

## O256

### Cardiological health in patients with schizophrenia. A prospective cohort study

R. Ernst Nielsen<sup>1,2\*</sup>, M. Rodrigo-Domingo<sup>2</sup>, L. Jørgensen<sup>2</sup>, C. Tranekær Hostrup<sup>2</sup> and S. Eggert Jensen<sup>1</sup>

<sup>1</sup>Department Of Clinical Medicine, Aalborg University, Aalborg, Denmark and <sup>2</sup>Psychiatry, Aalborg University Hospital, Aalborg, Denmark

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.429

**Introduction:** Patients with schizophrenia have a four-fold increased all-cause and a doubled cardiovascular mortality rate as compared to the general population.

**Objectives:** The study overall investigates the point-prevalence and prospective changes in cardiovascular risk factors in patients with schizophrenia, with baseline demographics of participants presented here.

**Methods:** A prospective study of patients diagnosed with schizophrenia divided into two subpopulations consisting of newly diagnosed ( $\leq 2$  years from baseline in study (group A)) or chronic (diagnosed  $\geq 10$  years from baseline in study (group B)).

**Results:** A total of 199 patients (57 diagnosed  $\leq 2$  years preceding baseline and 142 diagnosed  $\geq 10$  years ago) were included. Group A had been diagnosed for an average of  $1.13 \pm 0.58$  years and  $21.19 \pm 7.62$  years in group B. The majority ( $n=135$  (67.8%)) were diagnosed with paranoid schizophrenia. At baseline PANSS total (median[Q1;Q3]) for group A was  $61.0[51.0;76.0]$  and  $60.0[48.0;76.0]$  for group B, with PANSS Positive being  $17.0[13.0;20.0]$  and  $15.0[12;19]$ , PANSS Negative being  $16.0[11.0;20.0]$  and  $14.5[10.0;20.0]$ , and PANSS General being  $28.0[22.0;35.0]$  and  $30.0[25.0;37.0]$ , respectively. No difference in Clinical Global Impression was observed between groups ((median[Q1;Q3]:  $4.0[3.0;4.0]$  in both groups). Lastly, global assessment of function was similar between groups ((median[Q1;Q3]: group A symptom:  $38.5[37.0;46.0]$  and group B  $41.0[37.0;52.0]$ , and with function being  $48.0[44.5;53.5]$  in group A and  $45.5[41.0;53.0]$  in group B).

**Conclusions:** Prospective studies investigating prevalence of and prospective changes in cardiovascular risk in patients with schizophrenia are essential to understand the increased all-cause and cardiovascular specific mortality. Demographic descriptions of participants are essential to estimate generalizability in different treatment settings.

**Disclosure:** No significant relationships.

**Keywords:** Cohort; Mortality; Cardiology; schizophrenia

## O256

### Distinct alternations of brain functional network dynamics in obsessive-compulsive disorder and schizophrenia

L. Luo<sup>1\*</sup>, Y. Yang<sup>2</sup>, Q. Gong<sup>3</sup> and F. Li<sup>3</sup>

<sup>1</sup>Huaxi Mr Research Centre (hmrrc), Department Of Radiology, West China Hospital of Sichuan University, Sichuan, China; <sup>2</sup>Department Of Psychiatry, West China Hospital of Sichuan University, Chengdu, China and <sup>3</sup>Huaxi Mr Research Centre (hmrrc), Department Of

Radiology, West China Hospital of Sichuan University, Chengdu, China

\*Corresponding author.

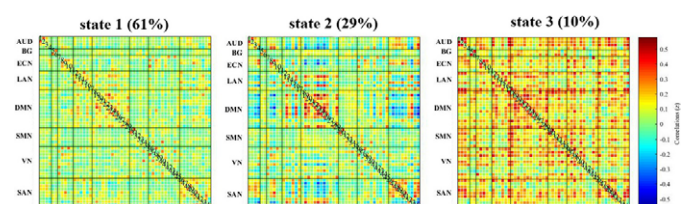
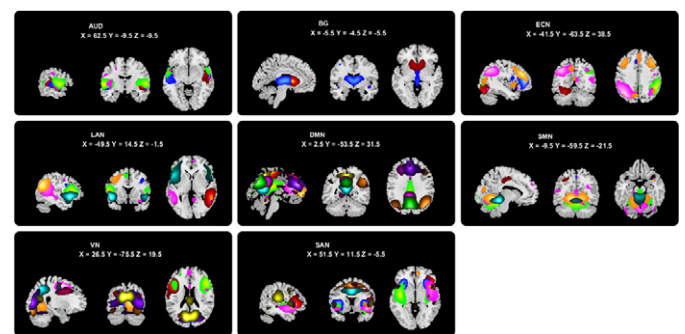
doi: 10.1192/j.eurpsy.2021.430

