



## Oral Communications

### Oral Communications 01: Anxiety Disorders and Somatoform Disorders/Neuroscience in Psychiatry/Obsessive-Compulsive Disorder/Psychosurgery & Stimulation Methods (ECT, TMS, VNS, DBS)

OC-0001

#### Biological motion processing in patients with schizophrenia: a high-density EEG event related potential study

M. Baradits<sup>\*</sup>, B. Kakuszi, S. Bálint, I. Bitter, P. Czobor  
Semmelweis University, Department of Psychiatry and Psychotherapy, Budapest, Hungary

<sup>\*</sup> Corresponding author.

**Background and aims.**– Biological motion (BM) processing constitutes part of social cognition, and a specialized network evolved for its accurate and automatic identification. Neuroimaging studies suggest prominent role for several brain areas in BM processing, including the posterior superior temporal sulcus (**pSTS**) with right hemisphere bias, the extrastriate body area (**EBA**) and the kinetic occipital (**KO**) region. Although the structural underpinnings are relatively well defined, the temporal dimension of the processing is unclear. Patients with schizophrenia with lower score on Zigler social competence scale show deficits in BM and scrambled motion discrimination.

Our aim to identify differences between patients with schizophrenia and healthy controls in electrophysiological correlates of BM recognition.

**Methods.**– EEGs were acquired using high-density 256-channel EEG-system from 40 patients with schizophrenia and 45 healthy controls. We conducted time-frequency analysis of the EEG, and applied random-regression hierarchical linear modelling to identify differences between study groups across all electrodes.

**Results.**– In patients with schizophrenia, the accuracy of BM recognition was significantly lower and reaction time was slower than in healthy controls, (in patients and controls, respectively, the mean accuracy was 80% and 92%; and reaction time was 765 and 690ms). Spectral amplitudes in theta (4–7 Hz) and gamma (30–50 Hz) bands were significantly reduced in patients with schizophrenia compared to controls. Furthermore, BM elicited larger amplitudes in alpha (8–12 Hz) and beta (13–30 Hz) bands.

**Conclusions.**– Biological motion recognition in patients with schizophrenia is impaired. Alterations in theta and gamma

frequency bands may indicate disconnectivity in the underlying neural networks, which may lead to altered BM perception.  
**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0002

#### Spectral analysis of magnetoencephalographic (MEG) correlates of, anxiety, and the effect of methylphenidate, a possible distinction between patients suffering from ADHD and controls

Y. Bloch<sup>1\*</sup>, Y. Dor-Ziderman<sup>2</sup>

<sup>1</sup> Shalvata, Child and adolescent outpatient clinic, Hod hashron, Israel; <sup>2</sup> Bar-Ilan University, Leslie and Susan Gonda Goldschmied Multidisciplinary Brain Research Center, Ramat-Gan, Israel

<sup>\*</sup> Corresponding author.

**Background and aims.**– In recent years there is rising awareness to the interplay of comorbidities, specifically anxiety, in patients suffering from, adult Attention deficits hyperactive disorder (ADHD). The alleged specificity of the effect of stimulant medications on ADHD patients has been questioned, and some have argued for a similar effect on controls when these medications are used as cognitive enhancers. In the presented study spectral power analysis assessed by the magnetoencephalography (MEG) was used to study the underlining brain process related to ADHD, to anxiety and to the effect of methylphenidate (MPH, a stimulant).

**Methods.**– Forty adult examinees (20 suffering from ADHD, and 20 controls) were recruited. In a double blind cross over design all examinees received on one-day MPH and on another placebo. On each day anxiety was reported, and a 9 min recording of resting state was performed using 248 MEG sensors. Spectral analysis was performed. Non-parametric cluster-based permutation statistics (CBP) was used to analyze the data.

**Results.**– The theta wave to beta wave ratio (suggested as a hallmark for the diagnosis of ADHD), was affected by the diagnosis, the presence of anxiety, treatment order (first session with MPH or placebo) and the presence of MPH. The high gamma wave was affected only by diagnosis (ADHD or Placebo). The alpha wave was affected by the medication (MPH or placebo).

**Conclusions.**– The underlining brain activity as reflected by specific brain waves is discriminative and valuable in studying ADHD, but demands prudence and accuracy in the phenomenology

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0003

### Compulsions predict psychological distress through obsessions: exploratory study in a non-clinical sample

A. Araújo<sup>1,2</sup>, A.T. Pereira<sup>1</sup>, D. Mota<sup>1,2</sup>, M.J. Soares<sup>1</sup>, C. Cabaços<sup>1\*</sup>, A.P. Amaral<sup>3</sup>, A. Macedo<sup>1,2</sup>

<sup>1</sup> Institute of Psychological Medicine- Faculty of Medicine- University of Coimbra- Portugal, Institute of Psychological Medicine, Coimbra, Portugal; <sup>2</sup> Centro Hospitalar e Universitário de Coimbra, Psychiatry, Coimbra, Portugal; <sup>3</sup> Institute Polytechnic of Coimbra- ESTeSC-Coimbra Health School, ESTeSC, Coimbra, Portugal

\* Corresponding author.

**Background and aims.**– Obsessive-Compulsive Disorder (OCD) is characterized by obsessions (unwanted thoughts and/or images that cause significant distress) and compulsions (stereotyped behaviors and/or mental acts performed to reduce the distress). While obsessions are related to cognitive inflexibility, compulsions mirror dysfunctional response/behavior inhibition. The Portuguese validated version of the Maudsley Obsessional-Compulsive Inventory (MOCI) assesses three independent but related factors: Doubting/Rumination (more cognitive); Checking and Cleaning (more behavioral).

**Aim.**– To study (a) the correlations between the MOCI dimensions and psychological distress; (b) the mediator role each MOCI dimension on the relationship between the other MOCI dimensions and psychological distress.

**Methods.**– 247 university students (78.9% girls, mean aged  $20.5 \pm 1.64$  years) answered the Portuguese versions of the MOCI and the Depression, Anxiety and Stress Scale. Correlation/mediation were performed using process for SPSS.

**Results.**– All the MOCI dimensions presented significant positive correlations with Anxiety and Depression ( $r > .16$ ,  $p < .05$ ). Doubting/Rumination and Checking also correlated with Stress ( $r > .22$ ,  $p < .01$ ). Doubting/Rumination fully mediated the relationship between Checking and Anxiety/Stress/Depression; and between Cleaning and Anxiety/Depression. Neither Checking or Cleaning were mediators in the relationship between Doubting/Rumination and psychological distress.

**Conclusions.**– Our results of OC symptoms in a non-clinical sample suggest that compulsions may boost obsessions, and this relation generates psychological distress. Our data supports the Compulsive-Obsessive Disorder hypothesis which postulates that obsessions in OCD may be a *post hoc* rationalization of otherwise inexplicable compulsive urges. The “compulsive urges” would be a consequence of a deficit in goal-directed learning, causing these individuals to over-rely on their habit system, resulting in inappropriate persistence of habits (compulsions).

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0004

### As anxious as a vertigo patient? Cognitive-behavioural group therapy in patients with anxiety disorder and functional dizziness – an fMRI study

M. Maywald, S. Levai, D. Keeser, D. Krause, O. Pogarell, S. Karch, A. Chrobok\*

Ludwig-Maximilians University, Department of Psychiatry and Psychotherapy, Munich, Germany

\* Corresponding author.

**Background and aims.**– Functional dizziness (FD) is likely to become a new diagnosis in ICD-11. FD shares many symptoms with anxiety disorders (AD) like avoidance, social withdrawal or hyperarousal. So far, there have been no neuroimaging-studies comparing these

two patient groups regarding cognitive-behavioural therapy (CBT). Aim of this study was to investigate, if a for anxiety patients designed CBT-programme, is as effective for patients with FD and if there are differences in neural correlates before and after treatment in comparison to a healthy control group.

**Methods.**– At present, 24 subjects were included in this study. The subjects were divided into two patient groups (AD and FD) and a matched healthy control group (HC). CBT was held twice a week and consisted of 10 sessions of 120 min each. During fMRI-measurements emotional pictures were shown and subjects answered various questionnaires, e.g. vertigo (VSS), anxiety (STAI-S), depression (BDI-II) and emotional state scales (PANAS), before and after treatment, or a pause (HC).

**Results.**– Regarding the self-rated questionnaires, the first statistical analysis indicates a tendency towards reduced psychiatric scores after the CBT programme in both intervention groups, whereby scores remain constant in the HC. Pre-post fMRI-analysis shows a significant reduced activation in emotional-associated brain regions in both patient groups, in insula, visual cortex, and gyrus frontalis inferior.

**Conclusions.**– Current analyses propose a positive trend towards reduced depression, anxiety and dizziness scores after cognitive behavioural therapy. The BOLD-reactions in anxiety related brain networks seem to decrease after the treatment. However, for more accurate results bigger sample sizes are needed.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0006

### Reconstruction of the global neural network with the application of minimum spanning tree in first-episode schizophrenia patients and its associations with cognitive speed and variability

P. Krukow<sup>1\*</sup>, K. Jonak<sup>2,3</sup>, H. Karakuła-Juchnowicz<sup>1</sup>

<sup>1</sup> Medical University of Lublin, Department of Clinical Neuropsychiatry, Lublin, Poland; <sup>2</sup> Lublin University of Technology, Department of Biomedical Engineering, Lublin, Poland; <sup>3</sup> Medical University of Lublin, Chair of Psychiatry- I Clinic of Psychiatry-Psychotherapy and Early Intervention, Lublin, Poland

\* Corresponding author.

**Background and aims.**– According to disconnection hypothesis, the clinical picture of schizophrenia is an effect of disturbed integration and communication between various brain regions. Minimum Spanning Tree (MST) is advanced method allowing reconstruction of the global neural network showing its abnormalities impeding optimal network organization, and this method has not been used in schizophrenia studies so far.

**Methods.**– A group of patients with first-episode schizophrenia (SZ) and demographically matched healthy controls (HC) underwent resting-state EEG recording and the assessment of cognitive speed. Based on the collected pre-processed EEG signals, an adjacency matrix was computed with application of PLI as a measure of functional connectivity, and then networks were reconstructed with MST algorithm. MST metrics were established for all typically analysed frequencies (from delta to gamma).

**Results.**– Comparing with controls, a network of SZ patients was significantly more centralized and had more random structure and star-like arrangement with overloaded hubs positioned more posteriorly than in HC group. Moreover, selected MST metric significantly differentiating the studied groups turn out to be significant predictors of cognitive speed (increased centrality in beta and gamma bands) and processing variability (decreased number of hubs in the frontal cortex in gamma band).

**Conclusions.**– Obtained findings indicate that the MST is a valid method of neural networks assessment in SZ and significantly predicts a core cognitive deficits present in schizophrenia.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0007

### Well-being of mothers with severely acute malnourished children in face of adversities in saptari district – Nepal during 2015–2016

K. Le Roch<sup>1\*</sup>, F. Tofail<sup>2</sup>, G. Koirala<sup>3</sup>, S. Shrestha<sup>3</sup>, F. Corna<sup>1</sup>, P. Raghavan<sup>4</sup>, P. Bubendorff<sup>4</sup>, I. Rampa<sup>4</sup>, C. Bizouerne<sup>1</sup>

<sup>1</sup> Action contre la Faim, Mental Health and Care Practices, Paris, France; <sup>2</sup> icddr, Maternal and child division, Dacca, Bangladesh; <sup>3</sup> Action contre la Faim, Mental Health and Care Practices, Rajbiraj, Nepal; <sup>4</sup> Action contre la Faim, Mental Health and Care Practices, Kathmandu, Nepal

\* Corresponding author.

**Background and aims.**– In 2015–2016, the Sapatari district of Nepal was prone to disasters and political insecurities: the earthquake that hits Nepal on 25th of April 2015 and the strikes that brought insecurity and disturbances in the inhabitants' life. During that period, we conducted the FUSAM clinical trial that assessed the mental health of mothers with severe acute malnourished (SAM) children. This study shows the impact of adversities on the well-being of those mothers.

**Methods.**– 427 mothers of SAM children and 213 mothers with healthy children were enrolled between December 2014 and February 2016. During home visits, we administered psychometric tests: WHO Self Reporting Questionnaire (SRQ 20), Edinburgh Postnatal Depression Scale (EPDS), Multidimensional Scale of Perceived Social Support (MSPSS), and Rosenberg self-esteem scale (RSE). One additional questionnaire measured traumatic symptoms based on the DSM-V criteria. We compared the mean scores before and after the earthquake and around the insecurity period.

**Results.**– After the earthquake, the comparison between the two groups showed that the mental health status of mothers with SAM children was more affected negatively. Before the insecurity period, the mean scores were higher for mothers with SAM children for SRQ and traumatic symptoms and lower for MSPSS mean scores. The comparison between groups showed that the mental health status of mothers with SAM children remains more affected by persistent adverse situations.

**Conclusions.**– Researchers in humanitarian contexts should consider carefully children's health status as well as other indicators when studying maternal mental health in the aftermath of adverse events that are unique or prolonged.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0008

### FMRI evaluation of deep brain stimulation in obsessive-compulsive disorder

M. Naesström<sup>1\*</sup>, J. Eriksson<sup>2</sup>, P. Blomstedt<sup>3</sup>, O. Bodlund<sup>1</sup>

<sup>1</sup> Umeå Medical University, Clinical Science– Psychiatry, Umeå, Sweden; <sup>2</sup> Umeå Medical University, Umeå center for Functional Brain Imaging, Umeå, Sweden; <sup>3</sup> Umeå Medical University, Department of Pharmacology and Clinical Neuroscience, Umeå, Sweden

\* Corresponding author.

**Background and aims.**– Deep brain stimulation (DBS) is a potential novel treatment in resistant obsessive-compulsive disorder

(OCD). The exact mechanism of action of DBS in OCD, is not yet fully understood. The aim of this study was to investigate with functional magnetic resonance imaging (fMRI) how DBS affects anxiety-related brain activity in patients with severe OCD, and explore which areas of the brain are possible involved in this treatment.

**Methods.**– 6 patients undergoing DBS in the bed nucleus of stria terminalis (BNST) for sever OCD were evaluated with symptom provocation fMRI. 4 patients underwent in total 3 fMRI scans: before surgery, and after at least 1 year of treatment with DBS on and off. The remaining two patients underwent fMRI scans with DBS on and off. Changes in anxiety related brain activity was then analyzed based on the fMRI findings.

**Results.**– Decrease in anxiety related brain activity was seen in the supplementary motor area and anterior insula when comparing. In the supplementary motor area a significant decrease was seen in 4/6 patients and in the anterior insula the change was significant in half of the patients. The difference in anxiety related activity tended to be more pronounced when comparing the pre- and on DBS fMRIs.

**Conclusions.**– We hypothesize that a possible mechanisms of BNST DBS in OCD could be modulation of anxiety related activity in the supplementary motor area and anterior insula, two regions that play an important role in the pathophysiology of this disorder.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## Oral Communications 02: Bipolar Disorders/E-mental Health/Consultation Liaison Psychiatry and Psychosomatics

OC-0013

### Validation of mobile device use for the evaluation of suicidality

E. Chan<sup>1\*</sup>, K. Wallace<sup>2</sup>, E. Yang<sup>2</sup>, L. Roper<sup>2</sup>, G. Aryal<sup>2</sup>, R.J. Lodhi<sup>2</sup>, K.J. Aitchison<sup>2</sup>

<sup>1</sup> University of Alberta, Department of Psychiatry, Edmonton, Canada; <sup>2</sup> University of Alberta, Departments of Psychiatry and Medical Genetics, Edmonton, Canada

\* Corresponding author.

**Background and aims.**– Suicide rates in 2016 were 11.0 per 100,000 people in Canada (Statistics Canada, 2018). Smartphone app-based rating scales have potential as tools to monitor mental health conditions. Our aim was to assess the validity of smartphone applications as tools for monitoring symptoms of suicidality.

**Methods.**– We developed a mobile application for administration of the new Suicide Ideation and Behavior Assessment Tool (SIBAT) (Williamson et al., 2017, *Biol Psychiatry*). The SIBAT was administered using the application via smartphone ( $n=93$ ) or computer ( $n=90$ ). Data were compared in order to assess the validity of smartphone-based assessment.

**Results.**– Figure 1 shows the responses from a sample question of the SIBAT. Internal consistency of data obtained via mobile device (Cronbach's alpha = 0.955) was slightly higher than via computer (Cronbach's alpha = 0.938), but not statistically different ( $\chi^2 = 2.23$ ,  $p = 0.14$ ). Median score for mobile device users (42) and computer users (43) was not statistically significantly different ( $p = .56$ ).



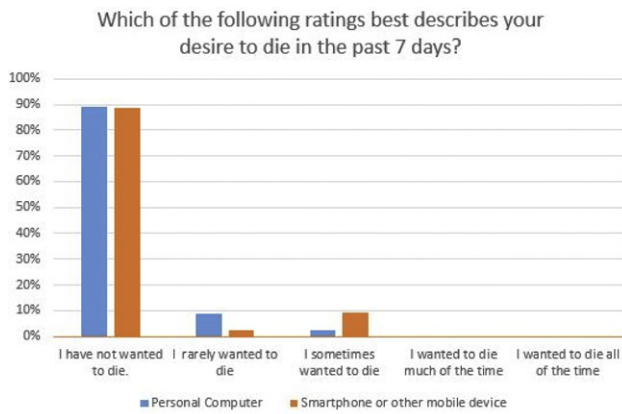


Fig. 1. Distribution of responses to sample question.

**Conclusions.**– Responses were similar between groups. Notably, participants completing the measure using their smartphone reported higher rates of suicidal ideation. Data collected via mobile device showed high internal consistency and was statistically similar to data collected via personal computer. This suggests that mobile devices are reliable and valid tools in the collection of data on suicidality.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0014

**More frequent lithium testing associates with lower hospital admission rate for bipolar disorder – what this tells us about GP practice engagement with this group**

D. Holland<sup>1</sup>, A. Heald<sup>2\*</sup>, M. Stedman<sup>3</sup>, C. Duff<sup>4</sup>, A. Fryer<sup>4</sup>, A. Yung<sup>5</sup>, S. Bailey<sup>6</sup>

<sup>1</sup> University of Keele, The Benchmarking Partnership, Stoke on Trent, United Kingdom; <sup>2</sup> University of Manchester, The School of Medicine and Manchester Academic Health Sciences Centre, Manchester, United Kingdom; <sup>3</sup> Res Consortium, Research, Andover, United Kingdom; <sup>4</sup> University Hospital of North Midlands, Department of Clinical Biochemistry, Stoke on Trent, United Kingdom; <sup>5</sup> University of Manchester, Institute of Brain- Behaviour and Mental Health, Manchester, United Kingdom; <sup>6</sup> Academy of Medical Royal Colleges, Chair Choosing Wisely Steering Group, London, United Kingdom

\* Corresponding author.

**Background and aims.**– Lithium treatment is a cornerstone of bipolar affective disorder management.

We determined how frequency of lithium level checks at GP (family) practice level relates to psychiatric admission rate for bipolar affective disorder relapses.

**Methods.**– We determined from 103 GP practices in one area of England (Stoke-on-Trent/North Staffordshire), the relation between the interval between GP lithium level blood tests and psychiatric admission rate (1<sup>st</sup> January 2014 to 31<sup>st</sup> December 2014).

**Results.**– The data fell into six groups (see Fig. 1), the highest being a test rate more than 59 tests/1000 people on the severe enduring illness (SMI) register, the lowest being a test rate less than 20 tests/1000 people on the SMI register. SMI register size at the GP practice varied from 11 to 129 people.

The more frequently the tests were requested, the lower the number of admissions/1000 patients on the SMI register. Annual admission rate varied from 0.75/1000 patients on the SMI register for the highest lithium test rate practices to 7.8/1000 SMI register patients for the lowest test rate practices.

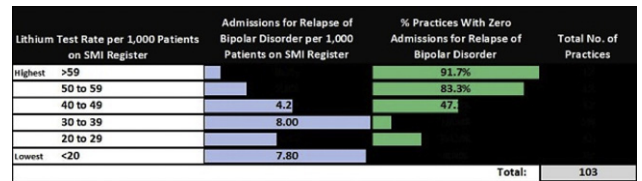


Fig. 1. Lithium test: six groups.

**Conclusions.**– We have demonstrated that higher frequency of lithium testing relates to lower hospital admission rate for relapse of bipolar affective disorder. We propose that lithium testing may act as a barometer of patient experience and patient/professional engagement at GP practice level with attendant impact on hospital admission rate.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0015

**Comparison of psychological and physical symptoms in patients with non-cardiac-atypical chest pain according to presence or absence of alexithymia**

Y.M. Jae\*, L. Kyoung Hwan

Bongseng Hospital, psychiatry, Busan, Republic of Korea

\* Corresponding author.

**Background and aims.**– Psychological factors have been postulated to play a central role in Non-Cardiac-Atypical chest pain (NCACP). Alexithymia is defined as the inability to recognize emotions and their subtleties and textures. We compared psychological and physical symptoms in patients with NCACP according to presence or absence of alexithymia.

**Methods.**– Eighty-four patients who visited cardiology department for chest pain but could not be diagnosed with a clear cause of pain after appropriate evaluation (so called NCACP) were included in this study. They were divided into alexithymia (n=45) and non-alexithymia (n=39) groups based on Toronto Alexithymia Scale-20-K (TAS-20-K) scores. Beck Depression Inventory (BDI), State-Trait Anxiety Inventory (STAI), Patient Health Questionnaire (PHQ-15) and Korean-version of WHO Quality of Life (QoL) scale Abbreviated Version (WHOQOL-BREF) were administered. T-tests and Univariate linear regressions were employed in data analyses.

