subjects underwent a PET scan with previous ingestion of 0.4 mg/kg bodyweight of d-amphetamine 90–120 minutes before scanning. Subsequently, subjects were sensitized to d-amphetamine with the same dose on two separate days. Thereafter, they underwent another PET scan with previous d-amphetamine ingestion. DEQ and SSQ were administered before, 60 min, 90–120 min, and 210 min after amphetamine ingestion.

Results We found significant sensitization effects on a behavioral level and on a neurochemical level after four administrations of amphetamine. Items of the SSQ, which showed significant sensitization effects were "outgoing", "energetic", "lively", "alert" and "focused".

Conclusions We were able to induce significant behavioral and neurochemical sensitization in healthy humans, which were measured with [\$^{11}C\$]-(+)-PHNO-PET for the first time. This sensitization model will be useful for studying the neurobiology of schizophrenia.

Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.090

### **FC87**

## An observational study of clozapine-induced sedation and its pharmacological management

S. Ramos Perdigues <sup>1,\*</sup>, A. Mane Santacana <sup>2</sup>, R.B. Sauras Quetcuti <sup>3</sup>, E. Fernandez-Egea <sup>4</sup>

- <sup>1</sup> Nuestra Señora de Jesus, Spain
- <sup>2</sup> Hospital Del Mar, Psychiatry, Barcelona, Spain
- <sup>3</sup> CSMA Horta, Psychiatry, Barcelona, Spain
- <sup>4</sup> Behavioural and Clinical Neurosciencie Institute, Psychiatry, Cambridge, United Kingdom
- \* Corresponding author.

Introduction Clozapine is the only drug approved for resistant schizophrenia, but remains underused because of its side effects. Sedation is common, but its management is unclear.

Objectives To analyze factors associated with clozapine-induced sedation and the efficacy of common treatment strategies.

Aims To determine clozapine-induced sedation factors and possible therapeutic strategies.

Methods Using two years' electronic records of a community cohort of resistant schizophrenia spectrum disorder cases on clozapine, we performed three analyses: a cross-sectional analysis of which factors were associated with number of hours slept (objective proxy of sedation), and two prospective analyses: which factors were associated with changes in hours slept, and the efficacy of the main pharmacological strategies for improving sedation.

Results One hundred and thirty-three patients were included; 64.7% slept at least 9 hours/daily. Among monotherapy patients (n = 30), only norclozapine levels (r = .367, P = .033) correlated with sleeping hours. Multiple regression analyses confirmed the findings (r = .865, P < .00001). Using the cohort prospectively assessed (n = 107), 42 patients decreased the number of hours slept between two consecutive appointments. Decreasing clozapine (40%) or augmenting with aripiprazole (36%) were the most common factors. In the efficacy analysis, these two strategies were recommended to 22 (20.6%) and 23 (21.5%) subjects, respectively. The majority (81.8% and 73.9%) did not report differences in the hours slept.

Conclusions Sedationis common and involves pharmacological and non-pharmacological factors. The only correlation was a weak correlation between norclozapine plasma levels and total sleeping hours. Reducing clozapine and aripiprazole augmentation were the most successful strategies to ameliorate sedation, although both strategies were effective only in a limited numbers of subjects.

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.091

#### FC88

## Trends of hospitalization for schizophreniform disorder in USA: A nationwide analysis

M. Rathod <sup>1</sup>,\*, Z. Mansuri <sup>1</sup>, S. Shambhu <sup>1</sup>, K. Karnik <sup>2</sup>, A. Sutaria <sup>1</sup>, U. Mansuri <sup>3</sup>

- <sup>1</sup> Drexel University, School of Public Health, Philadelphia, USA
- <sup>2</sup> Children's Hospital of San Antonio Texas, Department of Pediatrics, San Antonio, USA
- <sup>3</sup> Icahn School of Medicine at Mt. Sinai, School of Public Health, New York. USA
- \* Corresponding author.