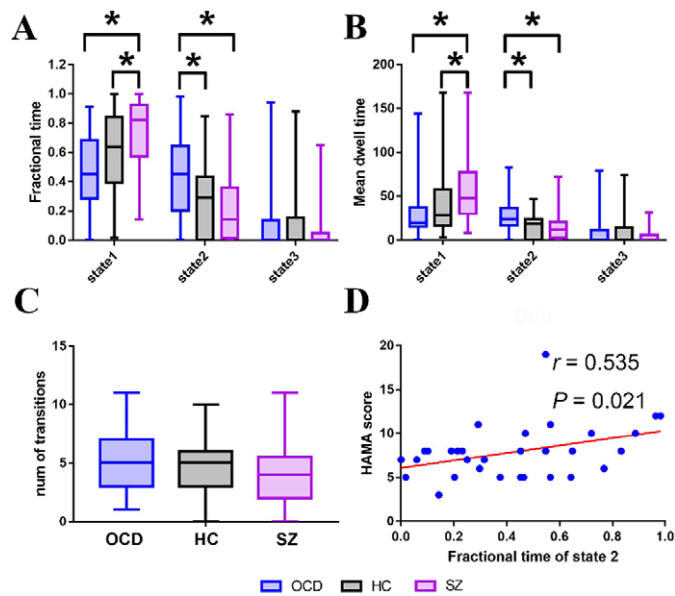
**Introduction:** Obsessive-compulsive disorder (OCD) and schizophrenia (SZ) are both severe psychiatric disorders. Though these two disorders have distinct typical symptoms, there are partial polygenic overlap and comorbidity between the two disorders. However, few studies have explored the shared and disorder-specific brain function underlying the neural pathophysiology of the two disorders, especially in the aspect of dynamics.

**Objectives:** To explore the abnormal characteristics of the dynamic functional connectivity (dFC) in OCD and SZ as well as the association between dFC metrics and symptom severity.

**Methods:** The resting state functional magnetic resonance imaging data of 31 patients with OCD, 49 patients with SZ, and 45 healthy controls were analyzed using independent component analysis to obtain independent components (ICs) and assigned them into eight brain networks (Figure 1), then used the sliding-window approach to generate dFC matrices. Using k-means clustering, we obtained three reoccurring dFC states (Figure 2), and state transition metrics were obtained

**Results:** In a sparsely connected state (state 1), SZ showed both increased fractional time and mean dwell time than controls ( $P=0.047$  and  $P=0.033$ ) and OCD ( $P=0.001$  and  $P=0.003$ ). In a state characterized by negative FC between networks (state 2), OCD showed both increased fractional time and mean dwell time than controls ( $P=0.032$  and  $P=0.013$ ) and SZ ( $P=0.005$  and  $P=0.003$ ). Moreover, the fractional time of state 2 was positively correlated with anxiety scores in OCD ( $r=0.535$ ,  $P=0.021$ , FDR corrected) (Figure 3).