**Results.**– Alexithymia group showed significantly higher scores of BDI (30.9 ± 9.4 vs 21.8 ± 8.1), STAI-Trait (64.5 ± 11.2 vs 55.9 ± 13.4) and PHQ-15 (28.1 ± 3.7 vs 10.7 ± 7.8) and lower score of QoL (58.7 ± 14.0 vs 70.5 ± 10.2) than non-alexithymia group in patients with NCACP (p < 0.001 in all statistics). There was no significant difference in STAI-State scores between two groups (60.4 ± 9.9 vs 60.0 ± 11.5, p = 0.10). BDI (58.7%, p < 0.001), State-anxiety (11.0%, p < 0.001), Trait-anxiety (51.0%, p < 0.001) and PHQ-15 (60.1%, p < 0.001) accounted significant amount of the variance in QoL in alexithymia group. State-anxiety (27.3%, p < 0.001) and Trait-anxiety (19.8%, p < 0.05) accounted significant amount of the variance in QoL in non-alexithymia group.

**Conclusions.**– NCACP patients with alexithymia suffered from more psychological and physical symptoms than patients with non-alexithymia.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0016

### Personality changes following heart transplants: can epigenetics explain these transformations?

M. Liester<sup>\*</sup>, M. Liester<sup>1</sup> University of Colorado School of Medicine, Psychiatry, Monument, USA<sup>\*</sup> Corresponding author.

**Background and aims.**– Personality changes following heart transplants have been reported for decades. Recent advances in the field of epigenetics may explain how such transformations occur. We investigated the possible relationship between personality changes following heart transplants and epigenetic mechanisms.

**Methods.**– We began our research by reviewing a 1999 article by Pearsall examining personality changes in ten heart transplant recipients. We then conducted a PubMed search using the terms “heart transplant,” “memory,” “cellular memory,” “epigenetics” and “epigenetic memory.” All retrieved articles were screened and relevant abstracts were selected for more detailed evaluation. Biographies of all articles were searched for additional references. Articles and books selected were those that evaluated the association between heart transplants and cellular/epigenetic memory.

**Results.**– Heart transplant recipients report personality changes including altered preferences (e.g. music, foods, activities, sexual orientation, etc.) and behaviors (e.g. change in eating patterns, change in sexual behaviors, change in laugh) that mimic their donor’s preferences. They also describe experiencing memories from their donor’s life (e.g. donor’s name, events related to donor’s death, etc.).

Epigenetic modifications of chromatin produce cellular memory. Animal and human studies have demonstrated memories can be transmitted between individuals via epigenetic modifications. We hypothesize epigenetic mechanisms are responsible for the personality changes that occur following heart transplants.

**Conclusions.**– Epigenetic processes are known to play a role in memory and learning. The discovery that memories can be transferred from one individual to another via epigenetic modifications provides a mechanism for the transfer of memories, as well as other personality traits, from heart transplant donors to recipients.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0017

### Personality traits and the risk of incident (hypo)mania: a 9-year longitudinal cohort study

R. Mesbah<sup>1\*</sup>, M.A. Koenders<sup>2</sup>, A.T. Spijker<sup>3</sup>, M. de Leeuw<sup>1</sup>, L. Boschloo<sup>4</sup>, B.W.J. Penninx<sup>5</sup>, A.M. van Hemert<sup>1</sup>, E. Giltay<sup>1</sup><sup>1</sup> Leiden University Medical Center, Psychiatry, Leiden, The Netherlands; <sup>2</sup> Leiden University, Psychology, Leiden, The Netherlands; <sup>3</sup> Mental Health Care PsyQ Kralingen, Department of Mood Disorders, Rotterdam, The Netherlands; <sup>4</sup> University Medical Center Groningen, Psychiatry, Groningen, The Netherlands; <sup>5</sup> Amsterdam UMC- Vrije Universiteit, Psychiatry, Amsterdam, The Netherlands<sup>\*</sup> Corresponding author.

**Background and aims.**– Bipolar disorder (BD) is characterized by the alternating occurrence of (hypo)manic and depressive episodes. A considerable amount of BD patients initially only suffer from unipolar depressed-mood episodes. Within the group of unipolar depressed patients, it is unknown who will develop (hypo)manic episodes over time. The aim of the current study was to determine whether personality traits independently predicted the subsequent development of (hypo)manic episodes within patients diagnosed with unipolar depression and anxiety disorders.

**Methods.**– The Netherlands Study of Depression and Anxiety (NESDA) is a cohort study with measurements at baseline and at the 2-, 4-, 6-, and 9-year follow-up. Development of a (hypo)manic episode during follow-up was assessed with the Composite International Diagnostic Interview (CIDI). The development of (hypo)manic symptoms was assessed with the Mood Disorder Questionnaire (MDQ). The Big Five personality traits served as the independent variables in multivariable Cox regression analyses.

**Results.**– Analyses on (hypo)manic episodes ( $n = 1,888$ , mean age 42.5 years, 68.3% women) revealed 31 incident cases, whereas there were 233 incident cases of (hypo)manic symptoms ( $n = 1,319$ , mean age 43.1, 71.9% women). In multivariable analyses, low agreeableness was independently associated with an increased risk of developing a (hypo)manic episode with a hazard ratio (HR) of 0.54,  $p = 0.002$ , 95% CI [0.37, 0.78]. This finding was consistent with the development of (hypo)manic symptoms with an HR of 0.77,  $p < 0.001$ , 95% CI [0.67, 0.86].

**Conclusions.**– The current study gained valuable insight into personality-related risk factors for the development of (hypo)manic episodes and the symptoms thereof.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0018

### Updated meta-analysis and moderator analysis of deprexis, an electronic cognitive behavioural therapy for depression

B. Meyer<sup>\*</sup>, O. Bültmann

GAIA, Research, Hamburg, Germany

<sup>\*</sup> Corresponding author.

**Background and aims.**– Electronically delivered cognitive behavioural therapy (eCBT) for depression could reduce treatment gaps or augment other treatments, including psychotherapy and medication. Meta-analyses have shown that some eCBT interventions are effective but differ in content and efficacy. Therefore, each intervention ought to be evaluated separately. The aim was to provide an updated meta-analysis and moderator analysis of deprexis, an artificial intelligence-based eCBT intervention for depression.

**Methods.**– Random effects meta-analysis was performed on all 12 deprexis randomized controlled trials (RCT). We examined potential publication bias and putative moderators, including clinician support, baseline severity, primary illness, and developer involvement.

**Results.**– The overall efficacy of deprexis was confirmed, with an average effect of  $d = 0.51$  (95% CI: 0.40–0.62, NNT = 3.6, Fig. 1). Heterogeneity was low ( $I^2 = 26\%$ ). The funnel plot and Egger’s test suggested no publication bias. Moderator analyses showed that clinician support, primary illness, and developer involvement did not influence treatment efficacy. The intervention was effective for mild to severe depression, and effects were slightly larger in samples with moderate or severe baseline severity.

**Conclusions.**– This updated meta-analysis with a total of 2517 participants confirmed the efficacy of deprexis, with an effect size comparable to that reported for conventional CBT in recent meta-analyses. Moderator analyses showed efficacy across a broad spectrum of severity. These results suggest that deprexis can be used alone or as an adjunct to other treatments, either CBT or antidepressant, or to reach patients without access to CBT.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0019

### Depressive features are related to higher inflammatory markers in a sample of euthymic patients with bipolar disorder: a focus on gender differences

E. Muñoz\*, P. Rodriguez, G. Anmella, I. Grande, E. Vieta, E. Jimenez  
*Barcelona Bipolar Disorders Program- Institute of Neurosciences- Hospital Clinic-, University of Barcelona- IDIBAPS- CIBERSAM- Barcelona- Catalonia- Spain., Barcelona, Spain*

\* Corresponding author.

**Background and aims.**– Bipolar disorder has been associated with a dysregulation of the inflammatory system. However, there is scarce data on differences in inflammatory patterns according to clinical phenotypes. The main objective of this study was to evaluate the association between clinical features and several inflammatory indexes in a sample of euthymic patients with bipolar disorder (BD). **Methods.**– We assessed the neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR), lymphocyte-monocyte ratio (LMR), monocyte-lymphocyte ratio (MLR) and the systemic immune-inflammation index (SII) in a sample of 254 euthymic patients with BD (128 women and 126 men). Differences in inflammatory indexes according to age, gender and clinical features were assessed using t-test or ANOVA, as appropriate. Correlations between inflammatory indexes and illness duration or number of episodes were also examined.

**Results.**– Our results showed that depressive features were associated with higher inflammatory indexes, especially in women. In men, patients with history of atypical symptoms, psychotic depression or suicidal attempts showed significantly higher SII ( $p = 0.009$ ), LMR ( $p = 0.029$ ) and PLR ( $p = 0.011$ ), respectively. When focusing on women, those with history of depressive onset of BD showed higher NLR ( $p = 0.045$ ) and SII ( $p = 0.02$ ). Significantly higher MLR was found in female patients with history of melancholic features ( $p = 0.037$ ), psychotic depression ( $p = 0.044$ ) and suicidal attempts ( $p = 0.002$ ). Those female patients with history of post-partum relapse showed higher SII ( $p = 0.006$ ). No correlations were found between illness duration or number of episodes and inflammatory indexes.

**Conclusions.**– In our sample, depressive features were associated with higher values in the examined inflammatory indexes, especially among women.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0020

### Mindfulness-based intervention through a smartphone application versus mindfulness-based stress reduction (MBSR) program in healthcare students: a randomised controlled trial

A. Orosa Duarte<sup>1\*</sup>, R. Mediavilla<sup>1</sup>, V. López Herrero<sup>2</sup>, J. Garde González<sup>2</sup>, B. Rodríguez Vega<sup>1</sup>, A. Muñoz San José<sup>1</sup>, Á. Palao Tarrero<sup>1</sup>, M.F. Bravo Ortiz<sup>1</sup>, C. Bayón Pérez<sup>1</sup>

<sup>1</sup> La Paz University Hospital, Psychiatry Department, Madrid, Spain; <sup>2</sup> Autonomous University of Madrid, Faculty of Medicine, Madrid, Spain

\* Corresponding author.

**Background and aims.**– Healthcare students suffer from higher levels of anxiety and depression than the general population. It compromises not only their mental health, but also the quality of care provided. Mindfulness-Based Stress Reduction (MBSR) program has proven to be an effective intervention for lowering stress in numerous studies. However, this intervention asks for a signifi-

cant degree of personal involvement, thus the number of dropouts is often reported as a problem. New technologies might allow users to adapt training to their personal schedules. The aim of this study is to compare the efficacy of a mindfulness-based intervention through a smartphone application against a regular training in the reduction of anxiety symptoms.

**Methods.**– A randomised, rater blind, controlled clinical trial was conducted. 140 students from degrees of Medicine, Nursing, Psychology and Nutrition were recruited at the Autonomous University of Madrid and allocated to one of following arms: app, MBSR program or control group. Anxiety (State-Trait Anxiety Inventory) was measured at baseline and post-intervention (8 weeks).

**Results.**– 92 participants completed both evaluations. App intervention arm showed slightly lower dropout rates than MBSR arm. ANOVA test found a significantly bigger reduction of anxiety in app group than in control group (CI = 1,88–12,34;  $p < 0,004$ ).

**Conclusions.**– The results indicate that a smartphone application can be as effective as MBSR program in reducing anxiety symptoms among healthcare students.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0022

### The effect of HPA axis functioning on visual memory in bipolar disorder

K. Tournikioti<sup>1\*</sup>, P. Ferentinos<sup>2</sup>, I. Michopoulos<sup>2</sup>, D. Dikeos<sup>3</sup>, C. Soldatos<sup>4</sup>, M. Alevizaki<sup>5</sup>, A. Douzenis<sup>2</sup>

<sup>1</sup> National and Kapodistrian University of Athens Greece, 2nd Department of Psychiatry, Athens, Greece; <sup>2</sup> National and Kapodistrian University of Athens- Medical School, 2nd Department of Psychiatry, Athens, Greece; <sup>3</sup> National and Kapodistrian University of Athens- Medical School, 1st Department of Psychiatry, Athens, Greece; <sup>4</sup> National and Kapodistrian University of Athens- Medical School, Mental Health Care Unit- Evgenidion Hospital, Athens, Greece; <sup>5</sup> National and Kapodistrian University of Athens- Medical School, Department of Medical Therapeutics- Endocrine Unit, Athens, Greece

\* Corresponding author.

**Background and aims.**– Bipolar Disorder (BD) is frequently associated with cognitive deficits that have been related to various clinical characteristics of the disorder. Moreover, many bipolar patients show altered HPA axis function such as hypercortisolemia and DST non-suppression. However, few studies have examined the effect of HPA axis function on cognition in BD. The aim of our study was to investigate the performance of bipolar patients in cognitive tasks targeting visual memory within the framework of the HPA axis hyperactivity model.

**Methods.**– Cognitive performance of 60 bipolar-I patients and 30 healthy controls was evaluated with CANTAB battery tasks targeting spatial memory (SRM) and paired associative learning (PAL). Moreover, basal cortisol levels were measured and the Dexamethasone Suppression Test (DST) was administered. Multiple linear regression analyses were performed with age, gender and education as covariates.

**Results.**– Bipolar patients showed significantly poorer performance in paired associative learning (PAL) than controls. Moreover, among patients a statistically significant association was found ( $p = 0.029$ ) between basal cortisol and performance in PAL. Specifically, after correcting for confounders higher levels of basal cortisol were correlated with more errors committed in PAL.

**Conclusions.**– The present study is one of few studies that have examined the effect of HPA axis function and cortisol on neurocognitive function in BD. Our findings provide evidence on the relation of cortisol with visuo-spatial associative memory in BD. Moreover, they suggest that hypercortisolemia in the long-term may result in hippocampal toxicity, possibly leading to altered visual memory function in BD.



*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

## Oral Communications 03: Epidemiology and Social Psychiatry/Psychoneuroimmunology/Sleep Disorders & Stress

OC-0023

### Inflammation and the occurrence of delirium in acutely ill older medical inpatients

D. Adamis<sup>1\*</sup>, K. Finn<sup>2</sup>, V. Melvin<sup>1</sup>, J. Williams<sup>1</sup>, G. McCarthy<sup>1</sup>, D. Meagher<sup>3</sup>

<sup>1</sup> Sligo Mental Health Services, Psychiatry, Sligo, Ireland; <sup>2</sup> Cork Institute of Technology, School of Biological Science, Cork, Ireland; <sup>3</sup> University of Limerick, Psychiatry, Limerick, Ireland

\* Corresponding author.

*Background and aims.*– Delirium is a complex neuropsychiatric syndrome with high prevalence among elderly medical inpatients. It often occurs during infections associated with elevated levels of cytokines and therapeutic use of cytokines can induce delirium. From our previous studies we had hypothesised that high levels or persistence of proinflammatory cytokines are not requirements for delirium if there are deficits in the immunoreactivity of the brain. To examine the association of demographic, clinical and biological factors (proinflammatory and neuroprotective) with the presence of delirium.

*Methods.*– Prospective, longitudinal. Consecutive elderly inpatients (aged 70+), were assessed twice weekly with MoCA, Confusion Assessment method (CAM), APACHE-II. Delirium has been defined with CAM. Previous history of dementia was evaluated with IQCODE. Serum levels of IL-1 $\alpha$ , IL-1 $\beta$ , IL-1RA, IL-6, IL-8, TNF- $\alpha$ , IFN- $\gamma$ , IGF-I, GH, NGF- $\beta$  were estimated at each assessment with ELISA method.

*Results.*– The sample consisted of 198 participants (mean age 80.63; SD: 6.81; range 70–97). Of these 92 (46.5%) were females. Eighty six (43.4%) were identified with a history of dementia. Incident or prevalence delirium have been identified with CAM in 40 participants (20.2%). Using GEE model for the analysis of the longitudinal data it was found that lower levels of circulating IGF-I, and IL-1 $\alpha$  and lower scores in MoCA are significantly ( $P < 0.05$ ) associated with any delirium (prevalent or incident) during hospitalisation.

*Conclusions.*– The pro-inflammatory cytokines studied and the severity of illness do not appear to be associated, in older medically ill patients, with delirium but lower cognitive ability (MoCA) and low levels of both neuroprotective factors (IGF-I, IL-1 $\alpha$ ) were associated.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0024

### The prevalence of loneliness and its association with mortality among older adults in Latin America, China, and India: a cross-cultural study

Q. Gao<sup>\*</sup>, R. Mayston, M. Prina

King's College London, Center for Global Mental Health- Health Services and Population Research Department- Institute of Psychiatry- Psychology & Neuroscience- King's College London, London, United Kingdom

\* Corresponding author.

*Background and aims.*– Loneliness is prevalent among older adults around the world. There is still a lack of evidence about the epidemiology of loneliness among older adults living in low and middle-income countries (LMICs). This study was designed to explore the prevalence of the 10/66 measure of self-reported experience of loneliness and to investigate whether loneliness predicts mortality in Latin America, China and India.

*Methods.*– The study based on population-based cross-sectional (2003–2007) and longitudinal surveys (follow-up 2007–2010) from the 10/66 Dementia Research Group project. The surveys were conducted among older adults (aged 65 or above) living in 11 catchment areas in 8 countries, including Cuba ( $N = 2897$ ), Dominican Republic ( $N = 2000$ ), Puerto Rico ( $N = 1914$ ), Venezuela ( $N = 1944$ ), Peru ( $N = 1884$ ), Mexico ( $N = 1992$ ), China ( $N = 2101$ ) and India ( $N = 1953$ ).

*Results.*– The standardized prevalence of loneliness varied between 25.3% and 32.4% in Latin America and was 18.3% in India. China showed an extremely low prevalence of loneliness (3.8%). In pooled meta-analyses, after adjusting for potential confounders, there is robust evidence about the association between loneliness and mortality across Latin America (pooled HR = 1.16, 95%CI 1.05–1.29,  $I^2 = 23.5\%$ ). In addition, when restricted to China and India, loneliness significantly increased risk of mortality in China (adjusted HR = 1.57, 95% CI 1.01–2.43), but there were no associations in India.

*Conclusions.*– This study contributes to evidence-base about prevalence and suggests that, loneliness is common in many LMIC settings and that it is closely linked to health outcomes, most importantly as a predictor of mortality.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0025

### Atypical long-acting injectables decrease mortality risk compared to other antipsychotics

P. Zagożdżon<sup>1</sup>, J. Grabowski<sup>2\*</sup>

<sup>1</sup> Medical University of Gdansk, Department of Hygiene and Epidemiology, Gdansk, Poland; <sup>2</sup> Medical University of Gdansk, Department of Developmental- Psychotic and Geriatric Psychiatry, Gdansk, Poland

\* Corresponding author.

*Background and aims.*– Evidence for correlation of antipsychotics use and mortality is inconsistent despite multiple attempts to analyze available data. Our aim was to establish how long-acting injectables (LAI) and other neuroleptic subgroups usage relates to mortality rates with regards to a possible role of somatic comorbidities.

*Methods.*– We examined antipsychotic use and mortality using a health insurer database on filled in prescriptions in years 2008–2012 in the Pomeranian region of Poland. 88,431 patients and 1,095,518 neuroleptic prescriptions were included in the analysis. There were 3504 patients with LAI prescriptions. Cardiovascular, diabetic or lipid-lowering drugs were prescribed in 61% of patients receiving antipsychotics. Cox proportional hazard was used to analyze mortality risk in patients treated with LAI compared to other neuroleptic subgroups.

*Results.*– After adjusting for age, sex and cardiovascular comorbidities subjects receiving atypical LAI (risperidone and olanzapine only) had lower overall mortality risk compared to those on orally administered antipsychotics (hazard ratio [HR] = 0.78; 95% confidence intervals [CI] 0.6 to 1.0) and to those on clozapine (HR = 0.72; 95% CI 0.54 to 0.96). There was no difference in mortality rates in patients treated with typical LAI compared to oral antipsychotics. Female gender and use of antilipemic medication was associated with reduced mortality.

*Conclusions.*– Atypical LAI seem to be safer than other antipsychotics in terms of overall mortality which may partly be a result of

better compliance associated with method of administration. Main limitations of the study include only partial attribution of filled-in drugs to diagnosis and other confounding typical for administrative healthcare registries.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0026

### Evolution of anti-nmda receptor encephalitis clinical features in adults

R. Gurrera

VA Boston Healthcare System, Mental Health Service, Brockton, USA

*Background and aims.*– INTRODUCTION: Anti-NMDA receptor encephalitis is the most common autoimmune encephalitis in adults. Most patients are initially evaluated by a psychiatrist because of its marked propensity to mimic psychiatric disorders, and missed diagnoses are common. Significant residual disability, or death, is likely to ensue without prompt and effective treatment. OBJECTIVES: To facilitate early recognition of this disorder by elucidating the time course of salient clinical features in adults presenting with symptoms or behaviors suggesting a primary psychiatric disorder.

*Methods.*– METHODS: A systematic literature search identified published reports of anti-NMDAr encephalitis associated with psychiatric symptoms. After eliminating redundancies, the frequencies and relative timing of clinical features were tabulated. Temporal ranks were assigned to these features based on their order of appearance relative to one another in each patient. Median ranks were used to sequence the most common clinical features.

*Results.*– RESULTS: Two hundred thirty unique cases (45 male, 19.6%) met study inclusion criteria. A viral-like prodrome was reported in 29.8% of cases. Ten features were reported in at least 25% of patients and tended to occur in the following chronological sequence based on median temporal ranks: behavioral symptoms; fever; seizures, diminished arousal, and catatonic signs; disorientation/confusion, memory impairment, and language dysfunction; and dyskinesias. Orofacial dyskinesias tended to emerge later than other features.

*Conclusions.*– CONCLUSIONS: Clinicians should be alert to the possibility of anti-NMDAr encephalitis when new psychiatric symptoms are accompanied by a recent viral prodrome, fever, seizures, diminished arousal or new onset of catatonic signs. More distinctive features, such as orofacial dyskinesias, typically emerge later.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0027

### Clinical progression of anti-nmda receptor encephalitis in children and adolescents

R. Gurrera

VA Boston Healthcare System, Mental Health Service, Brockton, USA

*Background and aims.*–

*Introduction.*– Anti-NMDA receptor encephalitis is more frequent than viral encephalitis in children and adolescents. Its remarkable ability to mimic psychiatric disorders often hinders diagnosis. Clinical outcomes following prompt immunotherapy are usually good, but delayed treatment often results in a protracted course with significant residual disability or death.