Objectives Schizophreniform disorder (SD) is an important cause of morbidity and mortality in hospitalized patients. While SD has been extensively studied in the past, the contemporary data for impact of SD on cost of hospitalization are largely lacking.

Methods We queried the Healthcare Cost and Utilization Project's Nationwide Inpatient Sample (HCUP-NIS) dataset between 1998–2011 using the ICD-9 codes. Severity of comorbid conditions was defined by Deyo modification of Charlson comorbidity index. Primary outcome was in-hospital mortality and secondary outcome was total charges for hospitalization. Using SAS 9.2, Chi² test, *t*-test and Cochran-Armitage test were used to test significance.

Results A total of 8645 patients were analyzed; 36.21% were female and 63.79% were male (P < 0.0001); 49.04% were white, 39.06% black and 19.9% of other race (P < 0.0001). Rate of hospitalization decreased from 599.22/million to 394.47/million from 1998-2011. Overall mortality was 0.23% and mean cost of hospitalization was 17930.23. The in-hospital mortality reduced from 0.21% to 0.15% (P < 0.0001) and mean cost of hospitalization increased from 9662.88% to 27,749.68% from 1998-2011. Total spending on SD related admissions have increased from \$47.59 million/year to \$853.83 million/year.

Conclusions While mortality has slightly decreased from 1998 to 2011, the cost has significantly increased from \$47.59 million/year to \$853.83 million/year, which leads to an estimated \$806.24 million/year additional burden to US health care system from 1998 to 2011. In the era of cost conscious care, preventing SD related hospitalization could save billions of dollars every year. Focused efforts are needed to establish preventive measures for SD related hospitalization.

Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.092

### FC89

# Assessment of cognitive impairment with the cognitive assessment interview (CAI) was useful for identifying poor psychosocial functioning outcome in patients with psychosis

A. Sánchez-Torres <sup>1,2,3,\*</sup>, M.R. Elosúa<sup>2</sup>, R. Lorente-Omeñaca <sup>1,3</sup>, L. Moreno-Izco <sup>1,3</sup>, V. Peralta <sup>1,3</sup>, J. Ventura <sup>4</sup>, M.J. Cuesta <sup>1,3</sup> <sup>1</sup> Complejo Hospitalario de Navarra, Department of Psychiatry, Pamplona, Spain

- <sup>2</sup> Universidad Nacional de Educación a Distancia, Department of Basic Psychology I, Madrid, Spain
- <sup>3</sup> IdiSNA, Navarra Institute for Health Research, Pamplona, Spain
- <sup>4</sup> UCLA, Department of Psychiatry, Semel Institute for Neuroscience and Human Behavior, Los Angeles, USA
- \* Corresponding author.

Introduction Cognitive impairments clearly impact the daily functioning of patients with psychosis.

*Objectives* To assess cross-sectionally whether there are differences in the cognitive domains assessed with the CAI, for considering the real-world functioning of a sample of patients with psychosis.

Methods The sample consisted of 76 patients with a DSM-IV psychotic disorder. Patients were assessed with the cognitive assessment interview (CAI), which is an interview-based measure of cognitive functioning that is intermediate between cognitive functioning and daily functioning, and three subscales of the specific levels of functioning (SLOF), an informant-rated measure of functioning. The CAI was used to assess the patient and an informant, and these scores were integrated into a rater composite score. We divided the sample by a median-split procedure for each of the three functional domains, and then applied ANOVAs to compare the two groups (impaired/not impaired) in the six cognitive domains of the CAI: working memory, attention, verbal memory, problem solving, processing speed, and social cognition.

*Results* We found significant differences between the impaired vs. non-impaired groups in most of the cognitive domains assessed with the CAI (Fig. 1).

Conclusions Interview-based assessment of cognition with the CAI allows for the prediction of everyday functioning in patients with psychosis. Impairment in almost all CAI cognitive domains, except for social cognition, was associated with poorer psychosocial functioning.