**Conclusions:** OCD and SZ patients showed distinct alternations of brain functional dynamics.

**Disclosure:** No significant relationships.

**Keywords:** schizophrenia; Obsessive-Compulsive disorder; dynamic functional connectivity; Independent Component Analysis

**O257**

**Effectiveness of antipsychotics in schizophrenia with comorbid substance use disorder**

M. Lähteenvuo<sup>1</sup>, J. Luykx<sup>2</sup>, H. Taipale<sup>3</sup>, E. Mittendorfer-Rutz<sup>3</sup>, A. Tanskanen<sup>3</sup>, A. Batalla<sup>4</sup> and J. Tiihonen<sup>3\*</sup>

<sup>1</sup>Dept Of Forensic Psychiatry, University of Eastern Finland, Kuopio, Finland; <sup>2</sup>Department Of Psychiatry, Utrecht University, Utrecht, Netherlands; <sup>3</sup>Department Of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden and <sup>4</sup>Psychiatry, University Medical Centre Utrecht, Utrecht, Netherlands

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.431

**Introduction:** Schizophrenia is highly comorbid with substance use disorders (SUD), which may negatively impact the course of illness. However, large studies exploring the best lines of treatment for this combination are lacking.

**Objectives:** We investigated what are the most effective antipsychotics for patients with schizophrenia in preventing the development of substance use disorders and preventing hospitalizations in patients already having substance use disorder.

**Methods:** We used two independent national cohort registries including all patient with schizophrenia aged under 46 years. Participants were followed during 22 (1996–2017, Finland) and 11 years (2006–2016, Sweden). We studied risk of rehospitalization, and risk of developing an SUD when using vs. not using antipsychotics, using Cox proportional hazards regression analysis models.

**Results:** 45,476 patients with schizophrenia were identified (30,860 in Finland; 14,616 in Sweden). For patients without SUD, clozapine and antipsychotic polytherapy were associated with the lowest risks

of developing SUD in both countries. For patients with co-existing SUD, the risk of hospitalization was the lowest during clozapine, polytherapy and long-acting injectable use.

**Conclusions:** In patients with schizophrenia and comorbid SUD, antipsychotic medications were effective in preventing relapses. In those without an SUD, antipsychotic use was associated with a markedly reduced risk of developing an initial SUD. Clozapine and long-acting injectables should be considered treatments of choice in patients with schizophrenia and SUD, or at risk of developing co-morbid SUD.

**Disclosure:** ML: Genomi Solutions Ltd, DNE Ltd, Sunovion, Orion Pharma, Janssen-Cilag, Finnish Medical Foundation, Emil Aaltonen Foundation. HT, EMR, AT: Eli Lilly, Janssen-Cilag. JT: Eli Lilly, Janssen-Cilag, Lundbeck, Otsuka.

**Keywords:** schizophrenia; antipsychotic; Substance use

**O259**

**A polydiagnostic approach to cognitive deficits in schizophrenia**

A. Sánchez-Torres<sup>1</sup>, G. Gil-Berrozpe<sup>1\*</sup>, R. Lorente-Omeñaca<sup>1</sup>, M. Zandío<sup>1,2</sup>, L. Moreno-Izco<sup>1,2</sup>, E. García De Jalón<sup>1</sup>, M. Ribeiro<sup>1</sup>, V. Peralta<sup>1,3</sup> and M. Cuesta<sup>1,2</sup>

<sup>1</sup>Mental Health Group, Instituto de Investigación Sanitaria de Navarra (IdISNA), Pamplona, Spain; <sup>2</sup>Psychiatry, Complejo Hospitalario de Navarra, Pamplona, Spain and <sup>3</sup>Mental Health Department, Servicio Navarro de Salud- Osasunbidea, Pamplona, Spain

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.432

**Introduction:** Cognitive deficits are common, clinically relevant and closely linked to poor functional outcomes in everyday functioning in patients with schizophrenia and other psychoses.

**Objectives:** To ascertain to which extent a polydiagnostic assessment of schizophrenia is associated with clinically-derived criteria of cognitive impairment and gold-standard neuropsychological assessment.

**Methods:** We assessed 98 patients with a psychotic disorder. We tested if patients met criteria for schizophrenia according to five diagnostic classifications: Krapelin, Bleuler, Schneider, ICD-10 and DSM-IV. Also, we applied a set of clinically-derived criteria to assess cognitive impairment associated with psychosis (CIAPs). Gold-standard neuropsychological assessment was administered, covering the cognitive domains included in the MATRICS Cognitive Battery: attention, processing speed, verbal memory, visual memory, working memory, executive functioning and social cognition. MANOVAs were performed to test the association between polydiagnostic and clinically-derived criteria and neuropsychological assessment.

**Results:**