*Objectives.*– To expedite recognition of this disorder in children and adolescents likely to be referred for psychiatric evaluation by characterizing the earliest salient clinical features.

*Methods.*– METHODS: A systematic literature search identified all published reports of antibody-confirmed anti-NMDArE associated with psychiatric symptoms in patients <19 years old. Redundancies were eliminated manually, and temporal ranks were assigned to clinical features according to their relative order of appearance

in each patient. Median temporal ranks were used to compare sequencing of the most common features.

*Results.*–167 cases (46 males, 27.5%) met inclusion criteria. A viral prodrome was present in 48 (28.7%), and suspected in 16 (9.6%), cases. Eleven features were reported in 25% or more of cases, with median temporal ranks indicating the following sequence: behavioral/psychiatric; seizures, fever; insomnia; dyskinesias other than orofacial; disorientation/confusion; orofacial dyskinesias; reduced arousal, catatonic features, language dysfunction; and memory impairment. The configuration and temporal sequencing of features varied greatly between individuals.

*Conclusions.*– Clinicians need to suspect this disorder when children or adolescents who develop new psychiatric symptoms in the context of a recent viral prodrome, or when they are accompanied by dyskinesias, seizures, fever, insomnia, disorientation/confusion or diminished arousal. Catatonic signs, language disturbance and memory dysfunction occur frequently but appear later.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0028

### Sleep disturbance in Huntington's disease in relation to depressive disorder

K. Gustaw-Rothenberg<sup>1</sup>, A. Ahmed<sup>2</sup>

<sup>1</sup> The Cleveland Clinic, Psychiatry, Cleveland, USA; <sup>2</sup> The Cleveland Clinic, Neurology, Cleveland, USA

\* Corresponding author.

*Background and aims.*– Both mood disorders as well as sleep disturbances are a prominent feature of Huntington's disease. Studies involving HD patients suggest that deficit contributing to disordered sleep is reduced suprachiasmatic nucleus output. This raises the possibility that the disordered sleep and circadian function experienced by HD patients may be an integral part of the disease. Therefore, we aimed to delineate the nature of sleep disturbances and identify correlates of sleep impairment in the context of depression in HD patients.

*Methods.*– Genetic, mood and sleep parameters were analyzed in 37 Patients with HD (CAG repeats 44 range 38–62 median 43) diagnosed and treated in HD Center at Cleveland Clinic. Clinical questionnaires for sleep and depression were used. Sleep disorders were categorized by DSM 5 criteria. Depression was assessed by PHQ 9.

*Results.*– 80% of examined report at least one episodes of MDD and all were treated for depression. Patient presented only with minimal (PHQ1-4) or mild depression (PHQ5-9). Sleep impairment was reported by 94.5% examined. Circadian rhythm disorders with delayed sleep phase type dominated in the group (30/37, 81%) followed by insomnia (26/37; 70%) and hypersomnia (7/37; 18%). Only 13% of Patients reported morning awakenings. Depression correlated with sleep disturbance ( $r = +0.76$ ) but not with number of CAG repeats ( $r = +0.17$ ). Sleep impairment persisted beyond treatment for depression in 32/37; 86% of Patients.

*Conclusions.*– Sleep dysfunction in HD may be an integral part of the disease independent from mood disorder. Treating circadian and sleep disruptions parallel to addressing depression is recommended.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.



OC-0029

### Clinical characteristics of major depressive disorder among North Korean defectors

H. Lee<sup>\*</sup>, J.H. An, J.P. Hong

Samsung Medical Center, Department of Psychiatry, Seoul, Republic of Korea

<sup>\*</sup> Corresponding author.

**Background and aims.**– With the ever-increasing number of North Korean Defectors (NKD) entering South Korea, helping their successful adaptation to South Korean society has become a major undertaking for the government of South Korea. The purpose of this study was to figure out the clinical characteristics and symptomatology of NKD with major depressive disorder (MDD) compared to South Korean with MDD.

**Methods.**– The subjects, NKD, were 300 adults settled in South Korea for 3 years or less. Between June 1, 2016 and October 31, 2016, face-to-face interviews were conducted using the North Korean version of the WHO-Composite International Diagnostic Interview (NK-CIDI) to diagnose DSM-IV psychiatric disorders. Corresponding data among general South Korean population ( $N=5,102$ ) were also obtained with comparable methodology.

**Results.**– Lifetime prevalence of major depressive disorder (MDD) was 22.3% in NKD and 4.9% in general South Korean population. Among the diagnostic criteria of MDD according to DSM-IV, NKD with MDD were more likely to express the symptoms of “change of appetite or weight” (97.3%), “feeling of worthlessness or guilty” (38.4%), but less to the symptoms like “recurrent thoughts of death or suicide” (53.4%) compared to South Korean with MDD. NKD with MDD showed lower average score in Brief Resilience scale (19.45), satisfaction with one’s overall life (5.56) and higher score in UCLA social loneliness scale (19.49) than those of NKD without MDD.

**Conclusions.**– Considering the symptom patterns and psychosocial characteristics of NKD with MDD, mental health support is needed for successful assimilation of defectors.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0030

### Pediatric prolonged-release melatonin for sleep in children with autism spectrum disorder: implications for child behavior and caregiver’s quality of life

T. Nir<sup>1</sup>, A. Maras<sup>2\*</sup>, B. Malow<sup>3</sup>, C. Schroder<sup>4</sup>, P. Gringras<sup>5</sup>, N. Zisapel<sup>6</sup>

<sup>1</sup> Neurim Pharmaceuticals, Clinical and regulatory affairs, Tel Aviv, Israel; <sup>2</sup> Yulius Academy, Yulius Mental Health Organization, Barendrecht, The Netherlands; <sup>3</sup> Vanderbilt University Medical Center Sleep Division, Department of Neurology, Nashville, USA; <sup>4</sup> Strasbourg University Hospital, Department of Child and Adolescent Psychiatry, Strasbourg, France; <sup>5</sup> Evelina London Children’s Hospital-Guy’s and St Thomas’- Evelina London Children’s Hospital-, Children’s Sleep Medicine, London, United Kingdom; <sup>6</sup> Neurim Pharmaceuticals Ltd., Medical Affairs, Tel Aviv, Israel

<sup>\*</sup> Corresponding author.

**Background and aims.**– Insomnia is frequent in children with Autism Spectrum Disorder (ASD). We recently reported on efficacy and safety of pediatric prolonged-release melatonin minitabets (Ped-PRM) treatment (13 weeks) vs placebo, for sleep in children with ASD and other Neurodevelopmental Disorders (NDD).

Here we report on the impact of this treatment on child behavior and caregiver’s quality of life.

**Methods.**– 125 Children (2–17.5 years; 96.8% ASD, 3.2% Smith-Magenis syndrome) were randomized (1:1 ratio), double-blind, to

receive PedPRM (2/5 mg) or placebo for 13 weeks. Child-related outcomes included the Strength and Difficulties Questionnaire (SDQ). Caregiver-related outcomes included the World Health Organization Well-Being Index (WHO-5), Epworth Sleepiness Scale (ESS) and Composite Sleep Disturbance Index (CSDI).

**Results.**– Subjects treated with PedPRM (13 weeks) had statistically significant improvement in externalizing behaviors over placebo ( $p=0.021$ ); 29/54 (53.7%) of the PedPRM vs. 13/47 (27.6%) of the placebo group had clinically relevant reduction of 1 unit or more in externalizing behavior score ( $P=0.008$ ). In addition, there were trends showing a benefit in favor of PedPRM in total SDQ (externalizing and internalizing behaviors), impact (overall distress and impairment) and hyperactivity/inattention scores. Caregivers reported significant improvement in well-being and satisfaction of the child sleep pattern with PedPRM compared to placebo ( $p=0.01$ ,  $p=0.005$  respectively) and a trend to benefit in ESS in favor of Ped-PRM.

**Conclusions.**– PedPRM treatment of insomnia in children and adolescents with ASD alleviated insomnia-related exacerbation of externalizing behavior difficulties, in particular hyperactivity and inattention, and improved caregivers’ well-being.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0031

### Comperative study of obstructive sleep apnea syndrome patients with healthy volunteers in terms of childhood traumas and dissociative experiences

A. Nabi<sup>\*</sup>, T. Kılıçarslan, O. Yılmaz, F.B. Parlakkaya, İ. Kırpınar

Bezmi Alem Vakıf University, Psychiatry, Istanbul, Turkey

<sup>\*</sup> Corresponding author.

**Background and aims.**– The aim of this study is to determine the level of childhood traumas and dissociative experiences among obstructive sleep apnea syndrome (OSAS) patients, compare these with healthy controls and making a proper interpretation about possible differences.

**Methods.**– 71 patients suffering from OSAS and age, gender and educationally matched 62 control subjects were included in the study. All the participants have undergone psychiatric examination and received the Sociodemographic Data Form prepared for the study, Structured Clinical Interview for DSM-IV Axis-1 Disorders (SCID-1), 28-Item Childhood Trauma Questionnaire (CTQ-28) and Dissociative Experiences Scale (DES).

**Results.**– Mean score of DES total points was significantly higher in patient group than the control group. Patients had significantly higher levels of emotional neglect and abuse than the control group ( $p<0,05$ ). However, the levels of dissociative experiences and trauma scores did not have a significant relationship with severity of OSAS.

**Conclusions.**– OSAS patients were found to have higher levels of dissociative experiences and childhood emotional neglect and abuse than healthy individuals. In view of the preliminary information which indicates that childhood traumatic events causes a tendency to be more hypnotic, we suggest that, clinical evaluation of OSAS patients may include an interdisciplinary approach. That is, in addition to clinical evaluation by thoracic medicine specialists, childhood traumas and dissociative experiences among OSAS patients may be evaluated by psychiatrists in order to differentiate between real obstructive airway problems and the tendency to easily sleep through.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0032

### Secondary and primary care service use for people with severe mental illness: explaining between-site differences

S. Reilly<sup>1\*</sup>, C. McCabe<sup>2</sup>, N. Marchevsky<sup>3</sup>, L. Davies<sup>4</sup>, N. Ives<sup>3</sup>, R. Rawcliffe<sup>5</sup>, J. Gibson<sup>6</sup>, C. Mike<sup>7</sup>, V. Pinfold<sup>6</sup>, P. Huxley<sup>8</sup>, R. Byng<sup>9</sup>, M. Birchwood<sup>10</sup>

<sup>1</sup> Lancaster University, Division of health research, Lancaster, United Kingdom; <sup>2</sup> University of Plymouth, Community and Primary Care Research Group- Faculty of Medicine, Plymouth, United Kingdom; <sup>3</sup> Birmingham Clinical Trials Unit, Birmingham University, Birmingham, United Kingdom; <sup>4</sup> University of Manchester, Division of Population Health- Health Services Research & Primary Care, Manchester, United Kingdom; <sup>5</sup> Lancashire Care NHS Foundation Trust, Research and Development, Lancashire, United Kingdom; <sup>6</sup> McPin Foundation, McPin Foundation, London, United Kingdom; <sup>7</sup> National Institute for Health Research School for Social Care Research, London School of Economics, London, United Kingdom; <sup>8</sup> Bangor University, School of Social Sciences-, Bangor, United Kingdom; <sup>9</sup> Plymouth University, Community and Primary Care Research, Plymouth, United Kingdom; <sup>10</sup> University of Warwick, Warwick Medical School, Warwick, United Kingdom

\* Corresponding author.

**Background and aims.**– People with severe mental illness often have minimally coordinated primary and specialist care. Study funding: Nartional Institute for Health Research (PARTNERS-2 study), England.

**Methods.**– A multi-site, retrospective cross-sectional epidemiological review of primary and secondary care notes in three locations in England. Care pathway&service use data were manually extracted from both electronic patient secondary mental health care and primary care medical records ( $n=297$ )-two years (2012–2014) from 5 community mental health teams and 33 primary care practices. **Results.**– Average age of the 297 patients was 47.4 years and 56.2% were male. Total number of primary care contacts were 4300 (median 10 [IQR 5,20]). The variation between sites was not statistically significant ( $p=0.3365$ ). A model is fitted adjusting for the pre-specified confounding variables (age, gender, diagnosis, number of medications, living situation, employment situation, number of co-morbidities, smoking status, alcohol use and drug use); the effect of site on number of primary care contacts is significant ( $p<0.01$ ). The total number of secondary care contacts were 13,910 (median 43 [20.5,73.5] and varied significantly between sites in an unadjusted analysis ( $p=0.01$ ). Secondary care contacts are significantly higher in one of the sites. When a model is fitted adjusting for the pre-specified confounding variables, the effect of site on number of secondary care contacts becomes more significant ( $p<0.001$ ), suggesting an effect of site, even when accounting for patient confounding variables.

**Conclusions.**– The design and configuration of services influences the level of care people receive. The study highlights significant implications for health service commissioning, including collaborative care in primary care.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0034

### Effect of perampanel in patients with chronic insomnia

E. Suarez<sup>1\*</sup>, M.J. Abenza Abildúa<sup>2</sup>

<sup>1</sup> Hospital Infanta Sofia, Psychiatry, San Sebastian de los Reyes, Spain;

<sup>2</sup> Hospital Infanta Sofia, Neurology, San Sebastian de los Reyes, Spain

\* Corresponding author.

**Background and aims.**–

**Introduction and objectives.**– Insomnia is one of the most frequent reasons for consultation in the Sleep Units. Perampanel is an antiepileptic also effective on the structure of sleep, and in restless legs syndrome. We describe the response to treatment in biterapia with perampanel in patients with chronic insomnia in our Multidisciplinary Unit.

**Material and methods.**– Retrospective observational descriptive analysis of 33 patients, treated for chronic insomnia over 2 years. All with insomnia resistant to more than 4 drugs, attended in the sleep consultations from November 2017 to November 2018. All diagnosed with the clinic, imaging tests, and in some cases, with nocturnal polysomnography. We reviewed sex, age, etiology of insomnia, years of evolution, proven treatments, and the response to treatment measured in hours, and quality of sleep by the Insomnia Severity Index (ISI scale).

**Results.**– 33 patients with resistant insomnia, 20 women (60,6%), 13 men (39,4%). Average age: 53.48 years; mean time of evolution: 11.21 years; 5 different drugs tested on average. Main etiology: 13 primary psychopharmacists (39,4%). After the combination of perampanel at 2–4 mg (100%) with antidepressants (17 cases, 51,5%), or anxiolytics (11 cases, 33,33%), at 3 months, improves the number of hours (average 2.5 h), and ISI scale improves 6 average points. The main adverse effect was irritability. Neglect occurred due to lack of efficacy in 4 cases (12,12%).

**Conclusions.**– The combination of perampanel with an antidepressant, or an anxiolytic, improves the quality of sleep by ISI scale. More studies are needed to corroborate these results.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## Oral Communications 04: Eating Disorders/Genetics & Molecular Neurobiology/Psychopharmacology and Pharmacoeconomics

OC-0035

### Fractal dimensionality as index of reduced cortical complexity in anorexia nervosa

E. Collantoni<sup>1</sup>, P. Meneguzzo<sup>1</sup>, F. Baggio<sup>1\*</sup>, C. Idotta<sup>1</sup>, I. Chiappini<sup>1</sup>, R. Manara<sup>2</sup>, E. Tenconi<sup>1</sup>, A. Favaro<sup>1</sup>

<sup>1</sup> University of Padova, Department of Neurosciences, Padova, Italy; <sup>2</sup> University of Salerno, Department of Medicine- Surgery and Dentistry, Salerno, Italy

\* Corresponding author.

**Background and aims.**– In the present study we used Fractal Dimensionality (FD) – a technique specifically designed for the analysis of complex structural patterns – to examine the cortical complexity in patients with acute Anorexia Nervosa (AN) and with weight-recovered AN (REC-AN).

**Methods.**– 38 patients with acute AN, 38 healthy controls (HC) and 20 patients recovered from AN underwent MRI scanning. Surface extraction was completed using FreeSurfer package. FD was computed using a specific Matlab toolbox.

**Results.**– Results showed a global FD reduction in the AN group when compared to HC. Total FD significantly correlated with BMI and duration of illness in patients with AN. Regression analysis evidenced a relationship between FD and age, BMI, cortical volume and gyrfication index in the experimental group. The FD of the left middle occipital gyrus and the right subparietal sulcus were significantly decreased both in acute AN patients and in REC-AN group when compared to HC.

**Conclusions.**– Our findings support the hypothesis that cortical alterations in AN are complexly determined by several variables and confirm the importance of age in determining cortical complexity. FD represents a method to explore cortical complexity that demonstrated to be sensitive to the effects of malnutrition. Moreover, the relation between FD and gyrification index is consistent with previous researches that evidenced that cortical folding is a high source of cortical complexity. In conclusion, the evaluation of cortical morphology by means of FD allows to widen the horizons of surface-based analysis by integrating cortical thickness and gyrification data with novel and non-redundant information.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0036

### **Interactions between natural products and psychotropic medication. “what is natural doesn’t hurt” - truth or myth?**

A.M. Carvalho\*, S. Martinho, J. Maia

Centro Hospitalar de Leiria- EPE, Psychiatry, Leiria, Portugal

\* Corresponding author.

**Background and aims.**– It is estimated that about 70% of people taking natural medications (including herbs, vitamins, certain foods and over-the-counter drugs) do not inform their physician. It occurs because, frequently, patients do not know that those kind of products may have direct interaction with prescribed medications. The myth that “what is natural doesn’t hurt” must be demystified. All substances ingested carry a potential interaction that becomes especially relevant when the drugs involved possess a narrow therapeutic window. This review aims to obtain a summary of the information available regarding a possible interaction between natural products and psychotropic medication.

**Methods.**– A research of articles, through the PubMed database, was conducted. We selected articles in Portuguese and English, published between 2013 and 2018 using, as keywords, the terms “herb-drug interactions” and “psychiatry”. Also, we analysed master dissertations on the subject and the Observatory of Herb-Drug Interactions (OIPM/FFUC).

**Results.**– Natural products may be contraindicated in individuals with specific pathologies. There are dangers associated with indiscriminate ingestion of these agents, especially in old age population, that often presents several pathologies and is frequently polymedicated. The consequences of interactions may range from the absence of the announced efficacy to death from toxicity.

**Conclusions.**– It is necessary carefulness in the use of natural products. Physicians should inquire patients about the current use of these products and be attentive to the effects and possible interactions. It is necessary to know the potential toxicity associated and offer the necessary warnings regarding the dangers of self-medication and the long-term use of such substances.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0037

### **Traumas in childhood or adulthood in interaction with endocannabinoid genes lead to different pathological phenotype**

J. Lazary<sup>1,2,3\*</sup>, N. Eslzari<sup>2,4,5</sup>, G. Juhasz<sup>2,5,6</sup>, G. Bagdy<sup>2,5</sup>

<sup>1</sup> Nyiró Gyula National Institute of Psychiatry and Addictions, Department of General Psychiatry, Budapest, Hungary; <sup>2</sup> Hungarian Academy of Science- Semmelweis University, MTA-SE Neuropsychopharmacology and Neurochemistry Research Group, Budapest, Hungary; <sup>3</sup> Semmelweis University, Department of

Psychiatry and Psychotherapy, Budapest, Hungary; <sup>4</sup> Hungarian Brain Research Program, DeNAP-2-SE New Antidepressant Target Research Group, Department of Pharmacodynamics, Budapest, Hungary; <sup>5</sup> Semmelweis University, Department of Pharmacodynamics, Budapest, Hungary; <sup>6</sup> Hungarian Brain Research Group, SE-NAP 2 Genetic Brain Imaging Migraine Research Group, Budapest, Hungary  
\* Corresponding author.

**Background and aims.**– The endocannabinoid (eCB) system plays essential role in neurodevelopment, stress response and inflammation but data are poorly available on the possible pathogenetic effect of human genetic variants on development of affective disorders. In this study interacting effect of the eCB genes with early and recent life events on anxious and depressive phenotypes were tested.

**Methods.**– DNA samples were genotyped for 12 SNPs in the CB1 receptor (CNR1), CB2 receptor (CNR2), and fatty acid amide genes (FAAH) of 921 volunteers. Anxious phenotype was measured by State-Trait Anxiety Inventory (STAI-T) and depressive symptoms were assessed by Zung Self-rating Depression Scale (ZSDS). Childhood Adversity Questionnaire (CAQ) and List of Threatening Life Events (TLE) were performed for assessment of childhood trauma and recent life events.

**Results.**– Effect of recent life events (TLE) showed significant interaction with three SNPs in the CNR1 ( $prs4707436=0.0009$ ;  $prs1049353=0.0006$ ;  $prs806379=0.003$ ) on the ZSDS score in linear regression model. Concerning trait anxiety, we found that  $rs2501432$  in the CNR2 ( $p=0.003$ ) and  $rs324420$  in the FAAH gene ( $p=0.002$ ) showed remarkable interactions with the CAQ score on the STAI-T scale.

**Conclusions.**– Our results implicate that stressful recent life event together with risk alleles of CNR 1 gene contribute to development of depression possibly due to disrupted HPA axis function. However, childhood traumas lead to trait anxiety through dysharmonic regulation of anandamide signaling and inflammation pathway by genetically altered function of CB2 receptor and FAAH enzyme during the neurodevelopment. Judit Lazary received Bolyai Janos fellowship of the Hungarian academy of Science during the study.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0038

### **Leptin and ghrelin levels in alcohol dependent patients and their relationship with withdrawal and craving**

S. Mehta<sup>1\*</sup>, A. Baruah<sup>2</sup>, D. Chetia<sup>2</sup>, S. Das<sup>2</sup>, P. Avinash<sup>3</sup>

<sup>1</sup> SGRIM&HS, PSYCHIATRY, DEHRADUN, India; <sup>2</sup> LGBRIMH, Psychiatry, Tezpur, India; <sup>3</sup> HIHT, Psychiatry, Dehradun, India

\* Corresponding author.

