months of treatment, the D-serine and D-serine/DAO ratios were significantly lower in patients than in healthy individuals ($Z=3.52$, $p < 0.001$; $Z=3.44$, $p < 0.001$). There was no correlation between the change in D-serine level and the change in scale scores. However, there was a negative correlation between the change in DAO level and the change in PANSS total ($r=-0.681$, $p=0.000$), anxiety scores ($r=-0.336$, $p=0.032$), and Calgary depression score ($r=-0.547$, $p=0.000$). There was a positive correlation between the change in D-serine/DAO ratio and the change in the Calgary depression scale score ($r=0.353$, $p=0.024$) in addition to PANSS positive ($r=0.395$, $p=0.011$) and total scores ($r=0.585$, $p=0.000$). Antipsychotic doses negatively correlated with the changes in DAO level ($r=0.421$, $p=0.01$). It was found that the female patients had significantly lower levels of DAO than the female healthy subjects ($Z=-5.061$, $p < 0.001$).

No correlation was found between serum D-serine level, DAO level, and the D-serine/DAO ratio with cognitive function. D-serine level negatively correlated with age ($r=-0.265$, $p=0.012$) and age at onset of the disease ($r=-0.227$, $p=0.032$).

Conclusions: The findings support the view that D-serine and DAO may play a role in the pathophysiology of schizophrenia and related psychotic disorders. To better understand the relationship between D-serine metabolism and symptom clusters in psychosis and the effects of antipsychotic drugs on NMDAR dysfunction, further studies that directly measure DAO enzyme activity and examine cognitive symptoms in more detail are needed.

Disclosure of Interest: None Declared

O0107

Catchment area rates of involuntary care and subsequent patient morbidity and mortality in Norway

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doi: 10.1192/j.eurpsy.2024.229

Introduction: Mental health legislation allows for involuntary care of patients with severe mental disorders, assuming it improves health and reduces risk. Professionals have warned against potentially adverse effects of recent initiatives to heighten involuntary care threshold, such as CRPD and national coercion-reduction strategies. We have not found that the impact of high thresholds for involuntary care have been studied.

Objectives: Our aim was to use national data from Norway to test implications of the hypothesis that areas with lower levels of involuntary care show higher levels of morbidity and mortality in their severe mental disorder populations compared to areas with higher levels. We pre-specified five models of how such adverse effects could manifest in national register data.

Methods: Using national register data, we calculated standardized (by age, sex, and urbanicity) involuntary care ratios across Community Mental Health Center areas in Norway. For patients diagnosed with severe mental disorders (ICD10 F20-31), we tested whether lower area ratios in 2015 interacted with 1) case fatality over four years, 2) an increase in inpatient days, and 3) time to first episode of involuntary care over the following two years. We also assessed 4) whether area ratios in 2015 predicted an increase in the number of patients diagnosed with F20-31 in the subsequent two years and whether 5) standardized involuntary care area ratios in 2014–2017 predicted an increase in the standardized suicide ratios in 2014–2018.

Results: We included 21481 patients with either an F20-31 diagnosis, an episode of involuntary care in 2015, or both. The standardization variables age, sex, and urbanicity explained 70.5% of the variance in raw rates of involuntary care, and the remaining extremal quotient was 2.5. Age and sex predicted case-fatality, but involuntary care-rate was insignificant. Patients with F20-31 and no involuntary care episode in 2015 showed a steady reduction in inpatient days the following years, but not significantly related to the area's involuntary care rates. For the same sample, these rates

did not predict the time to an episode of involuntary care. The area's involuntary care rate in 2015 did not predict *changes* in the number of patients in treatment for a diagnosis of F20-31 from 2015-2017. Finally, the area's involuntary care rate from 2014-2018 explained 1.2% of the variance in suicides in 2014-2019 in the area.

Conclusions: In the models, we found no significant associations between low standardized catchment area rates of involuntary care and the pre-specified outcomes. This raises questions about some assumptions in mental health legislation and merits further research.

Disclosure of Interest: None Declared

O0108

Preliminary data from the CONNEX-X extension trial examining the long-term safety of iclepertin in patients with schizophrenia who completed Phase III CONNEX trials

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doi: 10.1192/j.eurpsy.2024.230

Introduction: Cognitive impairment associated with schizophrenia (CIAS) is an important unmet need as there are no effective treatments available. Iclepertin (BI 425809), a glycine transporter-1 inhibitor, has been shown to improve CIAS in Phase II trials, and Phase III trials are underway.

Objectives: The ongoing CONNEX-X extension study aims to collect additional safety data relating to iclepertin treatment in patients with CIAS.

Methods: CONNEX-X (NCT05211947/1346-0014) is a multinational, multicentre, open-label, single-arm extension study in patients with CIAS who completed 26 weeks of treatment (iclepertin 10 mg or placebo) in one of 3 Phase III CONNEX parent trials (NCT04846868/1346-0011, NCT04846881/1346-0012, NCT04860830/1346-0013). An estimated 1400 clinically stable outpatients will be treated (iclepertin 10 mg daily) for 1 year, irrespective of previous treatment (iclepertin/placebo). Patients are excluded if any of the following circumstances occur during the parent study and up to Visit 1 of CONNEX-X: suicidal behaviour or ideation (type 5 on the Columbia-Suicide Severity Rating Scale), diagnosis with moderate/severe substance use disorder, diagnosis other than schizophrenia (according to Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition), development of any condition preventing participation, a haemoglobin level decrease (>25% or <100g/L from baseline in parent trial) or haemoglobinopathies. The primary endpoint is the occurrence of treatment-emergent adverse events. The secondary endpoints include change from baseline (Cfb) in Clinical Global Impressions-