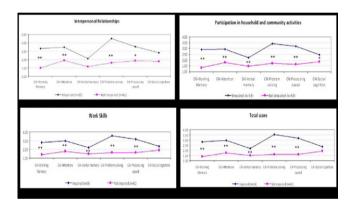


Fig. 1

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.093

### **FC90**

### Cerebral hemodynamics in schizophrenia during the Trail Making Test: A functional transcranial Doppler sonography study

D. Schuepbach<sup>1</sup>, S. Egger<sup>2</sup>,\*, S.C. Herpertz<sup>3</sup>

- <sup>1</sup> Zentrum für Psychiatrie Weinsberg, Clinic of General Psychiatry and Psychotherapy, Sector West, Weinsberg, Germany
- <sup>2</sup> Psychiatric University Hospital Zurich, Department of Psychiatry, Psychotherapy and Psychosomatics, Zurich, Switzerland
- <sup>3</sup> University of Heidelberg, Department of General Psychiatry, Heidelberg, Germany
- \* Corresponding author.

Introduction Schizophrenia is a severe mental disorder, with complex symptoms involving psychosis, negative symptoms and cognitive impairment. The Trail Making Test (TMT) has been widely used to assess attention and executive function. Functional transcranial Doppler sonography (fTCD) of basal cerebral arteries allows monitoring of aberrant cerebral hemodynamics during cognitive tasks in this patient group.

Objectives We assessed cerebral hemodynamics in the middle cerebral arteries (MCA) using fTCD while patients with schizophrenia and healthy subjects performed the TMT and a control task.

Methods Fifteen patients with chronic schizophrenia and 15 healthy controls performed the TMT-A and -B during fTCD measurements of the MCA. Dependent measures were performance, mean cerebral blood flow velocity (MFV) and the lateralization.

Results Patients demonstrated an overall decreased speed of solution (P=0.002), and there was no significant effect of age. They showed a significantly increased flow pattern for the TMT-B (P=0.005). There were no lateralization differences between diagnostic groups.

Conclusions There was a performance deficit in patients with schizophrenia for both TMT-A and -B that fits well with results of existing literature. The aberrant hemodynamic response supports the idea that cognitive performance elicits an aberrant cerebral hemodynamic correlate. It adds to the notion that fTCD is a valuable tool to correlate psychological paradigms with brain perfusion in patients with schizophrenia.

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.094

### FC91

### Does family history of schizophrenia affect the severity of disease?

M. Sisek-Šprem\*, M. Herceg, V. Jukić University Psychiatric Hospital Vrapče, Integral Ward, Zagreb, Croatia

\* Corresponding author.

Introduction Previous studies have demonstrated that family history is associated with earlier age at onset, severity of positive and negative symptoms, and the duration of untreated illness. Hereditary factors may contribute a vulnerability for antisocial and/or violent behaviour per se, and for other stable characteristics such as aggressive behaviour.

*Aim* To analyze the impact of family history of schizophrenia and aggressive behavior among members of family on severity of disease and aggressive behavior of patients.

Method The study population consisted of 120 male schizophrenic patients classified into non-aggressive (n=60) and aggressive (n=60) groups, based on indication for admission in hospital (aggression/anything else but aggression). For severity of disease, we assessed psychopathology using the Positive and Negative Syndrome Scale (PANSS), the number of hospitalizations and the total equivalent dose of therapy (collected from medical record). The presence of a family history and aggression in family was assessed using a semi-structured interview of patients and, when available, family members.

Results Twenty-seven (22.5%) participants were determined to have at least one family member with schizophrenia or another psychotic disorder, with no difference between aggressive (10%) and non-aggressive (12.5%) group. There was no significant interaction between family history and severity of disease (PANSS, number of hospitalizations, total equivalent dose of therapy). Aggressive behaviour in first-degree family member had no influence on aggressive behaviour of patients with schizophrenia.

Conclusion Family history of schizophrenia does not affect the severity of disease nor aggressive behaviour.

Keywords Family history; Schizophrenia; Severity of disease; Aggressive behavior

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.095