**Background and aims.**– Association between leptin and ghrelin plasma levels and alcohol craving have been found in few studies but they have failed to differentiate this correlation with alcohol withdrawal state. This current research has been done to study correlation of alcohol craving with leptin and ghrelin levels in a different population and to study this correlation with respect to hyper-excitability state of alcohol withdrawal.

**Methods.**– 25 indoor patients fulfilling the alcohol dependence criteria were assessed for alcohol withdrawal symptoms and craving. Leptin and ghrelin levels were measured on 1<sup>st</sup> day, @ the end of 1<sup>st</sup> week, @ the end of 3<sup>rd</sup> week of stopping alcohol. Withdrawal was assessed using CIWA-A at day 1 and day 7, craving was assessed using PENN’s scale of craving at the end of week 1 and week 3. Control group consisted of 15 first degree relatives not taking alcohol.

**Results.**– It was found that leptin [ $t(38)=2.95, p=0.005$ ] and ghrelin [ $t(38)=2.56, p=0.015$ ] were significantly higher in alcohol dependent patients. Levels of hormones had no significant correlation with



alcohol withdrawal scores but had positive correlation with craving scores after abstinence.

**Conclusions.**– Leptin and ghrelin, known for balancing the energy homeostasis of body, also seem to play a role in pathways of drug dependence and craving. This relation is independent of stress hormone axis as leptin and ghrelin levels are not correlated with withdrawal scores, which is an indicator of stress hormone axis activation during alcohol withdrawal.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0041

### Disordered eating in adult international adoptees: a population-based cohort study

M. Strand<sup>1\*</sup>, Y. von Hausswolff-Juhlin<sup>1</sup>, P. Fredlund<sup>2</sup>, A. Lager<sup>2</sup>

<sup>1</sup> Stockholm Centre for Eating Disorders, Research and Development Unit, Stockholm, Sweden; <sup>2</sup> Karolinska Institutet, Department of Public Health Sciences, Stockholm, Sweden

\* Corresponding author.

**Background and aims.**– On group level, international adoptees (i.e., individuals adopted to another country than that in which they were originally born) display a higher prevalence of mental health issues. However, there is a paucity of data on the prevalence of eating disorders and symptoms of disordered eating among adoptees and the few existing studies have yielded mixed results. The aim of the present study was to explore the prevalence of symptoms of disordered eating and body image concerns among international adoptees in a large representative community survey on health-related behaviors.

**Methods.**– Combining survey data from the Stockholm Public Health Cohort, comprising almost 115 000 participants in total, and data from the Multi-Generational Register at Statistics Sweden, adult international adoptees was compared with total participant data to assess potential differences in disordered eating and body image concerns.

**Results.**– International adoptee women displayed significantly higher levels of self-induced vomiting, loss-of-control eating, food preoccupation, underweight, and wish for thinness compared to non-adoptee women, albeit with small effect sizes. Internationally adoptee men displayed significantly higher levels of loss-of-control eating compared to non-adoptee men. No significant differences were found in terms of mean body mass index, cognitive restraint, or emotional eating.

**Conclusions.**– Most notably, international adoptee women were disproportionately affected on several measures of disordered eating, although the magnitude of these differences were generally small in absolute terms. Hypothetically, these findings may reflect an increased prevalence in the international adoptee population of symptoms of attention-deficit/hyperactivity-disorder and externalizing behavioral problems. The findings could have implications for screening and risk assessment.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0042

### Clinical implementation of pre-emptive pharmacogenomics in psychiatry

E.E. Tsermpini<sup>1\*</sup>, M. Skokou<sup>2</sup>, K. Karaivazoglou<sup>2</sup>, E. Georgila<sup>2</sup>, P. Ferentinos<sup>3</sup>, M. Kalogeropoulou<sup>1</sup>, P. Kolios<sup>1</sup>, C. Gerasimou<sup>3</sup>, P. Bali<sup>3</sup>, S. Pagiati<sup>1</sup>, T. Stamopoulou<sup>1</sup>, E. Barba<sup>1</sup>, A. Stathoulas<sup>1</sup>, G. Iconomou<sup>2</sup>, G. Voukelatou<sup>2</sup>, A. Douzenis<sup>3</sup>, P. Gourzis<sup>2</sup>, K. Assimakopoulos<sup>2</sup>, G. Patrinos<sup>1</sup>

<sup>1</sup> University of Patras, Department of Pharmacy, Patras, Greece; <sup>2</sup> General University Hospital of Patras, Psychiatric Clinic, Patras, Greece; <sup>3</sup> National and Kapodistrian University of Athens, 2nd Department of Psychiatry- Attikon General Hospital, Athens, Greece  
\* Corresponding author.

**Background and aims.**– “PREemptive Pharmacogenomic testing for Preventing Adverse drug REactions (PREPARE)” is a multi-center, open, randomized, cross-over implementation study, within the frame of the Horizon 2020 program. It is the first pre-emptive Pharmacogenomic study conducted, including 7 European countries.

The study aims to determine whether implementing pre-emptive Pharmacogenomics testing of clinically relevant biomarkers, in order the dose and drug selection to be guided for 39 commonly prescribed drugs, will result in an overall reduction of both the occurrence and the severity of drug-genotype-associated adverse drug reactions (ADRs).

**Methods.**– The Laboratory of Pharmacogenomics and Individualized Treatment of the University of Patras, which represents Greece in this study, focuses on patients that receive antidepressant or antipsychotic treatment. In total, 1276 patients will be recruited; 638 in the intervention arm, in which the administration of the drug will be PGx-guided and 638 in the control arm, in which the drug and the dose will be administered according to the standard clinical practice.

**Results.**– The end of September of 2018 marks the end of the intervention arm, in which 673 patients have been recruited. There are only 78 incidences of ADRs reported in 56 patients, with the most common being extrapyramidal symptoms, sexual dysfunction, weight gain, sedation, nausea, etc., while in 94 patients where drug dose recommendation were available, there were no ADRs that have been recorded.

**Conclusions.**– The results of this study are expected to lead to safer and more cost-effective drug treatments, contributing to the improvement of psychiatric patients' quality of life.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0044

### Effect of exogenous cannabinoids on eating behaviour

A. Skawiańczyk<sup>1</sup>, S. Gryboś<sup>1</sup>, P. Walecki<sup>2\*</sup>

<sup>1</sup> Jagiellonian University Medical College, Faculty of Medicine, Krakow, Poland; <sup>2</sup> Jagiellonian University Medical College, Department of Bioinformatics and Telemedicine, Krakow, Poland

\* Corresponding author.

**Background and aims.**– In recent years, the role of cannabinoids in food intake associated with the activation of the brain reward system has again become interested. This indicates the potential use of the endocannabinoid system in the treatment of diseases with appetite disorders: bulimia, anorexia, and neurodegenerative, debilitating diseases.

The aim of this study is the assessment of the effect of exogenous cannabinoids on eating behavior.

**Methods.**– Twenty drug-dependent people taking marijuana were enrolled in the study. Each examined person provided ten 24-h dietary recall interviews - five of days in which cannabinoids were used and five days when participants did not use cannabinoids. In total, one hundred and eighty 24-h interviews were collected. Nutrients were calculated on the basis of the Polish Food Composition Database and the Dieta 5.0 software.

**Results.**– The average amount of calories consumed on the days when participants used cannabinoids is 42% higher compared to the days when cannabinoids were not used. There were significant differences in the amount of calories consumed, vegetable protein, carbohydrates and fats. The amount of magnesium, zinc,

manganese and vitamin E delivered is significantly higher on days when participants use cannabinoids derived from marijuana.

**Conclusions.**– The use of exogenous cannabinoids has an impact on the amount of energy supplied, macronutrients and some micronutrients. Exogenous cannabinoids have potential application in helping to treat diseases that cause reduced appetite. However, the mechanism not fully understood, the variability of results and side effects suggest that the potential therapy with the use of exogenous cannabinoids should be approached with caution.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0045

### **Psychopharmacogenetic analysis in the structure of a multifactorial personalized approach to the patient**

N. Zakharova<sup>1</sup>, D. Kutovoy<sup>1</sup>, L. Bravve<sup>1</sup>, I. Nizamutdinov<sup>2</sup>, V. Ilnsky<sup>3</sup>, A. Reznik<sup>4</sup>, G. Kostyuk<sup>5</sup>

<sup>1</sup> Psychiatric Clinical Hospital 1 n. a. N.A. Alekseev of Healthcare Department of Moscow, The Educational Center, Moscow, Russia; <sup>2</sup> Genotek Ltd, Genotek Ltd, Moscow, Russia; <sup>3</sup> Genotek Ltd., Genotek Ltd., Moscow, Russia; <sup>4</sup> Institute of Medico Social Technology of the Moscow State University of Food Production, Psychiatric Department, Moscow, Russia; <sup>5</sup> Psychiatric Clinical Hospital 1 n. a. N.A. Alekseev of Healthcare Department of Moscow, Head Doctor, Moscow, Russia  
\* Corresponding author.

**Background and aims.**– The efficacy and safety of psychopharmacotherapy are one of the most discussed issues of psychiatry. Prevalence rates of psychopharmacotherapy inefficiency are relatively constant, and vary from 30% to 60–75%.

**Methods.**– Pharmacogenetic testing seem to be an useful approach to increase therapy efficiency rate. Databases of genetic markers involved in pharmacokinetics and pharmacodynamics are constantly updated, recommendations for genetic testing are provided in some drug labels. Psychopharmacogenetics is a promising area of work for the Alekseev Psychiatric Clinical Hospital №1.

Using the ontology PsyGenCheck, a psychopharmacogenetic test was performed for 14 patients (10 men, 4 women, 18–40 years old) with a catamnesis 1–36 months after genotyping, on customized Global Screening Array microchips.

**Results.**– The results of this analysis have been confirmed in practice - the intolerance of some drugs has been revealed, the dosage of others has been adjusted. Preliminary calculations indicate a reduction in the economic burden on the budget by about 2.5 times when conducting a test with high-performance genotyping.

**Conclusions.**– Due to the choice of the optimal dose of an individually suitable drug, compliance increases, the duration of inpatient treatment decreases, there are no side effects that require additional examination and treatment, the probability of a positive response to the drug doubles, and the duration of high-quality remission increases threefold.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

### **Oral Communications 05: Depression Part I/Mental Health Care/Classification of mental disorders**

OC-0046

#### **Importance of communication with patients with mental disorders - presentation of educational program**

A. Wiczorek<sup>1</sup>, Ł. Ciochoki Wiczorek<sup>2</sup>, A. Fusińska-Korpik Wiczorek<sup>2</sup>

<sup>1</sup> Szpital Kliniczny im. J. Babińskiego, Ośrodek Edukacji Badań i Rozwoju, Kraków, Poland; <sup>2</sup> Szpital Kliniczny im. J. Babińskiego, Ośrodek Edukacji Badań i Rozwoju, Kraków, Poland

\* Corresponding author.

**Background and aims.**– Professionals of various origin: medical doctors, nurses, pharmacists, paramedics, etc. experience a lot of difficulties in everyday work with patients with mental disorders. Important part of these difficulties are problems with communications. To help the professionals to increase their communication competences, psychiatrists and psychotherapists of Babinski's Psychiatric Hospital in Krakow prepared and conducted in Małopolskie and Podkarpackie voivodships educational program "Contact in treatment".

**Methods.**– We prepare the workshop and theoretical training that include short lectures about communication and psychiatric based knowledge. The most important and innovative elements of the program was the work with simulated patient with mental disorders and short movies.

**Results.**– The results of quantitative and qualitative research showed that theoretical assumptions was correct and the program helped professionals in improving their knowledge communication skills.

**Conclusions.**– The main conclusion was that increase of the communication skills needed most of all the practical training. Otherwise the possibility of contact with the simulated patient with mental disorders helps to change the wrong imagination about psychiatric patients and reduce the fear of them.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0047

#### **Enhancing skills needed in communication with people with mental disturbances – the results of an educational programme**

A. Fusińska-Korpik<sup>1</sup>, Ł. Ciochoki<sup>1</sup>, A. Wiczorek<sup>2</sup>

<sup>1</sup> Andrzej Frycz Modrzewski Cracow Academy- Chair of Psychiatry, Chair of Psychiatry, Cracow, Poland; <sup>2</sup> Babinski Hospital, Babinski Hospital- Center for Education- Research and Development, Cracow, Poland

\* Corresponding author.

**Background and aims.**– The interest in issue of communication in medicine has been growing. Despite that, there's little evidence concerning professional's communication skills in contact with people having mental disturbances. The aim of the study was to evaluate training intervention developed to increase specialists' knowledge and communication skills in contact with people experiencing mental health problems. Moreover, participants' level of satisfaction with workshops was measured.

**Methods.**– 2520 people took part in the project. Training programme was adjusted to participant's profession and needs. Both knowledge about psychiatric issues and communication skills were measured before and after the workshop.

**Results.**– The results confirm the effectiveness of the programme. The analysis revealed significant increase in participant’s knowledge about mental issues, as well as in their communication skills. Participants reported high level of satisfaction with the programme.

**Conclusions.**– There is a need to implement programmes developed to increase professionals’ communication skills, as well as their knowledge about mental issues. Further conclusions and limitations will be discussed.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0048

**Educational programme “contact in treatment”. what we can learn from it - qualitative data**

Ł. Cichocki<sup>1</sup>\*, A. Wiczorek<sup>2</sup>, A. Fusińska<sup>1</sup>

<sup>1</sup> Andrzej Frycz Modrzewski Cracow Academy, Chair of Psychiatry, Cracow, Poland; <sup>2</sup> Babinski Hospital, Center for Education- Research and Development, Cracow, Poland

\* Corresponding author.

**Background and aims.**– To present qualitative data gained during the educational program “Contact in treatment”.

**Methods.**– This educational program dedicated to professionals of various origin: GPs, medical doctors, nurses, social workers, pharmacists, policemen, paramedics etc. (n = 2520) was on one hand an intervention in the system but also diagnosis of medical and social care system.

**Results.**– We gained many interesting information both as a feedback but also as an observation of various place we taught in. We observed high level of burn out syndrome phenomena but also quite many interesting coping mechanism to deal with difficulties.

**Conclusions.**– Polish medical and social care system is heavily over-stretched. Educational programs and trainings should be a constant element of work.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0050

**Higher patient’s own perceived rating of support in family practices in England relate directly to increased antidepressant and anxiolytic prescribing. is this choosing wisely?**

A. Heald<sup>1</sup>\*, M. Davies<sup>2</sup>, S. Bailey<sup>3</sup>, M. Stedman<sup>2</sup>

<sup>1</sup> University of Manchester, The School of Medicine and Manchester Academic Health Sciences Centre, Manchester, United Kingdom; <sup>2</sup> Res Consortium, Research, Andover, United Kingdom; <sup>3</sup> Academy of Medical Royal Colleges, Chair Choosing Wisely Steering Group, London, United Kingdom

\* Corresponding author.

**Background and aims.**– We have previously shown in GP (family) practices using 2017 General Practice Patient Survey (GPPS) a strong link between positive patient own ratings for Long Term Conditions (LTC) practice support and improved glycaemic control outcomes.

We apply the same methodology to examine the impact of patient engagement on prescribing for mental health problems.

**Methods.**– In 6,726 practices, 56million population, 808,000 patients completed GPPS, 53.5% with LTC of these 13.1% responded “No” regarding sufficient support to manage condition.

Total Annualised Defined Daily Dose (ADDD) of anti-depressants and anxiolytics were divided by practice population to give average

medication use. The above were compared uni-variately and multi-variantly.

**Results.**– 5,093,000 ADDD of 28 anti-depressants (Citalopram and Sertraline were 52%) and 684,000 ADDD of 22 anxiolytics/hypnotics (Zopiclone and Diazepam were 54%) were prescribed.

Figure 1 Univariate analysis showed that GPP with higher ratings for patient LTC support prescribe MORE anti-depressants ( $r^2 = 0.06$ ,  $p < 0.0001$ ) and MORE anxiolytics/hypnotics ( $r^2 = 0.08$ ,  $p < 0.0001$ )

Figure 2 increased prescribing was linked to more patients over 75 years, with higher social disadvantage, on mental health register, lower cost/DDD and more positive patient practice support ratings (all  $p < 0.0001$ )

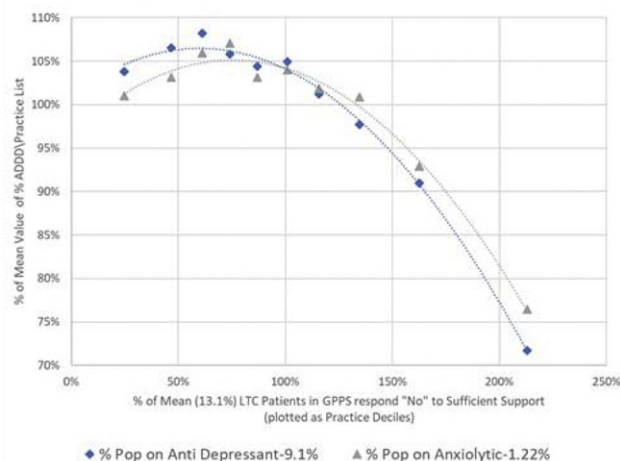


Fig. 1. Univariate Medication Prescribed Link to Patient Support (plotted as practice deciles).

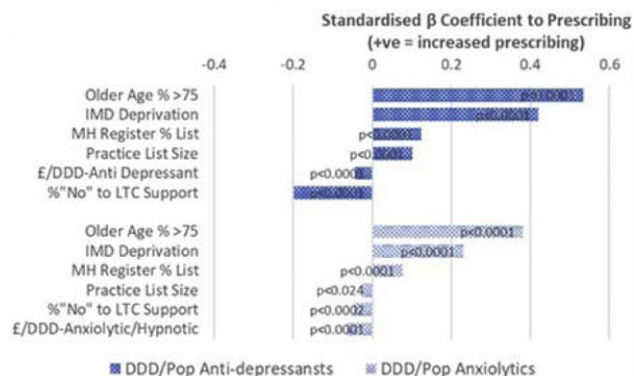


Fig. 2. Multivariate Analysis.

**Conclusions.**– These findings raise important questions as to whether and how doctor/patient consultations drive drug prescribing. Patient positive perception of clinical care links to higher levels of anti-depressants/anxiolytic/hypnotic prescribing. Are physicians supporting their patients to choose their treatment wisely?

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0052

**Evaluation of depressive symptoms beyond the treatment period in an integrated dataset from brexanolone injection placebo-controlled trials in postpartum depression**

S. Meltzer-Brody<sup>1</sup>, H. Colquhoun<sup>2</sup>, R. Riesenbergs<sup>3</sup>, C.N. Epperson<sup>4</sup>, K. Deligiannidis<sup>5</sup>, D. Rubinow<sup>1</sup>, H. Li<sup>6</sup>, C. Clemson<sup>2</sup>, R. Lasser<sup>2\*</sup>, S. Kanets<sup>2</sup>



<sup>1</sup> UNC School of Medicine, Department of Psychiatry, Chapel Hill, USA; <sup>2</sup> Sage Therapeutics- Inc., Medical Science, Cambridge, USA; <sup>3</sup> Atlanta Center for Medical Research, Atlanta Center for Medical Research, Atlanta, USA; <sup>4</sup> University of Pennsylvania- Perelman School of Medicine, Department of Psychiatry, Philadelphia, USA; <sup>5</sup> Zucker Hillside Hospital, Department of Psychiatry, Glen Oaks, USA; <sup>6</sup> Sage Therapeutics- Inc., Data Sciences, Cambridge, USA  
\* Corresponding author.

**Background and aims.**– Three double-blind, randomized, placebo-controlled trials evaluated brexanolone injection (BRX) efficacy and safety in women with postpartum depression (PPD). The primary endpoint was achieved, with a significantly greater change from baseline in Hamilton Rating Scale for Depression (HAM-D) total score at Hour 60 versus placebo (PBO). This analysis assessed depressive symptoms in the post-treatment follow-up period.

**Methods.**– Women aged 18–45 years,  $\leq 6$  months postpartum, with PPD and a qualifying HAM-D total score (Studies A and B,  $\geq 26$ ); Study C, 20–25) were randomized to receive a single, continuous 60-h infusion of PBO, BRX 90  $\mu\text{g}/\text{kg}/\text{h}$  (BRX90) or 60  $\mu\text{g}/\text{kg}/\text{h}$ , with follow-up through Day 30. An umbrella protocol allowed integrated dataset analysis. HAM-D total score, response (reduction  $\geq 50\%$ ), and relapse (total score  $\geq 20$  after Hour 60 response) were assessed. Adverse events with any BRX dose were reported to evaluate safety and tolerability.

**Results.**– Significantly greater reductions in Hour 60 least-squares mean HAM-D total score were observed for BRX90 ( $-17.0$ ,  $-4.1$  difference,  $p < 0.0001$ ) versus PBO ( $-12.8$ ) and were maintained through Day 30 (BRX90  $-16.9$ ,  $p = 0.0213$ ; PBO  $-14.3$ ). A significantly greater proportion of BRX90 subjects (74.5%) achieved Hour 60 response versus PBO (55.7%). At Day 30, 94.3% of BRX90 responders did not relapse. The most common adverse events ( $\geq 10\%$ ) with BRX were headache, dizziness, and somnolence.

**Conclusions.**– Brexanolone injection was generally well tolerated and showed rapid (Hour 60) and durable (Day 30) antidepressant effects. If regulatory approval is obtained, brexanolone injection has the potential to provide meaningful new treatment options for women with PPD.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0054

### **Impact of mental illness on in-patient hospital costs for somatic disorders and associated factors: a French nationwide study**

A.J. Hammami, M. Michel\*, K. Chevreul  
Assistance Publique-Hôpitaux de Paris/INSERM, URC Eco/UMR 1123, Paris, France

\* Corresponding author.

**Background and aims.**– People suffering from mental disorders are in poorer somatic health than the general population. This is due in part to poor quality of care in primary care settings, which can in turn have a major impact on hospitals and healthcare systems, in particular in terms of costs.

Our objective was to assess the economic burden of acute care admissions for somatic diseases in patients with a mental illness compared to other patients and analyse the factors associated with it.

**Methods.**– An exhaustive study using French hospital discharge databases was carried out between 2009 and 2013. Total acute hospital costs were calculated from the all payer perspective (statutory health insurance, private health insurances and patient out-of-pocket payments). A multivariate regression modelled the association between mental illness and hospital costs while adjusting for other explanatory variables.

**Results.**– 37,458,810 admissions were included in the analysis. 1,163,972 patients (6.54%) were identified as mental ill. Mean total hospital costs at five years per patient were €8,114. Costs per mentally ill patients were on average 34% higher than costs per non-mentally ill patients (€10,637 vs. €7,949). A longitudinal analysis of costs showed a widening of the gap between the two groups as time went by, from 1.60% in 2009 to 10.51% in 2013. In the multivariate model, mental disorders were significantly associated with increased costs.

**Conclusions.**– Improving quality of primary care and health promotion in people with a mental illness, both for their own sake and to decrease the economic burden on the healthcare system, is of vital importance.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0055

### **Bidirectional association between blood pressure and depressive symptoms in young and middle age adults: a cohort study**

K.S. Oh\*, S.W. Jeon  
Kangbuk Samsung Hospital- Sungkyunkwan University, Psychiatry, Seoul, Republic of Korea

\* Corresponding author.

**Background and aims.**– The relationship between blood pressure (BP) level and depression is not fully understood. We prospectively evaluated the bidirectional relationship of onset of hypertension and depressive symptoms.

**Methods.**– A cohort study was performed on Korean adults who underwent a health checkup and were followed annually or biennially. BP levels were categorized according to the 2017 American College of Cardiology and the American Heart Association hypertension guidelines. Depressive symptoms were assessed using Center for Epidemiologic Studies-Depression (CESD) and cut-off score of 25 was regarded as depression.

**Results.**– Among 276,244 participants without high CESD of 16 at baseline, 5,222 participants developed depression with 3.9 years of mean follow-up. The multivariable-adjusted hazard ratio (95% confidence interval) for incident depression comparing hypotension, elevated BP, hypertension stage 1 and hypertension stage 2 to normal BP were 1.07 (0.99–1.16), 0.92 (0.82–1.05), 0.88 (0.80–0.96) and 0.77 (0.58–1.01), respectively ( $p$  for trend  $< 0.001$ ). Among 183,448 participants without hypertension at baseline, 27,787 participants developed hypertension with 3.6 years of mean follow-up. The multivariable-adjusted hazard ratio (95% confidence interval) for incident hypertension comparing CESD 16–24 and  $\geq 25$  to CESD  $< 16$  were 1.01 (0.96–1.06) and 1.06 (0.98–1.14), respectively ( $p$  for trend = 0.166).

**Conclusions.**– In this large cohort study of young and middle-aged individuals, increased BP levels were independently associated with a decreased risk for developing depression, while, in the other direction, depressive symptoms were not associated with incident hypertension. Further studies are required to elucidate the mechanisms underlying inverse association between BP levels and incident depression.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0057

### Predicting depression and anxiety comparing machine learning and data modelling approaches: a 9-year follow-up study

W. Van Eeden<sup>1\*</sup>, C. Luo<sup>2</sup>, H. Hoos<sup>2</sup>, A. van Hemert<sup>1</sup>, I. Carlier<sup>1</sup>, B. Penninx<sup>3</sup>, K. Wardenaar<sup>4</sup>, E. Giltay<sup>1</sup>

<sup>1</sup> Leiden University Medical Center, Psychiatry, Leiden, The Netherlands; <sup>2</sup> Leiden University, Leiden Institute of Advanced Computer Sciences, Leiden, The Netherlands; <sup>3</sup> VUMC, Psychiatry, Amsterdam, The Netherlands; <sup>4</sup> University Medical Center Groningen, Psychiatry, Groningen, The Netherlands

\* Corresponding author.

**Background and aims.**– Despite the effort made on researching the phenomenology and (e.g. etiological/psychological/environmental) origins of mood- and anxiety disorders, its course and onset remains hard to predict and has had limited clinical value. We aimed to research the potential additional value of automated machine learning methods (AutoML).

**Methods.**– We compared the performance of three modelling methods (i.e., multinomial logistic regression, naïve bayesian classifier, and AUTO-SKLEARN AutoML) to predict disease status, i.e., healthy, depressive disorder, anxiety disorder, or comorbid disorder. Data at two timepoints (i.e., baseline and 1 year follow-up) that were relatively easy to collect in clinical practice (demographics and self-report questionnaire data), of 2931 participants of the Netherlands Study of Depression and Anxiety, were used to predict health status at 2, 4, 6 and 9 years follow-up.

**Results.**– At baseline, participants were 42.2 years old, 66.5% were women, and 53.6% had a current mood or anxiety disorder. AutoML was the most successful in predicting disease status with an accuracy of up to 0.75. However, at the optimal level accuracy, AutoML overestimated a healthy status and underestimated depressive disorders.

**Conclusions.**– Machine learning methods showed only limited advantages over and above the more traditional method, due to overestimating the absence of a disorder.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## Oral Communications 06: Child and Adolescent Psychiatry Part II/Migration and Mental health of Immigrants/Prevention of Mental Disorders/Comorbidity - Dual Pathologies

OC-0058

### Medically unexplained symptoms in children: clinical and socio-demographic predictors of symptoms in a specialist paediatric liaison service

B. Baig<sup>1\*</sup>, O. Day<sup>2</sup>, M. Cooney<sup>3</sup>, S. Yao<sup>4</sup>, D. Imeson<sup>3</sup>, J. Kerr<sup>3</sup>

<sup>1</sup> Institute of Psychiatry- Psychology and Neuroscience, Child and Adolescent Psychiatry, London, United Kingdom; <sup>2</sup> Kings College London, School of Medicine, London, United Kingdom; <sup>3</sup> South London and Maudsley NHS Foundation Trust, Paediatric Liaison Psychiatry, London, United Kingdom; <sup>4</sup> New York Presbyterian Hospital- Columbia and Cornell Universities, Child and Adolescent Psychiatry, New York, USA

\* Corresponding author.

**Background and aims.**– Medically Unexplained Symptoms (MUS) are common and disabling in children and may continue into

adulthood. Despite this, there has been less research done to characterize these symptoms compared to adult patients. This study aims to identify common sociodemographic and clinical predictors of MUS in children who are referred by pediatricians to a national and specialist Paediatric Liaison Psychiatry service in a tertiary Children's Hospital.

**Methods.**– A retrospective case note review was conducted of sequential referrals made to liaison psychiatry service at St. Thomas' Hospital, London in 2017–2018. Identified cases ( $N=43$ ) were reviewed for clinical features, psychiatric comorbidity, socio-demographic factors and life events (measured by the negative life events scale CAPA).

**Results.**– Of 41 cases with sufficient data, 70.7% ( $N=29$ ) patients with MUS have contact with more than one medical specialty. 73.2% ( $N=30$ ) have a co-morbid psychiatric diagnosis. 90.2% ( $N=37$ ) have at least one and 24.4% ( $N=10$ ) had four or more negative life events. There was a significant association between the number of MUS a patient has and the number of negative life events they report ( $r=0.34$ ,  $p=.032$ ). 85.4% ( $N=35$ ) of participants missed 1 month and 34.1% ( $N=14$ ) missed more than six months of school.

**Conclusions.**– Referrals to specialist paediatric liaison psychiatry showed high levels of psychiatric and medical symptoms, significant disability and a history of negative life events. This population needs specialised multidisciplinary input; longitudinal cohort studies and better RCTs would support management.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0059

### Asylum seekers' mental health. first results of the finnish asylum seekers health and wellbeing survey (TERTTU-survey)

A. Castaneda<sup>\*</sup>, N. Skogberg

National Institute for Health and Welfare, Inclusion and Equality Unit, Helsinki, Finland

\* Corresponding author.

**Background and aims.**– Asylum seekers have strong health and wellbeing burdens, including mental health. However, there is a lack of survey-based information on the health status and service needs of asylum seekers generally as well as of those arriving to the Nordic countries. The TERTTU-project was launched to fill these information gaps and to develop the current health examination protocol for assessing the health, wellbeing and need for health care services, including mental health, of newly arrived asylum seekers.

**Methods.**– As part of the TERTTU-project, systematic, nationally representative data was collected in 2018 by conducting a health examination and interview survey in reception centers in Finland ( $n=1000$ ). Mental health was assessed with the HSCL and PROTECT questionnaires (SDQ among the children), along with questions of potentially traumatic experiences. Additionally, disease burden and service use of asylum seekers was analyzed based on information from the national electronic health records. The project is conducted by the National Institute for Health and Welfare (THL) in Finland in collaboration with the Finnish Immigration Service, and supported by The EU (Asylum, Migration and Integration Fund).

**Results.**– Current mental health symptoms, traumatic experiences and post-traumatic symptoms were strongly prevalent among the newly arrived asylum seekers.

**Conclusions.**– Based on the data, a national health examination protocol will be developed in 2019 to improve assessment and identification and to enable systematic health monitoring and evidence-based development of services for asylum seekers. A common health examination protocol will also unify practices across reception centers all over the country.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0060

### The evaluation of relationship between PTSD symptoms and psychological resilience in Turkmen refugees migrated into Turkey after Iraqi Civil War

A. Civan Kahve<sup>1\*</sup>, M.C. Aydemir<sup>2</sup>, R.N. Yüksel<sup>1</sup>, H. Kaya<sup>1</sup>, E. Goka<sup>1</sup>

<sup>1</sup> Ankara Numune Training and Research Hospital, Department of Psychiatry, Ankara, Turkey; <sup>2</sup> Ankara University Faculty of Medicine, Department of Psychiatry, Ankara, Turkey

\* Corresponding author.

**Background and aims.**– In the last years many people from neighbouring countries migrated into our country due to civil war. Turkmens who came to Turkey after the terrorist organization living in the north of Iraq are some of these refugees. The purpose of this study is to explore the relationship between PTSD development and psychological resilience, to determine the protective and risk factors for PTSD.

**Methods.**– 101 voluntary Iraqi Turkmen refugees who migrated to our country after war events because of ISIS were included to study. Interviews were held with at most one person from each family in the charity tents of voluntary foundations between March and May 2017. Sociodemographic Data Form, CAPS and Resilience Scale for Adults were used in our study.

**Results.**– The prevalence of PTSD among the refugees was found to be %25.7. Sociodemographic characteristics were not found to be effective in the development of PTSD. We only found that “losing a relative during the war” was significantly associated with the development of PTSD. The psychological resilience of individuals with PTSD was negatively correlated with the severity and frequency of trauma symptoms and CAPS scores. When the patients with and without PTSD were compared in terms of psychological resilience, there was no significant difference between the two groups in RSA total scores (Fig. 1).

PSYCHOLOGICAL RESILIENCE		CAPS SCORES OF INDIVIDUALS WITH PTSD
RSA Perception of the Self	r	-.493
	p	.010
RSA Planned Future	r	-.471
	p	.015
RSA Structured Style	r	-.159
	p	.436
RSA Social Competence	r	-.208
	p	.308
RSA Family Cohesion	r	-.564
	p	.003
RSA Social Resources	r	-.426
	p	.030
RSA Total	r	-.622
	p	.001

RSA : Resilience Scale for Adults; CAPS : Clinician-Administered Post Traumatic Stress Disorder Scale; r : correlation coefficient; p : used Spearman Correlation Analysis

Fig. 1. The evaluation of psychological resilience and CAPS scores in individuals with PTSD.

**Conclusions.**– Clinicians will be facing growing number of immigration related problems in the following years. In the context of preventive medicine identifying risk and protective factors is as important as diagnosing and treating the trauma related disorders. Our study will provide an important contribution to the literature about trauma related disorders.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0061

### Offspring of mothers with hypertensive disorders of pregnancy are at increased risk of anxiety disorders: findings from the ALSPAC study

B. Dachew<sup>1\*</sup>, J. Scott<sup>2</sup>, A. Mamun<sup>1</sup>, A. Rosa<sup>1</sup>

<sup>1</sup> The University of Queensland, Institute for Social Science Research, Brisbane, Australia; <sup>2</sup> University of Queensland, Faculty of Medicine-Centre for Clinical Research, Brisbane, Australia

\* Corresponding author.

**Background and aims.**– No study has yet investigated the association between HDP and the risk of anxiety disorders in adolescence. The study aimed to examine the association between HDP and offspring anxiety disorders at age 15 years.

**Methods.**– We used data from 5,231 mother-offspring pairs from the United Kingdom based Avon Longitudinal Study of Parents and Children (ALSPAC). Anxiety disorder was diagnosed in the offspring at the age of 15 years using the Development and Wellbeing Assessment (DAWBA).

**Results.**– Children of women with HDP had a 2.5 fold (95% CI: 1.38–4.43) increase in the odds of anxiety disorder compared with children of women without HDP. Results were adjusted for a wide range of confounding variables including maternal depression and anxiety during pregnancy.

**Conclusions.**– Our study showed that children exposed to HDP had higher risk of anxiety disorder compared with unexposed children and suggests that prevention and treatment of maternal HDP could possibly also prevent offspring anxiety in adolescence. Further research is needed to explain the pathways by which HDP may increase the risk of offspring psychopathology.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0063

### Possible metabolic alterations among autistic male children: clinical and biochemical approaches

M. Hassan<sup>1</sup>, T. Desoky<sup>2</sup>, H. Sakhr<sup>3</sup>, R. Gabra<sup>4\*</sup>, A. Helmy<sup>3</sup>

<sup>1</sup> Faculty of Medicine- South Valley University- Qena-Egypt., Department of Medical Biochemistry, Qena, Egypt; <sup>2</sup> Faculty of Medicine- South Valley University- Qena-Egypt, 2Department of Neuropsychiatry, Qena, Egypt; <sup>3</sup> Faculty of Medicine- South Valley University- Qena-Egypt, Department of Pediatrics, Qena, Egypt; <sup>4</sup> Faculty of Medicine. Assiut University, Neuropsychiatry department, Assiut, Egypt

\* Corresponding author.

**Background and aims.**– The present study has been designed for assessment and delineating some aspects of metabolic derangement that may occur in ASD.

**Methods.**–

**Design.**– Cross-sectional, hospital based study.

**Patients and methods.**– 73 autistic male children have been recruited from the outpatients' psychiatric clinics of the Neuropsychiatric and Pediatric Departments of South Valley and Assiut University Hospitals. Serum cholesterol and some its steroid hormones derivatives were measured using ELISA assay kits. Biochemical assessments of mitochondrial dysfunction, oxidative stress and heavy metals (mercury, lead and aluminium) were done. Mean  $\pm$  SD was calculated for all measured values.



**Results.**– There were significant higher plasma lactate, serum pyruvate, lactate/pyruvate ratio, CK, PK, LDH and ammonia, with significant lower serum L-carnitine and urea levels among autistic children versus the controls, with  $p < 0.05$  for all. Those were associated with significant higher blood heavy metals levels, serum total oxidant status, oxidative stress index with significant lower serum total antioxidant capacity, with  $p < 0.05$  for all. There were significant lower serum total cholesterol, cortisol and estradiol with significant higher serum levels of DHEA and free testosterone among autistic children when compared with the controls, with  $p < 0.05$  for all.

**Conclusions.**– Several metabolic abnormalities have been encountered among autistic children who could be helpful in establishing a medical protocol for therapy or at least improving the health status and quality of life of these children.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0064

### **Alterations of resting-state brain function in pediatric bipolar disorder patients with and without psychotic symptoms**

W. Gao<sup>1\*</sup>, S. Lu<sup>2</sup>, L. Su<sup>3</sup>

<sup>1</sup> The Children's Hospital- Zhejiang University School of Medicine, Child Psychology, Hangzhou, China; <sup>2</sup> The First Affiliated Hospital- Zhejiang University School of Medicine, Psychiatry, Hangzhou, China; <sup>3</sup> Mental Health Institute of The Second Xiangya Hospital, Psychiatry, Changsha, China

\* Corresponding author.

**Background and aims.**– The aims of the present study were to investigate the possible mechanisms of pediatric bipolar disorder (PBD) through functional brain imaging and to explore the influence of psychotic symptoms on brain functional alterations in PBD patients.

**Methods.**– A total of 55 children and adolescents with BD were recruited, including 29 patients with psychotic symptoms and 26 patients without psychotic symptoms. Simultaneously, 19 age- and gender-matched healthy controls (HCs) were recruited from public schools. The resting-state functional magnetic resonance imaging data were obtained on a Siemens 3.0 Tesla scanner. Regional homogeneity (ReHo) based analyses were conducted for imaging data and analyses of variance (ANOVA) were performed to test the differences among the groups.

**Results.**– As compared with HCs, psychotic PBD showed decreased ReHo in the medial prefrontal cortex (mPFC), bilateral middle frontal gyrus (MTG), parietal lobule, superior temporal gyrus (STG), fusiform gyrus, and the left insula, putamen; while non-psychotic PBD exhibited decreased ReHo in the mPFC, bilateral MTG, parietal lobule, fusiform gyrus, the left insula, and the right STG. When comparing to non-psychotic PBD, psychotic PBD patients exhibited decreased ReHo in the left MTG and putamen.

**Conclusions.**– The widespread occurrence of functional brain abnormalities in PBD mainly located in the cortical - subcortical - limbic pathways. Psychotic symptoms were associated with much more severe and extensive brain impairments in PBD patients, which could be the pathological basis of more severe symptoms and worse prognosis in psychotic PBD.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0065

### **To the search of clinical and neuroanatomical predictors of functional outcome in individuals at risk of psychosis**

M. Omel'chenko<sup>1\*</sup>, A. Tomyshev<sup>1</sup>, I. Lebedeva<sup>1</sup>, V. Kaleda<sup>1</sup>, T. Akhadov<sup>2</sup>

<sup>1</sup> Federal State Budgetary Scientific Institution "Mental Health Research Centre", Federal Agency for Scientific Organizations, Moscow, Russia; <sup>2</sup> Children's Clinical and Research Institute of Emergency Surgery and Trauma, Federal Agency for Scientific Organizations, Moscow, Russia

\* Corresponding author.

**Background and aims.**– The problem of early diagnosis and prevention of schizophrenia is of utmost importance today. In this context, the analysis of multimodal markers in the at-risk mental state (ARS) patients merits particularly close attention.

The aim was to determine clinical and neuroanatomical markers that differ between subgroups of ARS patients with good and poor functional outcome.

**Methods.**– 34 young (16–25 years) ARS in-patients underwent clinical and sMRI examination. Participants were scanned on 3T Philips Achieva scanner (TR/TE = 8.2/3.7 ms, FA = 8°, voxel size 0.83 × 0.83 × 1.0 mm, no gap). T1-weighted images were analysed in FreeSurfer 5.3.0. Follow-up examinations with the assessment of PSP scores were done in 5.5 years (on the average) and repeated in 3 months after that.

**Results.**– At the time of the first follow up examination 14 patients (GR1) had a complete functional remission. 20 patients (GR2, mostly with initial specific interaction between depressive symptoms and APS) had an incomplete remission. It was also found that initially GR1 had higher cortical thickness in the cluster covering the part of the left dorsolateral prefrontal cortex. However, the second follow up study has revealed some changes in the subgroups structure such that the identified cortical thickness differences became statistically insignificant.

**Conclusions.**– Some clinical and neuroanatomical features seem promising in regard to outcome prediction however the study emphasizes instability of clinical state in ARS patients.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0066

### **Quality of life in patients seeking treatment for alcohol use disorder and concurrent disorders in Ontario, Canada**

A. Samokhvalov<sup>1\*</sup>, J. Rehm<sup>2</sup>

<sup>1</sup> University of Toronto, Department of Psychiatry, Toronto, Canada; <sup>2</sup> Centre for Addiction and Mental Health, Institute for Mental Health Policy Research, Toronto, Canada

\* Corresponding author.

**Background and aims.**– Quality of life (QOL) is an important determinant of condition severity, treatment seeking, adherence and outcome. Alcohol use disorder (AUD) is a common condition, which is associated with a number of comorbidities and QOL deterioration. There is a lack of data on QOL in patients with AUD.

**Aim.**– To quantitatively evaluate QOL in patients with AUD and concurrent disorders in clinical setting using a standardized instrument.

**Methods.**– Cross-sectional study. European Quality of Life (EQ-5D-5L) tool.

**Results.**– The data from clinical charts of 321 patients (62.9% males, mean age 44.9 ± 12.3 years) seeking treatment for AUD and concurrent disorders from multiple clinics in Ontario, Canada,

were collected. Self-care and mobility were the least affected categories, whereas 65.4% of patients had some problems with activities of daily living and 66.0% - reported some degree of pain and discomfort. Concurrent anxiety and depressive symptoms were the most prevalent with 91.0% of patients experiencing them to some degree and 69.2% having moderate-to-severe problems in this domain (See Fig. 1).

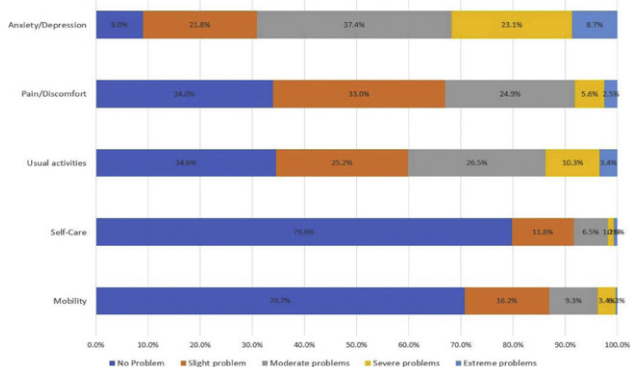


Fig. 1. Distribution of rankings of quality of life indicators.

**Conclusions.**– Quality of life in patients with AUD is predominantly affected in domains of mood and anxiety problems as well as in the domains of pain and discomfort and activities of daily living. Further research is necessary for estimation of the impact of QOL on treatment outcomes and changes of QOL during treatment.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0067

### Prevalence of clinical high risk (CHR) criteria in children and adolescents not suspected to develop psychosis

F. Schultze-Lutter<sup>1</sup>\*, C. Michel<sup>2</sup>, B.G. Schimmelmann<sup>2</sup>, P. Walger<sup>3</sup>, M. Franscini<sup>4</sup>, N. Traber-Walker<sup>4</sup>

<sup>1</sup> Heinrich-Heine University- Medical Faculty, Department of Psychiatry and Psychotherapy, Düsseldorf, Germany; <sup>2</sup> University of Bern, University Hospital of Child and Adolescent Psychiatry and Psychotherapy, Bern, Switzerland; <sup>3</sup> Heinrich-Heine University-Medical Faculty, Department of Child and Adolescent Psychiatry and Psychotherapy, Düsseldorf, Germany; <sup>4</sup> Psychiatric University Hospital Zurich, Department of Child and Adolescent Psychiatry and Psychotherapy, Zurich, Switzerland

\* Corresponding author.

**Background and aims.**– In the community, clinical high risk of psychosis (CHR) criteria occur more frequently in children and adolescents compared to adults. Yet, little is known about their occurrence in clinical children and adolescents samples. Thus, we studied how frequent CHR criteria and symptoms occur in 8- to 17-year-old inpatients with disorders that were associated with greater odds to develop psychosis in adulthood, i.e., attention-deficit hyperactivity disorder, social and specific phobia, and obsessive compulsive disorder, eating disorders and Asperger's disorder.

**Methods.**– In the multicenter naturalistic Bi-national Evaluation of At-Risk Symptoms in children and adolescents (BEARS-Kid) study, 8- to 17-year-olds of the community ( $N = 235$ ) and 8- to 17-year-old inpatients with any one of the above main diagnoses who were not suspected to be at increased risk of psychosis ( $N = 306$ ) were examined for CHR symptoms and criteria with the Structured Interview for Psychosis-Risk Syndromes and the Schizophrenia Proneness Instrument, Child & Youth version.

**Results.**– At 6.4%, the prevalence rate of CHR criteria in the community sample was almost as high as the 8.2%-rate in the inpatient

sample. However, both rates were higher than the earlier reported 2.4%-rate of CHR criteria in young adults.

**Conclusions.**– This indicates that, irrespective of their mental health status, children and adolescents present more frequently with CHR criteria compared to adults. Thus, more research into these symptoms and their cause and meaning in children and adolescents is needed to understand their significance in this age group and to detect factors that convey their clinical relevance in adulthood.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0069

### Antipsychotic prescribing trends in a children and adolescent population in Pomerania Region, Poland 2008–2012

P. Waszak<sup>1</sup>\*, P. Zagodzón<sup>1</sup>, M. Pierucka<sup>1</sup>, A. Kubanek<sup>2</sup>

<sup>1</sup> Medical University of Gdansk, Department of Hygiene and Epidemiology, Gdansk, Poland; <sup>2</sup> Medical University of Gdansk, Department of Occupational- Metabolic- and Internal Diseases, Gdansk, Poland

\* Corresponding author.

**Background and aims.**– In recent years antipsychotics have been increasingly used in the population of children and adolescents. The objective of this article is to profile the use of antipsychotic medications in a pediatric population in Poland based on data from the Pomeranian region (Northern Poland).

**Methods.**– The study was based on National Health Fund data about prescription drug reimbursement between 2008 and 2012. A patient database was created using ID to analyze specific patterns and information about individuals using antipsychotics. Percentage population indicators were calculated using official demographic reports.

**Results.**– An increased number of overall prescriptions was observed since 2008, with a subsequent decline to its lowest number in 2012. The population with at least one antipsychotic-filled prescription per year has grown in the same time. The annual rate has increased from 0.26% to 0.31% of the general population between 0 and 17 years of age in the Pomeranian region. We observed an increasing number of females and the 0- to 4-year-old receiving antipsychotic prescriptions. The population share of prescribed first-generation antipsychotics exceeded the share of second-generation antipsychotics (SGAs). The use of SGAs increased from 38% to 44% of all prescriptions, during the observation period. The most frequently prescribed drugs were Risperidone (26.7%) and Chlorprothixene (21.7%).

**Conclusions.**– The study revealed that the prescribing patterns of antipsychotics increased in the Polish pediatric population and concerned more patients from the youngest group. The high prevalence of such early exposure to antipsychotics should focus more attention on drug safety in this population.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## Oral Communications 07: Neuroimaging/Suicidology and suicide prevention Part I/Others

OC-0071

### The relevance of cognitive deficit in an adapted animal model of IBS in mice

R.O. Cojocariu<sup>1\*</sup>, R. Lefter<sup>2</sup>, A. Daniela<sup>3</sup>, A.S. Ciobica<sup>4</sup>

<sup>1</sup> Alexandru Ioan Cuza University of Iasi, Biology, IASI, Romania; <sup>2</sup> Romanian Academy- Iasi- B dul Carol I- no 8, Center of Biomedical Research, Iasi, Romania; <sup>3</sup> Universitatea de Medicină și Farmacie “Gr. T. Popa”, Department of physiology, Iasi, Romania; <sup>4</sup> Faculty of Biology- Alexandru Ioan Cuza University- B dul Carol I- no 11-, Department of Research, Iasi, Romania

\* Corresponding author.

**Background and aims.**– Psychological stress plays a pivotal role in the interactions between the multiple codependent factors, that favor disturbance of the brain-gut axis and occurrence of IBS symptoms (activation of mucosal immune system, disturbance of intestinal function, inflammatory processes and dysbiosis). Currently, stress exposure is largely used under a variety of approaches (neonatal and early life stress, chronic stress, acute stress, multifactorial stress) in developing animal models of IBS.

Considering the unpredictability of stressors in daily life, our aim was to optimize a validated IBS stress paradigm based on neonatal maternal separation by adding an original combination of stressors, for a reduced period of days, which would lead to memory deficiencies highlighted in the literature.

**Methods.**– Neonatal male and female mice (n = 12) experienced maternal separation between postnatal days 1 and 14, and 3 days contention stress at postnatal days 90–92. Half of the group was exposed to six additional different stressors during postnatal days 90–95. Y-maze task was used for assessing short-term memory modifications.

**Results.**– Stress exposure resulted in significantly reduced short-term memory performance (expressed as spontaneous alternation percentage), only in the multifactorial stress when compared to control group ( $p = 0,019179$ ).

**Conclusions.**– A multifaceted approach in generating an IBS animal model may be indicated for covering more aspects of the disorder.  
**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0073

### Predictors of suicide attempts in self-harm adolescents: analysis from a clinical and community sample

T. Duarte<sup>1\*</sup>, S. Paulino<sup>1</sup>, C. Almeida<sup>1</sup>, H. Gomes<sup>2</sup>, M. Gouveia-Pereira<sup>3</sup>

<sup>1</sup> Núcleo de Estudos de Suicídio do Hospital de Santa Maria – CHLN, Serviço de Psiquiatria e Saúde Mental, Lisboa, Portugal; <sup>2</sup> Universidade do Minho, Centro de Investigação em Psicologia CIPsi, Lisboa, Portugal; <sup>3</sup> ISPA - Instituto Universitário, CIE - ISPA - Instituto Universitário, Lisbon, Portugal

\* Corresponding author.

**Background and aims.**– Frequent self-harm behaviors and the use of different methods are major suicidal risk factors, after suicidal ideation and before psychiatric symptoms. The aim is to analyze the predictive risk factors for self-harm in adolescents with and without accompanying suicidal ideation.

**Methods.**– 73 adolescents answered a questionnaire about self-harm and suicidal behaviors (502 from a school sample and 71 from a hospital sample). A Logistic Regression Model was used to clarify which predictive variable (suicidal ideation, depression, anxiety,

and stress) had more impact in non-suicidal self-harm, suicidal ideation and suicide attempts.

**Results.**– Almost half of the total sample (47%) had at least one self-harm behavior, the majority (80%) presented suicidal ideation and about 18% had at least one suicide attempt. Everyone with suicidal ideation had at least one previous self-harm behavior. From those who attempted suicide, only one had no previous self-harm behavior. Adolescents with suicidal ideation had a higher average (5.4 vs 2) of self-harm behavior types, and more self-harm behaviors (12.4 vs 3.2) and suicidal ideation (82.3 vs 24.5). Depression and anxiety were significant predictors of suicide attempts in self-harm adolescents.

**Conclusions.**– There is a continuum between self-harm and suicidal behaviors. There is neither a desire nor an absence of desire to die during the act, thus seeking intentionality in self-harm is a contradiction. Intentionality seems to be constructed as an attempt to give the act a meaning. Therefore, it is important to be attentive for anxiety and depression symptoms in self-harm adolescents as they increase the risk for suicide attempts.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0074

### Specific structural and functional underpinnings of pain catastrophizing dimensions in patients with chronic pain: evidence in medication-overuse headache

F. Christidi<sup>1</sup>, E. Karavasilis<sup>2</sup>, P. Ferentinos<sup>3\*</sup>, F. Riederer<sup>4</sup>, L. Michels<sup>5</sup>, G. Velonakis<sup>2</sup>, E. Anagnostou<sup>1</sup>, S. Kollias<sup>5</sup>, E. Efstathopoulos<sup>2</sup>, N. Kelekis<sup>2</sup>, E. Kararizou<sup>1</sup>

<sup>1</sup> Medical School- National and Kapodistrian University of Athens, First Department of Neurology- Aeginition Hospital, Athens, Greece; <sup>2</sup> Medical School- National and Kapodistrian University of Athens, Research- Radiology and Medical Imaging Unity- Second Department of Radiology- Attikon General University Hospital, Athens, Greece; <sup>3</sup> National and Kapodistrian University of Athens- Medical School, 2nd Department of Psychiatry, Athens, Greece; <sup>4</sup> General Hospital Hietzing With Neurological Center Rosenhügel, Department of Neurology, Vienna, Austria; <sup>5</sup> University Hospital Zurich, Institute of Neuroradiology, Zurich, Switzerland

\* Corresponding author.

**Background and aims.**– Pain catastrophizing (PC) significantly mediates the perception of pain but its dimensions may differentially contribute to pain severity, chronicity or treatment ineffectiveness in chronic pain syndromes. The aim of the present study is to examine the neuroanatomical substrate of different PC dimensions (i.e. rumination; magnification; helplessness) in patients with medication-overuse headache (MOH).

**Methods.**– We included 18 patients with MOH who were administered the Pain Catastrophizing Scale (PCS) and scanned in a 3T MRI scanner using structural and functional resting state MRI sequences. We performed whole-brain volumetric and resting-state functional connectivity (FC) analysis to examine the association between gray matter (GM) density and FC strength and PCS dimensions controlling for depression and anxiety.

**Results.**– Higher total PCS score was associated with decreased GM density in precentral and inferior temporal gyrus, reduced FC between middle temporal gyrus and cerebellum and increased FC between precuneus and inferior temporal gyrus, and between frontal pole and temporal fusiform cortex. With regards to PCS dimensions, volumetric and FC analysis mainly revealed the involvement of (a) somatosensory cortex, supramarginal gyrus, basal ganglia, core default-mode network (DMN) in rumination; (b) somatosensory, core DMN, dorsal medial prefrontal cortex



(DMPFC)-DMN subsystem and cerebellum in magnification; and c) temporal regions, DMN and basal ganglia in helplessness.

**Conclusions.**– In conclusion, PC dimensions are associated with a specific pattern of structural and functional brain alterations which is different from the pattern observed when PC is considered as a single score. Clinical implications of our findings in MOH, specifically regarding basal ganglia and cerebellum, need further investigation.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0075

### Changes of brain functional connectivity after a single-dose of intravenous citalopram are associated with trait anxiety in healthy individuals

A.E. Edes<sup>1</sup>, X. Gonda<sup>2\*</sup>, K. Gecse<sup>1</sup>, G. Juhasz<sup>3</sup>, G. Bagdy<sup>1</sup>

<sup>1</sup> Semmelweis University, Department of Pharmacodynamics, Budapest, Hungary; <sup>2</sup> Hungarian Academy of Sciences- Semmelweis University, MTA-SE Neuropsychopharmacology and Neurochemistry Research Group, Budapest, Hungary; <sup>3</sup> Semmelweis University, SE-NAP2 Genetic Brain Imaging Migraine Research Group, Budapest, Hungary

\* Corresponding author.

**Background and aims.**– According to literature, serotonergic challenge with selective serotonin reuptake inhibitors (SSRI) leads to widespread changes in resting brain functional connectivity in healthy volunteers. Trait anxiety, which is an important risk factor for depression and anxiety disorders, is influenced by the serotonergic system.

Our aim was to investigate the association between trait anxiety and functional connectivity changes of the anterior cingulate cortex (ACC) to intravenous citalopram.

**Methods.**– 33 healthy participants took part in a 30-min long resting state functional MRI. After 10 min baseline, 7.5 mg citalopram was administered over 7.5 min. Before and after the citalopram infusion normal saline was administered. The first (baseline) and last 10 min (citalopram condition) of the fMRI session were compared in the analyses. ACC Seed-to-voxel analyses was performed using the CONN toolbox v18. Results were controlled for the effects of sex and age. The State-Trait Anxiety Inventory was used to measure trait anxiety.

**Results.**– Decreased functional connectivity in relation to trait anxiety was found between the ACC seed and four clusters covering the middle cingulate cortex, the precentral gyrus, the supplementary motor cortex and the caudate after citalopram challenge.

**Conclusions.**– Our results suggest that the acute effects of SSRI treatment on brain functional connectivity are related to trait anxiety. As the ACC is part of the default mode and the salience network, this phenomenon might be associated with changes in nonconscious attentional processes.

**Funding.**– This work was supported by KTIA.NAP.13-2-2015-0001; 2017-1.2.1-NKP-2017-00002 and by the New National Excellence Program of the Ministry of Human Capacities (ÚNKP-18-4-SE-33 and ÚNKP-18-3-III-SE-6).

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0076

### Periaqueductal gray activation in chronic pain and depressed patients with offset analgesia induction

C.S. Ho<sup>1\*</sup>, R.C. Ho<sup>1</sup>, S.W. Derbyshire<sup>2</sup>

<sup>1</sup> National University Health System, Psychological Medicine, Singapore, Singapore; <sup>2</sup> National University of Singapore, Psychology, Singapore, Singapore

\* Corresponding author.

**Background and aims.**– Endogenous modulating mechanisms such as offset analgesia (OA) are frequently targeted in pain management. OA is characterised by prominent non-proportional reduction in pain perception following discrete decrease in noxious stimulus intensity. We aim to investigate periaqueductal gray (PAG) and pain matrix activity during offset, baseline and constant heat conditions in healthy, depressed and chronic pain subjects.

**Methods.**– 45 subjects underwent functional magnetic resonance imaging (fMRI). 3 heat conditions interweaved in the same fMRI run were administered. Each run involved 46 °C delivered to the left leg. All conditions commenced with 12 seconds of 35 °C (T0). Offset conditions persisted with 46 °C noxious stimulus (T1, 6s), followed by 1 °C increase (T2, 6s) and 1 °C decrease (T3, 12s) back to T1. Baseline conditions were identical to offset conditions except that temperature returned to 35 °C at T3. Constant conditions continued with 46 °C throughout T1 to T3. Brain activation in T3 of each condition was compared with T0 and this difference was compared across conditions and groups.

**Results.**– OA effect was observed in healthy and depressed but not chronic pain patients. Activation of PAG was observed with inhibition of activation throughout pain matrix for controls. No attenuated activation in pain matrix despite PAG activation was noted in depressed patients, with significant activation of temporal/parietal lobes and orbitofrontal cortex. Chronic pain patients had prominent reduced activation throughout pain matrix and no PAG activation.

**Conclusions.**– OA inhibits activation of pain matrix by engaging an endogenous inhibitory mechanism involving PAG. Depression and chronic pain alter OA effect and affect pain matrix differently.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0077

### Prevention of suicide behaviour in Belarus

S. Igumnov

Institute of Psychology- Belarusian State University, Clinical Psychology- Professor, Minsk, Belarus

**Background and aims.**– For more than 20 years (1990–2013) Republic of Belarus has been a country of high suicide rates with more than 20 cases per 100,000 population. The suicide rates reached their maximum in 1996 (35.8 cases per 100,000) and for almost ten years have never been lower than 30 cases per 100,000. A marked and persistent trend towards decrease of suicide rates has been observed since 2004.

**Methods.**– In 2006, the suicide rates dropped below 30 and this favourable tendency became more prominent in 2009, following the implementation of the Comprehensive Plan for Suicidal Behaviour Prevention in the Republic of Belarus.

**Results.**– During the following three years, from 2009 to 2012, the suicide rates dropped further by 7.8 cases per 100,000 (from 28.3 to 20.5). In 2014, for the first time in the history of Belarus as an independent country, the official suicide rates in general population were lower than 20 cases per 100,000. Alcohol intoxication was shown to be a major contributor to suicidal acts in Belarusian pop-

ulation: about 60.0% of suicidal acts among men and 52.9% among women are committed in the state of alcohol intoxication.

**Conclusions.**– Therefore, prevention of suicidal behaviour should be only considered within the context of national anti-alcohol policy.  
**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0078

### **A meta-analysis of task-related brain fMRI activation in major depressive disorder, bipolar disorder, anxiety disorder and post traumatic stress disorder**

D. Janiri<sup>1,2\*</sup>, D.A. Moser<sup>1</sup>, M.J. Lubert<sup>1</sup>, G.E. Doucet<sup>1</sup>, A. Rasgon<sup>1</sup>, W.H. Lee<sup>1</sup>, J. Murrugh<sup>1</sup>, G. Sani<sup>3</sup>, S.B. Eickhoff<sup>4</sup>, S. Frangou<sup>1</sup>  
<sup>1</sup> Icahn School of Medicine at Mount Sinai, Department of Psychiatry, New York, USA; <sup>2</sup> Sapienza University of Rome- Faculty of Medicine and Psychology, Psychiatry Residency Training Program, Rome, Italy; <sup>3</sup> Sapienza University of Rome- Faculty of Medicine and Psychology, NESMOS Department Neurosciences- Mental Health and Sensory Functions, Rome, Italy; <sup>4</sup> Heinrich-Heine-Universität, Institut für Systems Neuroscience, Düsseldorf, Germany  
\* Corresponding author.

**Background and aims.**– Major Depressive Disorder (MDD), Bipolar Disorder (BD), Anxiety Disorders and Post Traumatic Stress Disorder (PTSD) have been associated with alteration in brain activation across diverse tasks. We sought to identify trans-diagnostic and diagnosis-specific patterns of brain engagement by synthesizing the task-fMRI literature published in the last decade.

**Methods.**– Using standard procedures we extracted the anatomical coordinates of case-control differences from 226 whole-brain task-fMRI studies with a combined sample of 4507 adult patients and 4755 healthy controls. Tasks were classified according to the Research Domain Criteria. Data analyses were implemented using activation likelihood estimation. Statistical inference in each analysis was based on cluster-forming voxel-level threshold of  $p < 0.001$ , with family-wise error correction.

**Results.**– Patients across all disorders and all paradigms showed hypo-activation in three right-sided clusters in the inferior frontal orbital gyrus, the inferior parietal lobule and the putamen. Diagnosis-specific findings were noted in patients with BD who showed hypo-activation in the left putamen during non-affective tasks and in patients with anxiety disorder who showed hypo-activation in the right inferior parietal lobule during affective paradigms.

**Conclusions.**– Despite some evidence of diagnostic specificity, MDD, BD, Anxiety disorders and PTSD shared a pattern of task-related hypo-activation in the fronto-parietal and striatal regions.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0079

### **Mindful acceptance or cognitive reappraisal? Looking for neural correlates of emotion regulation in major depressive disorder before and after mindfulness based cognitive therapy**

M. Kulesza<sup>1\*</sup>, P. Holas<sup>2</sup>, K. Rękawek<sup>2</sup>, A. Marchewka<sup>1</sup>, M. Wypych<sup>1</sup>  
<sup>1</sup> Nencki Institute of Experimental Biology, Laboratory of Brain Imaging, Warsaw, Poland; <sup>2</sup> University of Warsaw, Psychology, Warsaw, Poland  
\* Corresponding author.

**Background and aims.**– Cognitive behavioral therapy (CBT) and mindfulness based cognitive therapy (MBCT) were proven to effectively treat major depressive disorder (MDD). Both interventions differently address impaired emotion regulation (ER). CBT focuses on reinterpretation of the meaning of stimuli, while mindfulness focuses on awareness of inner states and fully accepting them.

Our goal was to compare influence of CBT and MBCT on brain activity related to ER strategies.

**Methods.**– 8 MDD patients took part in 8-week MBCT group training, 7 MDD patients took 8-week CBT group training and 10 participants were in a waiting list control group (WL). All subjects underwent an fMRI experiment. Before the scan a qualified psychologist gave them detailed and exemplified instructions of the task, during which subjects were shown sad or emotionally neutral pictures, with one of three instructions: to change the interpretation to more positive (REAP), to be mindfully aware and accepting (MIND), or just to observe the photos (PASSIVE). After every condition participants were asked to score their performance and current mood.

**Results.**– Pre-therapy results showed extensive activations during REAP (REAP > PASSIVE) including insula, ACG and IFG, supposedly representing the cognitive effort to reinterpret the viewed scenes. In MIND > PASSIVE only inferior and middle FG was found. This outcome can suggest that subject naïve to mindfulness techniques have difficulties in engaging in this kind of ER strategies. In post-therapy REAP (CBT > WL) there was activation of supramarginal, angular and middle frontal gyrus, suggesting involvement of executive control network. MIND task (MBCT > WL) activated hippocampus and middle cingulate.

**Conclusions.**– (Data is being further analyzed).

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## **Oral Communications 08: Schizophrenia and other psychotic disorders Part I/Rehabilitation and psychoeducation**

OC-0082

### **Anxious attachment style as a mediator between negative religious coping and distress levels among outpatients with first-episode psychosis in Singapore**

L. Cetty<sup>1\*</sup>, A. Jeyagurunathan<sup>1</sup>, W.L. Teh<sup>1</sup>, R. Kumarasan<sup>1</sup>, F. Devi<sup>1</sup>, Y.W. Lau<sup>1</sup>, C. Tang<sup>2</sup>, S. Verma<sup>2</sup>, M. Subramaniam<sup>1</sup>  
<sup>1</sup> Institute of Mental Health, Research Division, Singapore, Singapore; <sup>2</sup> Institute of Mental Health, Early Psychosis Intervention Programme, Singapore, Singapore  
\* Corresponding author.

**Background and aims.**– While there is research suggesting that negative religious coping (NCOPE) is associated with higher distress, the mechanisms underlying it are relatively unexplored. The correspondence pathway theory posits that one's attachment style mimics the way one perceives God or a higher power. This study aims to investigate if anxious attachment mediates the relationship between NCOPE and distress among 174 outpatients diagnosed with first-episode psychosis at a psychiatric hospital in Singapore.

**Methods.**– The study procedure involved participants completing a one-time self-reported questionnaire. Information on anxious attachment and NCOPE was collected using the Psychosis Attachment Measure (PAM) and the Brief Religious Coping scale (Brief RCOPE) respectively. Distress levels were measured using the Depression Anxiety Stress Scale (DASS-21). Mediation analysis was conducted using Hayes' (2013) PROCESS macros for SPSS. Ten

thousand bootstrap samples were obtained to estimate the bias-corrected and accelerated confidence intervals (BCa CI) for the indirect effects.

**Results.**– There was a significant indirect effect on NCOPE on distress levels through anxious attachment,  $ab = 1.57$ , BCa CI [1.02, 2.23] (Fig. 1). The mediator could account for about three quarters of the total effect  $PM = 0.78$ .

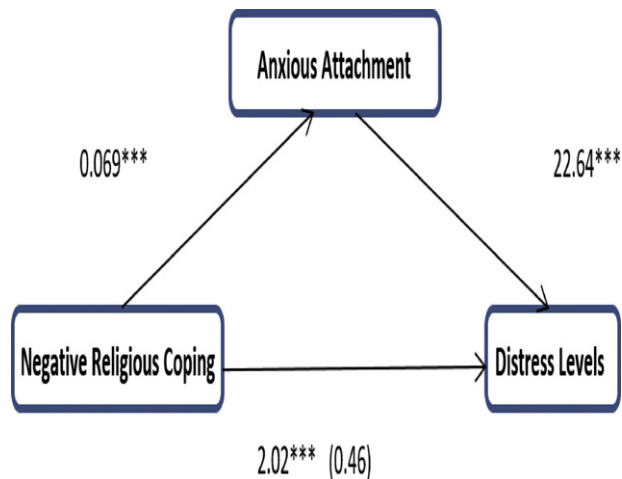


Fig. 1. Standardised regression coefficients for the relationship between negative religious coping and distress levels as mediated by anxious attachment. The standardised regression coefficient between negative religious coping and distress level, controlling for anxious attachment is in parenthesis.

\*\*\* $p < .001$ .

**Conclusions.**– The findings suggest that the use of negative religious coping methods might be predicated on levels of anxious attachment. It might be beneficial in future clinical practice to address one's individual working model as a basis for reducing negative religious coping.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0083

### Decisions, probabilities and predictions: the relationship between childhood trauma and cognitive and perceptual strategies associated with psychosis in a large UK birth cohort

J. Croft\*, J. Heron, S. Zammit, N. Pathways to Psychosis Group  
University of Bristol, Centre for Academic Mental Health, Bristol,  
United Kingdom

\* Corresponding author.

**Background and aims.**– Childhood trauma is an established risk factor for the onset and development of psychotic symptoms in clinical and non-clinical groups. Theoretically, cognitive and perceptual biases may mediate the relationship between trauma and psychotic symptoms. However, this relationship has not been tested in a large cohort.

**Methods.**– Using data from 2,344 participants from the Avon Longitudinal Study of Parents and Children, Linear Regression was used to assess the association between the number of different types of trauma experienced (0,1,2,  $\geq 3$ ), and parameters derived from beads tasks and a predictive processing task.

**Results.**– A linear trend between the strength of the association between hasty decision making, cognitive noisiness and the number of trauma types reported was observed. Participants that reported the highest level of exposure ( $\geq 3$  types of trauma) were less likely to draw a large number of beads in the decision-making

task (Adj  $B = -.07$ , 95% CI  $-.07, -.06$ ,  $p < .001$ ) and less likely to make precise estimates in decision making (Adj  $B = -.15$  95% CI  $-.05, -.4$   $p < .001$ ) and probability estimation (Adj  $B = -.04$ , 95% CI  $-.05, -.04, .-.02$   $p < .001$ ). Adjusting for potential confounders (IQ, SES) had minimal impact on these associations.

**Conclusions.**– Our findings of associations between exposure to trauma and hasty decision making and sub-optimal strategies in both decision making and probability estimation suggest traumatic experiences increase the likelihood of cognitive characteristics thought to be causally related to psychosis. Longitudinal studies that examine the extent to which these potentially modifiable biases mediate the relationship between trauma and psychosis are required to inform prevention strategies.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0084

### Gene co-expression networks reveal pathways of convergence of schizophrenia risk genes and of response to treatment

P. Di Carlo<sup>1,2\*</sup>, G. Pergola<sup>1</sup>, A.E. Jaffe<sup>2</sup>, M. Papalino<sup>1</sup>, Q. Chen<sup>2</sup>, T.M. Hyde<sup>2</sup>, J.E. Kleinman<sup>2</sup>, J.H. Shin<sup>2</sup>, A. Rampino<sup>1</sup>, G. Blasi<sup>1</sup>, D.R. Weinberger<sup>2</sup>, A. Bertolino<sup>1</sup>

<sup>1</sup> University of Bari Aldo Moro, Department of Basic Medical Sciences-Neuroscience and Sense Organs, Bari, Italy; <sup>2</sup> Lieber Institute for Brain Development, Johns Hopkins Medical Campus, Baltimore, USA

\* Corresponding author.

**Background and aims.**– Schizophrenia (SCZ) is associated with genetic factors, and specific risk loci have been identified. Still, the biology and clinical translation of genetic risk remain unknown. Gene co-expression networks are relevant to functional and clinical translation of SCZ risk. We hypothesized that SCZ risk genes may converge into co-expression pathways which may be associated with clinical outcomes.

**Objectives.**– Identify co-expression pathways of risk for SCZ and link transcriptomic with clinical findings.

**Methods.**– We used Weighted Gene Co-expression Network Analysis to identify co-expression modules in two prefrontal cortex post mortem RNA-sequencing datasets, including 379 healthy controls (HC) and 309 SCZ. We used four replication datasets (HC = 339). To identify modules enriched for SCZ risk genes, we computed hypergeometric tests correcting for multiple comparisons. To translate *post mortem* into clinical phenotypes, we identified polymorphisms predicting co-expression and combined them into an index approximating co-expression (Polygenic Co-expression Index: PCI), which we replicated in two independent datasets (HC = 131). Finally, we replicated the association between PCI and treatment response to antipsychotics, measured with Positive And Negative Syndrome Scale, in two independent SCZ cohorts (SCZ = 167).

**Results.**– We identified and replicated ( $p$ -values  $< .001$ ) a single module enriched for SCZ risk genes (13 genes in 10 loci, corrected- $p$ -value  $< .001$ ). PCI-co-expression association was replicated in two datasets ( $p$ -values  $< .05$ ). PCI was associated with treatment response in the positive symptom scale in both clinical cohorts ( $p$ -values  $< .05$ ).

**Conclusions.**– These findings show that part of the risk genes for SCZ is co-expressed in the prefrontal cortex. Results provide evidence for the clinical relevance of this co-expression pathway and its associated polymorphisms.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.



OC-0085

### The role of facial fear recognition and trait aggressiveness in determining violent behavior in schizophrenia and in the general population

M. Krakowski<sup>1\*</sup>, P. Czobor<sup>2</sup>, U. Tural<sup>3</sup>

<sup>1</sup> Nathan Kline Institute- New York University School of Medicine, Psychiatry, Orangeburg, USA; <sup>2</sup> Semmelweis Medical School, Psychiatry, Budapest, Hungary; <sup>3</sup> nathan kline institute for psychiatric research, Psychiatry, Orangeburg, USA

\* Corresponding author.

**Background and aims.**– Facial fear recognition impairment (FRI) and trait predisposition to physical aggressiveness (PTA) have been associated with greater violence in violent subjects. We investigated the role these factors play in violent patients with schizophrenia (VS) and contrasted this to their roles in non-psychotic violent subjects (NPV), non-violent schizophrenic patients (NV) and healthy controls (HC).

**Methods.**– 144 subjects were included: 40 VS's, 35 NPV's, 35 HC's, 34 NV's. FRI was measured with the Penn Emotion Recognition Task; Physical Aggressiveness with the Buss Perry Aggression Questionnaire; aggression with Life History of Aggression (LHA) Questionnaire. General linear models were used with relevant covariates.

**Results.**– FRI and PTA played an important role in determining violence in the violent but not in the non-violent group. In NPV's, there were strong main effects for FRI ( $F = 17.1, p < .001$ ) and PTA ( $F = 32.6, p < .001$ ) but no interaction effect in determining LHA score. In the VS ( $N = 40$ ) there was a main effect for FRI ( $F = 10.1, p = .004$ ), and for PTA ( $F = 5.3, p = .03$ ). There was also a significant interaction effect between the two ( $F = 9.1, p = .005$ ): with more severe impairment in fear recognition, patients were more violent regardless of their PTA score. If, however, FRI was low, subjects with more severe PTA were much more aggressive than those with low PTA.

**Conclusions.**– FRI and PTA are important factors influencing violence. In the violent non-psychotic group both contributed strongly in an additive fashion to violence. In the schizophrenic patients, impairment in fear recognition played a more important role than physical aggressiveness and interacted with it.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0086

### Cognitive flexibility, cognitive inhibition and problem solving in patients with schizophrenia

M. Mak<sup>1\*</sup>, E. Tyburski<sup>2</sup>, A. Starkowska<sup>1</sup>, A. Samochowiec<sup>2</sup>, J. Samochowiec<sup>3</sup>

<sup>1</sup> Pomeranian Medical University, Independent Clinical Psychology Unit, Szczecin, Poland; <sup>2</sup> University of Szczecin, Department of Clinical Psychology, Szczecin, Poland; <sup>3</sup> Pomeranian Medical University, Department of Psychiatry, Szczecin, Poland

\* Corresponding author.

**Background and aims.**– Executive functions impairments (e.g. cognitive flexibility, cognitive control and problem solving) have been reported in schizophrenia, but knowledge about differences of particular aspects of these processes is still unclear. The purpose of this study was to assess three aspects of executive functions in schizophrenia patients and compare with healthy participants.

**Methods.**– For assessing executive functions we used three classical tests: the Trail Making Test (TMT, relative indicator: (time in 2 – time in 1)/time in 1), the Stroop Color Word Test (SCWT, relative indicator: (time in 2 – time in 1)/time in 1) and the Wisconsin Card Test (WCST, percent of non-perseverative errors). The study involved 33 patients with schizophrenia. The control group

comprised 33 neurologically and mentally healthy participants, matched for age, gender, years of education and global cognitive functioning. To test the differences between both group and different indicators  $2 \times 3$  ANOVA with the between-subject factor was used (z scores were analysed).

**Results.**– Patients had less scores in TMT, SCWT and WCST than healthy participants. Furthermore, in clinical group were differences between three indicators of neuropsychological tests (patients were better results in WCST than in TMT or SCWT).

**Conclusions.**– These results suggest that patients with schizophrenia have difficulties in various aspects of executive functions, and the bigger dysfunctions are observed in cognitive inhibition and cognitive flexibility than in problem solving. This founding of conducted study can be used in neuropsychological assessment and helpful in cognitive training design.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0087

### Pregnancy, delivery and motherhood in women with schizophrenia or schizoaffective disorder: a national register-based follow-up study from Finland

L. Simoila<sup>1\*</sup>, E. Isometsä<sup>1</sup>, M. Gissler<sup>2,3</sup>, J. Suvisaari<sup>4</sup>, E. Halmesmäki<sup>5,6</sup>, E. Sailas<sup>7</sup>, N. Lindberg<sup>8</sup>

<sup>1</sup> University of Helsinki and Helsinki University Hospital, Psychiatry, Helsinki, Finland; <sup>2</sup> University of Turku, Child Psychiatry, Turku, Finland; <sup>3</sup> Karolinska Institute, Neurobiology, Stockholm, Sweden; <sup>4</sup> National Institute for Health and Welfare, Mental Health Unit, Helsinki, Finland; <sup>5</sup> University of Helsinki and Helsinki University Hospital, Obstetrics and Gynecology, Helsinki, Finland; <sup>6</sup> Fameda-clinic, Obstetrics and Gynecology, Helsinki, Finland; <sup>7</sup> University of Helsinki and Helsinki University Hospital-Kellokoski hospital, Psychiatry, Kellokoski, Finland; <sup>8</sup> University of Helsinki and Helsinki University Hospital, Forensic Psychiatry, Helsinki, Finland

\* Corresponding author.

**Background and aims.**– There has been a substantial increase in pregnancies among women with schizophrenia spectrum disorders. However, research focusing on reproductive health of them has been scarce and often limited by modest sample sizes. The purpose of this nationally representative follow-up study was to assess pregnancy-related and delivery-related health outcomes of women with schizophrenia or schizoaffective disorder, as well as to investigate negative perinatal health outcomes and out-of-home placements of their offspring.

**Methods.**– Using the Care Register for Health Care, we identified Finnish women who were born between 1965 and 1980 and who were diagnosed with schizophrenia or schizoaffective disorder during the follow-up period ending 31.12.2013 ( $n = 5214$ ). For each case, five age- and gender-matched controls were obtained from the population Register ( $n = 25,999$ ). Till the end of 2013, we identified 1162 singleton pregnancies among affected women and 4683 among their non-affected controls. The Medical Birth Register, the Register of Congenital Malformations and the Child Welfare Register were used to gather information about mothers and their offspring.

**Results.**– Schizophrenia spectrum disorders are associated with risk factors related to pregnancy, as well as with pregnancy- and delivery-related complications. Maternal schizophrenia spectrum disorders associate with some negative perinatal health outcomes and out-of-home placements of the offspring.

**Conclusions.**– Targeted health education and lifestyle interventions should be considered for those who plan for pregnancy. Intensive collaboration between psychiatrists, gynecologists, obstetricians and social workers is needed.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0088

### Moment-to-moment dynamics between auditory verbal hallucinations and negative affect and the role of beliefs about voices

S.H.W. So<sup>1</sup>, L.K.H. Chung<sup>1\*</sup>, C.Y. Tse<sup>1</sup>, S.S.M. Chan<sup>2</sup>, G.H.C. Chong<sup>3</sup>, K.S.Y. Hung<sup>4</sup>, I.E.C. Sommer<sup>5,6</sup>

<sup>1</sup> The Chinese University of Hong Kong, Psychology, Hong Kong, Hong Kong S.A.R.; <sup>2</sup> The Chinese University of Hong Kong, Psychiatry, Hong Kong, Hong Kong S.A.R.; <sup>3</sup> Kwai Chung Hospital, Clinical Psychology, Hong Kong, Hong Kong S.A.R.; <sup>4</sup> Castle Peak Hospital, Psychiatry, Hong Kong, Hong Kong S.A.R.; <sup>5</sup> University Medical Center Groningen, Neuroscience, Groningen, The Netherlands; <sup>6</sup> University Medical Center Groningen, Psychiatry, Groningen, The Netherlands

\* Corresponding author.

**Background and aims.**– Auditory verbal hallucinations (AVH) constitute a major source of emotional distress for patients with psychosis. Previous studies suggested that negative affect (NA) is both an antecedent and consequence of AVH. Furthermore, it has been theorized that negative appraisals of voices contribute to the maintenance of AVH. However, the temporal interplay between NA and AVH has not been formally tested.

This study examined the direction of association between NA and AVH using a real-time ecologically valid method and the effect of negative beliefs about voices on the association.

**Methods.**– Thirty-four patients diagnosed with schizophrenia spectrum disorders with present AVH (PANSS P3 item  $\geq 3$ ) completed a clinical interview, followed by experience sampling assessment for ten times a day over six days on an iPod Touch.

**Results.**– Multilevel modelling revealed that level of NA was significantly associated with intensity of AVH ( $\beta = 0.127$ ,  $SE = 0.024$ ,  $p < .001$ ) at the same moment. Time-lagged analyses revealed that level of NA at moment  $t$  significantly predicted intensity of, and increase in, AVH at moment  $t + 1$  ( $\beta = 0.124$ ,  $SE = 0.036$ ,  $p < .001$ ). Intensity of AVH at moment  $t$  also significantly predicted level of, and increase in, NA at moment  $t + 1$  ( $\beta = 0.064$ ,  $SE = 0.029$ ,  $p = 0.027$ ). Malevolent ( $\beta = 0.019$ ,  $SE = 0.005$ ,  $p < .001$ ) and omnipotent ( $\beta = 0.017$ ,  $SE = 0.006$ ,  $p = .010$ ) beliefs about voices significantly strengthened the same-moment association between AVH and NA, but not their cross-moment associations.

**Conclusions.**– Experiences of NA and AVH drove each other, leading to a feedback loop that maintained voices. The within-moment association between NA and AVH was exacerbated by negative beliefs about voices.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0090

### Enfacement illusion phenomenon in patients with schizophrenia

M. Tonna<sup>\*</sup>, V. Lucarini, M. Ardizzi, F. Ferroni, M.T. Sestito, F. Paraboschi, F. Marsella, B.D. Daniel, V. Gallese, C. Marchesi  
University of Parma, Neuroscience, Parma, Italy

\* Corresponding author.

**Background and aims.**– The constitution of a minimal or core Self is rooted in embodied interactions with the others and the world. Disorders in the minimal Self, including disturbances in self-demarcation, are central in schizophrenia spectrum.

The “Enfacement Illusion” Experiment (EI) has been adopted to assess the boundary between self and others in healthy individuals. It consists in the subjective illusion of looking at oneself in

the mirror when in fact looking at another person’s faces after interpersonal multisensory stimulation (IMS). No studies to date adopted the EI effect to investigate disturbed self-demarcation in schizophrenia spectrum.

**Objectives.**– To test the EI effect in schizophrenia and its correlations with psychopathology.

**Methods.**– 20 patients with diagnosis of Schizophrenia (SCZ) and 23 healthy controls (HC) underwent an EI task. PANSS was adopted for the investigation of psychopathology.

**Results.**– EI effect was estimated calculating the changing score for Self-frames in the post-IMS relative to the pre-IMS condition ( $\Delta$  Self frames), with a positive value indicating EI occurrence. Post-hoc comparison on the interaction Condition by Group revealed a higher number of  $\Delta$  Self frames than  $\Delta$  Other frames in HC group, but not for SCZ group (Fig. 1). The EI effect resulted associated with the disorganization dimension.

**Conclusions.**– SCZ patients are sensible to the EI effect even in the Other-Control Condition. The present finding clearly confirms an increased permeability of the Self/Non-Self boundaries in schizophrenia, which in turn resulted associated with disorganization, a “fundamental” symptom dimension of the disease.

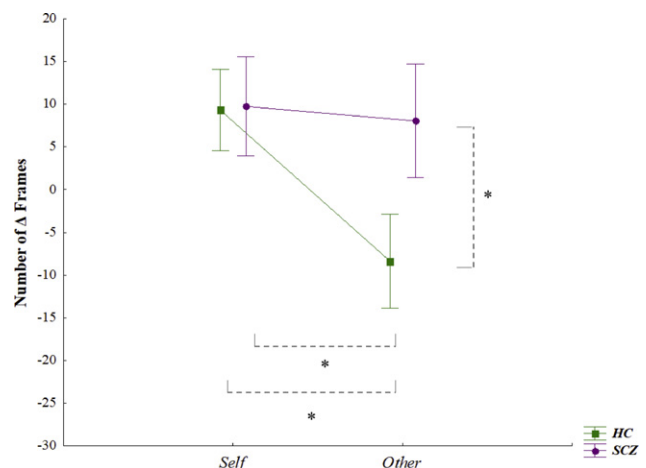


Fig. 1. Significant interaction Condition by Group.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0091

### Characteristic of strategy in phonemic and semantic fluency in young patients with schizophrenia

E. Tyburski<sup>1\*</sup>, M. Mak<sup>2</sup>, E. Karabanowicz<sup>3</sup>, A. Samochowiec<sup>1</sup>, J. Pełka-Wysiecka<sup>4</sup>, J. Samochowiec<sup>4</sup>

<sup>1</sup> University of Szczecin, Department of Clinical Psychology, Szczecin, Poland; <sup>2</sup> Pomeranian Medical University, Independent Clinical Psychology Unit, Szczecin, Poland; <sup>3</sup> University of Gdańsk, Institute of Psychology, Gdańsk, Poland; <sup>4</sup> Pomeranian Medical University, Department of Psychiatry, Szczecin, Poland

\* Corresponding author.

**Background and aims.**– Verbal fluency in patients with schizophrenia has been reported as comparable to healthy participants, but knowledge about fluency strategies (e.g. clustering and switching) is still unclear. The purpose of this study was to compare the performance of young patients with schizophrenia and healthy participants in word production and verbal strategies.

**Methods.**– Two phonemic (letter *k* and letter *f*) and two semantic (animal and fruit) fluency measures were used. The study involved 40 patients with paranoid schizophrenia and 40 healthy participants. Both groups were matched for age, gender, years of education and global cognitive functioning. To test the differences

between both group and different indicators  $2 \times 2$  ANOVA with the between-subject factor was used.

**Results.**– Patients produced less words and demonstrated reduced switching on both phonemic and semantic tasks. No significant differences in clustering performance were found. There were differences in the number of produced words and switching between semantic tasks as well as phonemic tasks.

**Conclusions.**– These results suggest that assessment of clustering and switching and the overall word production may be important in the context of cognitive dysfunctions in schizophrenia as well as may be useful in neuropsychological diagnosis.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0092

### Are premorbid eighth-grade scholastic achievements associated with subsequent psychiatric disorders? A population-based study

V. Zerem Ullman<sup>1,2\*</sup>, T. Lurie-Hornik<sup>3</sup>, A. Reichenberg<sup>4</sup>

<sup>1</sup> The Hebrew university of Jerusalem, social work, Jerusalem, Israel; <sup>2</sup> Mailman School of Public Health- Columbia University, New York, USA, Epidemiology, New York, USA; <sup>3</sup> The Falk Institute for Mental Health Studies- Kfar Shaul Hospital, Givat Shaul, Jerusalem, Israel, Mental Health Studies, Jerusalem, Israel; <sup>4</sup> Department of Psychiatry, Icahn School of Medicine, Mount Sinai Hospital, New York, NY, USA, Psychiatry, New York, USA

\* Corresponding author.

**Background and aims.**–

**Introduction.**– Population-based studies of premorbid cognitive functioning in schizophrenia have found verbal deficits and low IQ scores. It remains unclear, however, whether premorbid deficits are specific to schizophrenia, compared with other psychiatric disorders. Moreover, studies using school-based measures are few and their results inconsistent.

**Objectives.**– This study assesses the eighth-grade (ages 13–14;  $n = 11,418$ ) scholastic performance of adults with psychiatric disorders ( $n = 194, 1.7\%$ , particularly with schizophrenia ( $n = 86, 0.8\%$ ), comparing the results with those of their normative peers.

**Methods.**– The researchers examined report cards of eighth-graders at state secular schools in Jerusalem over a ten-year period (1978–1988), applying ANOVA and logistic regression models to evaluate associations between school performance and subsequent psychiatric hospitalization.

**Results.**– The findings indicated that participants hospitalized with varied psychiatric disorders had lower grades in mathematics, gym, handcraft and academic core subjects, with significantly lower overall scores. Amended logistic regression models indicate that reduced performance (in mathematics, gym, handcraft and overall scores) was correlated with an increasing likelihood of hospitalization for the psychiatric disorders group and the subgroup with schizophrenia-related ailments.

**Conclusions.**– These results imply that eighth-grade school performance in core subjects is poorer among persons later hospitalized with psychiatric disorders than that of their classmates. While previous studies emphasize premorbid verbal deficits, the present study noted an association between poor school performance in mathematics at age 13 with psychiatric disorders presenting later in life.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## Oral Communications 09: Schizophrenia and other psychotic disorders Part III/Ethics and Psychiatry

OC-0093

### “Never Say Die” – dying as the final act of living–role of modern medicine and palliative care in culturally diverse societies

A. Budzyna-Dawidowska\*

Waitemata District Health Board, Mental Health Service Old Age, Auckland, New Zealand

\* Corresponding author.

**Background and aims.**– The presentation considers the implication of legalising euthanasia and medically assisted suicide for medical practise especially as it applies to the elderly.

**Methods.**– The author reviews literature and discusses ethical implications on end life psychiatry in different countries Holland, New Zealand and Poland with special focus on cultural sensitivity. Consideration is given to the impact of legal changes on ethics. Specifically on the shifting line between duty of care and patient autonomy in societies that value productivity and youth on the one hand and on the other harness latest technical to artificially sustain life in those mortally traumatised, severely unwell, and in aid of extending life in oncological treatments.

**Results.**– In the presentation the author asks how end-of-life ethics are influenced by the doctors' and patients' nationality, spirituality and beliefs. Special consideration is given to the fact that encounters between physicians and patients from different cultures are increasingly common. The author asks questions regarding the cultural perspectives that influence decisions at the end of life in the context of assessment of mental competency or capacity of those who face suffering and choose death.

**Conclusions.**– In conclusion the author ask the question: What are the ethical consequences and challenges for a modern physician in light of the legal shift toward assisted death?

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0094

### Is the cumulative environmental risk score for schizophrenia associated with psychosis proneness in the general population?

S. Chanda<sup>1\*</sup>, S. Willemsen<sup>1</sup>, P. Smeets<sup>1</sup>, R.S. Boerenboom<sup>1</sup>, M. Franßen<sup>1</sup>, X. Leontarakis<sup>1</sup>, M. Drukker<sup>2</sup>, S. Guloksuz<sup>2,3</sup>

<sup>1</sup> Maastricht University, Student FHML, Maastricht, The Netherlands;

<sup>2</sup> Maastricht University Medical Centre, Department of Psychiatry and Neuropsychology- School for Mental Health and Neuroscience MHeNS- European Graduate School of Neuroscience EURON, Maastricht, The Netherlands;

<sup>3</sup> Yale School of Medicine, Department of Psychiatry, New Haven- CT, USA

\* Corresponding author.

**Background and aims.**– The aim of this study was to generate a cumulative environmental risk score (ERS) for schizophrenia similar to the polygenic risk score (PRS) for schizophrenia and subsequently test whether ERS is associated with psychosis proneness in the general population.

**Methods.**– Data was derived from the East Flanders Prospective Twin Survey, a general population twin cohort ( $n = 704$ ). The ERS was estimated by aggregating weighted odd ratios for schizophrenia for the following environmental risk factors childhood trauma (physical abuse, emotional abuse, sexual abuse, physical and emotional neglect), bullying, cannabis use, winter



birth and obstetric complications. A multilevel regression analysis was used to investigate the association between the ERS and psychosis. Community Assessment of Psychic Experiences (CAPE) and Structured Interview for Schizotypy-Revised (SIS-R) as well as their subscales were used as outcome measures to assess psychosis proneness.

**Results.**– The multilevel analysis showed significant associations between ERS and CAPE and its subscales (CAPE total: chi-squared=71.60,  $p < 0.0001$ ; CAPE negative: chi-squared=28.57,  $p < 0.0001$ ; CAPE positive: chi-squared=65.48,  $p < 0.0001$ ; CAPE depressive: chi-squared=54.75,  $p < 0.0001$ ). Multilevel analyses between ERS and SIS-R revealed significant associations on both the positive and negative symptom subscales (chi-squared=36.37,  $p < 0.0001$  and chi-squared=9.41,  $p = 0.0022$  respectively).

**Conclusions.**– Our findings suggest that different environmental risk factors can be combined in an ERS that is associated with psychosis proneness in the general population. In further investigations, the ERS and the PRS will be combined to analyse the interaction between genes and environment in schizophrenia.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0096

### The severity and dynamics of symptoms on the background of antipsychotic therapy in patients with schizophrenia with associated metabolic syndrome

V. Dubrovskaya<sup>1\*</sup>, E. Kornetova<sup>2</sup>

<sup>1</sup> Mental Health Research Institute- Tomsk National Research Medical Center Russian Academy of Sciences, Department of Endogenous Disorders, Tomsk, Russia; <sup>2</sup> Siberian State Medical University, Department of Psychiatry- Narcology and Psychotherapy, Tomsk, Russia

\* Corresponding author.

**Background and aims.**– The problem of metabolic disorders in patients with schizophrenia remains currently important and requires further study.

**Objectives:** Assessment of the prevalence of metabolic syndrome in patients with schizophrenia receiving antipsychotic therapy and the effects of metabolic syndrome on the severity of clinical manifestations of schizophrenia.

**Methods.**– 119 patients with schizophrenia were examined using the PANSS scale. The study included patients from the Scientific Research Institute of Mental Health in a continuous method. IDF criteria were used to diagnose metabolic syndrome. All patients received recommended doses of atypical antipsychotics. Statistical analysis was performed using Pearson's  $\chi^2$ -test, to compare of two independent samples Mann-Whitney *U*-criterion was used.

**Results.**– It was found that 39.5% of patients with schizophrenia had a concomitant metabolic syndrome. All patients received the same therapy with atypical antipsychotics. In the group of patients with metabolic syndrome, the duration of the disease was longer ( $p = 0.0114$ ), and the age at which the disease manifested itself was older ( $p = 0.0919$ ). In the course of therapy in the group of patients with metabolic syndrome compared with patients without concomitant metabolic syndrome, a smaller reduction in symptoms was observed on the PANSS scale: positive scale ( $p = 0.0187$ ), negative scale ( $p = 0.0455$ ), general scale of psychopathology ( $p = 0.0498$ )

**Conclusions.**– The presence of concomitant metabolic syndrome in patients with schizophrenia with more severe clinical manifestations of the psychopathological process was established and the registered antipsychotic therapy effect was lower.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0097

### Could patients with schizophrenia be able to measure their own negative syndrome?

L. García-Alvarez<sup>1\*</sup>, M.P. García-Portilla<sup>2</sup>, L. González Blanco<sup>3</sup>, L. De la Fuente-Tomás<sup>4</sup>, Á. Velasco<sup>5</sup>, F. Dal Santo<sup>6</sup>, P.A. Sáiz<sup>2</sup>, J. Bobes<sup>2</sup>

<sup>1</sup> University of Oviedo - FINBA - CIBERSAM, Psychiatry, Oviedo, Spain;

<sup>2</sup> University of Oviedo - FINBA - CIBERSAM - SESPA, Psychiatry, Oviedo, Spain; <sup>3</sup> University of Oviedo - CIBERSAM - SESPA, Psychiatry, Oviedo, Spain; <sup>4</sup> University of Oviedo - CIBERSAM, Psychiatry, Oviedo, Spain; <sup>5</sup> University of Oviedo, Psychiatry, Oviedo, Spain; <sup>6</sup> University of Oviedo - SESPA, Psychiatry, Oviedo, Spain

\* Corresponding author.

**Background and aims.**– The ability of patients with schizophrenia of measuring their own negative symptoms could help clinicians in their treatment. The Motivation and Pleasure Scale–Self-Report (MAP-SR) (1) is a self-report measure of negative symptoms based on the Clinical Assessment Interview for Negative Symptoms (CAINS) (2–3). Aim: to investigate the ability of patients with schizophrenia in measuring their negative syndrome based on a self-report.

**Methods.**– A cross-sectional study. Sample: 152 Spanish schizophrenia outpatients. Assessment: (1) demographic information; (2) Clinician Rated Outcomes Measures: CGI, PANSS, CDS, the spanish version of the Clinical Assessment Interview for Negative Symptoms (CAINS) (Motivation and Pleasure “MAP” scale and Expression “EXP” scale); (3) Patient Reported Outcomes Measure: the Spanish version of the Motivation and Pleasure Self-Report (MAP-SR) 15-item version. Statistical analysis: Pearson Correlation Coefficient and ANOVA test.

**Results.**– Mean age 36.65 (12.28); 62.6% males; 77.8% never married; 85.3% primary or high school; 65.5% living with origin family; 63.3% not working. Pearson Correlation Coefficient between MAP-SR and: CAINS total score  $-0.606$  ( $p \leq 0.0001$ ), MAP scale  $-0.659$  ( $p \leq 0.0001$ ), social items  $-0.565$  ( $p < 0.991$ ), work items  $-0.615$  ( $p \leq 0.0001$ ), recreation items  $-0.576$  ( $p \leq 0.0001$ ), EXP scale  $-0.302$  ( $p \leq 0.0001$ ), CDS total score  $-0.485$  ( $p \leq 0.0001$ ), PANSS positive scale  $-0.241$  ( $p = 0.003$ ). There were differences in MAP-SR total score according CGI severity (40.60 mild; 32.63 moderate; 22.56 severe,  $F = 37.780$ ,  $p \leq 0.0001$ ).

**Conclusions.**– Patients with schizophrenia show a good ability in measuring their negative syndrome using the MAP-SR: MAP-SR shows higher correlation with negative symptoms assesment made by clinicians, especially with Motivation and Pleasure scales; there are differences in MAP-SR according CGI severity.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0098

### P3a and real-life functioning in a sample of chronic schizophrenia subjects

G.M. Giordano<sup>1\*</sup>, A. Mucci<sup>1</sup>, A. Vignapiano<sup>1</sup>, G. Di Lorenzo<sup>2</sup>, F. Ferrentino<sup>2</sup>, A. Bellomo<sup>3</sup>, M. Altamura<sup>3</sup>, S. Galderisi<sup>1</sup>

<sup>1</sup> University of Campania “Luigi Vanvitelli”, Department of Psychiatry, Naples, Italy; <sup>2</sup> University of Rome “Tor Vergata”, Department of Systems Medicine, Rome, Italy; <sup>3</sup> Univeristy of Foggia, Department of Clinical and Experimental Medicine- Psychiatry Unit, Foggia, Italy

\* Corresponding author.

**Background and aims.**– The impairment in different domains of real-life functioning is a core aspect of schizophrenia. Recently, functional outcome was associated with P3a, an event-related potential associated with the automatic engagement of attention and novelty processing. However, these findings were not

controlled for possible confounding factors, such as cognitive impairment which might be cross-correlated with both functioning and P3a.

Our aims were to investigate differences between subjects with schizophrenia (SCZs) and healthy controls (HCs) on P3a amplitude and relationships with functioning domains in SCZs.

**Methods.**– Pitch- (p-P3a) and duration-deviant (d-P3a) P3a were recorded in 125 chronic SCZs and 61 HCs, recruited within the Italian Network for Research on Psychoses. Within SCZs, we assessed functioning (using the Specific Level of Functioning Scale, SLOF), psychopathology and neurocognitive functions. We used multiple regression to investigate the potential relationships between SLOF and P3a, age, gender, duration of illness, neurocognitive composite score of the MATRICS Consensus Cognitive Battery, Calgary Depression Scale for Schizophrenia total score, negative symptom domains of the Brief Negative Symptom Scale, positive and disorganization dimensions of the Positive and Negative Syndrome Scale (PANSS).

**Results.**– SCZs, in comparison with HCs, showed a significant reduction of p-P3a and d-P3a amplitudes.

p-P3a amplitude ( $\beta = .329, p < .001$ ), avolition-apathy domain ( $\beta = -.207, p = .019$ ) and PANSS positive dimension ( $\beta = -.183, p = .038$ ) predicted the SLOF social acceptability domain, independently from severity of the other psychopathological dimensions, demographic characteristics and neurocognition.

**Conclusions.**– Our findings suggested that dysfunctions in P3a are associated with social acceptability and not with other aspect of real-life functioning, such as instrumental and interpersonal skills.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0100

### miR-137 and miR-34 family expression aberration of age at onset in schizophrenia patients with neurological soft signs

S.H. Lin<sup>1\*</sup>, B.Y. Chen<sup>1</sup>, J.J. Lin<sup>2</sup>, M.K. Lu<sup>3</sup>

<sup>1</sup> Institute of Clinical Medicine, National Cheng Kung University, Tainan, Taiwan R.O.C.; <sup>2</sup> Department of Psychiatry, Chi Mei Medical Center, Tainan, Taiwan R.O.C.; <sup>3</sup> Department of Health, Jianan Mental Hospital, Tainan, Taiwan R.O.C.

\* Corresponding author.

**Background and aims.**– Previous studies have shown that miRNA expression for mental illness might manifest to alter neurodevelopment prior to disease onset. The neurodevelopment-related miRNAs expression levels in different age-onset schizophrenia patients during neurodevelopmental process remain unknown. We aimed to investigate the aberrant expressions of miR-137 and miR-34 family might serve as clinically useful biomarkers in different age-onset schizophrenia patients.

**Methods.**– This study included 215 schizophrenia patients, 40 bipolar patients and 100 nonpsychotic controls as comparison groups. We examined the miR-137 and miR-34 family (miR-34a, miR-34b and miR-34c) expression levels in different age-onset patients with neurological soft signs (NSS) by receiver operating characteristic (ROC) curve and partial least squares-linear discriminant analysis (PLS-LDA).

**Results.**– The miR-137 and miR-34 family expression levels presented significant expression patterns that could distinguish schizophrenia from bipolar disorder ( $p < 0.001$ ). The results of ROC curve showed that the AUC of miR-137 and miR-34 family expression levels in early onset schizophrenia (EOS) vs. controls was 0.935 (accuracy = 0.853) and adult onset schizophrenia (AOS) vs. controls was 0.867 (accuracy = 0.763). For EOS vs. AOS, the AUC of miR-137 and miR-34 family expression levels was 0.826 (accuracy = 0.781). The AUC of miR-137 for EOS with NSS and controls was 0.957 (accuracy = 0.881). We further applied PLS-LDA to discriminate EOS and

AOS by these microRNAs. The correct classification rate was 86.5% and leave-one-out cross-validation rate was 84.2% in EOS patients and AOS patients.

**Conclusions.**– The findings provide further insights into peripheral miRNAs expression levels as potential stable biomarkers for early onset schizophrenia.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0101

### Direct and indirect costs of an intensive first episode of psychosis program (PAFIP), from Cantabria, Spain, during the first year of intervention

J. Mayoral-Van Son<sup>1\*</sup>, M. Juncal-Ruiz<sup>1</sup>, V. Ortiz-García de la Foz<sup>2</sup>, D. Cantarero-Prieto<sup>3</sup>, C. Blázquez-Fernández<sup>3</sup>, M. Paz-Zulueta<sup>4</sup>, P. Paras-Bravo<sup>5</sup>, B. Crespo-Facorro<sup>6</sup>

<sup>1</sup> Hospital Sierrallana. IDIVAL. CIBERSAM. University of Cantabria., Psychiatry, Santander- CANTABRIA, Spain; <sup>2</sup> Instituto IDIVAL. CIBERSAM., Psychiatry, Santander- CANTABRIA, Spain; <sup>3</sup> Faculty of Economics- University of Cantabria. GIECONPSALUD., Economics, Santander, Spain; <sup>4</sup> Nursing School- University of Cantabria. IDIVAL, Nursing School, Santander, Spain; <sup>5</sup> Nursing School- University of Cantabria., Nursing School, Santander, Spain; <sup>6</sup> University Hospital Marques de Valdecilla. IDIVAL. CIBERSAM. University of Cantabria., Psychiatry, Santander- CANTABRIA, Spain

\* Corresponding author.

**Background and aims.**– Early-intervention psychiatric services for patients with psychosis aim to limit the most damaging outcomes and reduce the patient's risk of social drift, decreasing illness severity and thus containing healthcare costs. There is a scarcity of studies that focus on first-episode psychosis (FEP), and those few that have been published only looked at direct health costs, but not at indirect costs, which make up the bulk of the budget. One unanswered question is whether the increased costs of comprehensive first episode of psychosis programs are offset by reduced inpatient costs, or whether the value of health benefits justified the additional costs.

To explore short-term economic costs of a specialized intervention program for patients with a first episode of psychosis.

**Methods.**– Data from the first year after treatment initiation, was retrospectively collected in a cohort of first episode psychosis patients enrolled in an intensive clinical program. Observational retrospective study of economic costs. Data from direct and indirect costs was collected from clinical records of 157 patients.

**Results.**– On average, the total costs during the first year were €48,353.51 per patient, with direct healthcare costs being €13,729.47 (28.39%), direct non-medical costs €108.6 (0.22%), and indirect costs €34,515.44 (71.38%). We found that hospitalization costs were higher in males ( $p = 0.081$ ) and in cannabis users ( $p = 0.032$ ). The number of relapses increased both, hospitalization and treatment costs ( $r = 0.40, p = 0.000$ ;  $r = 0.24, p = 0.067$  respectively).

**Conclusions.**– Intensive Early Intervention in Psychosis Services may result in cost savings by ensuring better outcome, however the first year after diagnosis would represent the one with the highest costs.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0102

### Duration of untreated illness and duration of untreated psychosis amongst first time psychosis patient cohort in capital city of Latvia

K. Mieze<sup>1</sup>\*, K. Bruna<sup>1</sup>, L. Berze<sup>2</sup>, J. Zaharova<sup>1</sup>, E. Rancans<sup>1</sup><sup>1</sup> Riga Stradins University, Department of Psychiatry and Narcology, Riga, Latvia; <sup>2</sup> Riga Stradins University, Department of Doctoral Studies, Riga, Latvia

\* Corresponding author.

**Background and aims.**– The first episode psychosis (FEP) is a critical period which management is important in determining the long-term outcome of the schizophrenia (Dell’Osso et al., 2013). The duration of untreated illness (DUI) has been increasingly investigated in the last decade as a predictor of outcome of psychotic disorders, also due to its potentially modifiable nature (Murru et al., 2016). Aim: The purpose of this study was to assess sociodemographic characteristics and the relationship between DUI and clinical features in FEP patients.

**Methods.**– All consecutive patients with FEP ( $n = 113$ ) were interviewed in Rigas Centre of psychiatry and addiction medicine at time period 01.07.2017–30.06.2018. ICD-10 criteria for schizophrenia spectrum disorder was used, authors conducted structural interview including sociodemographic data, help-seeking pathways, DUI, DUP, clinical characteristics (SANS, CDSS, SAI-E). The study was approved by the RSU Ethics committee.

**Results.**– From all 113 patients inclusion criteria were met by 68. From included 42 (61,7%) were men, median age 29 y. (IQR 24.0–38.5), DUP 4 weeks (IQR 2.0–16.0), DUI 144 weeks (IQR 24.0–240.0). 13,2% came to psychiatric ER by themselves, 11,8% were brought by family members, 55,9% brought by ambulance, 19,1% brought by ambulance with police escort. Patients with longer DUI had more severe negative symptoms at discharge ( $rs = 0,297$ ,  $p = 0,018$ ), longer stay at hospital ( $rs = 0,355$ ,  $p = 0,004$ ), patients with more severe negative symptoms at admission had less insight about illness ( $rs = -0,253$ ,  $p = 0,046$ ) and more severe depressive symptoms ( $rs = 0,431$ ,  $p = 0,000$ ) at discharge.

**Conclusions.**– We found statistically significant correlations between longer DUI and more severe clinical features.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0103

### Short- and long-term changes in metabolic parameters and body weight in cariprazine-treated patients with schizophrenia

B. Sebe<sup>1</sup>\*, Á. Barabásky<sup>1</sup>, B. Szatmári<sup>1</sup>, I. Laszlovszky<sup>1</sup>, J. Harsányi<sup>1</sup>, K. Acsai<sup>1</sup>, A. Burján<sup>1</sup>, W. Earley<sup>2</sup>, M. Patel<sup>3</sup>, G. Németh<sup>1</sup><sup>1</sup> Gedeon Richter Plc., Medical Division, Budapest, Hungary; <sup>2</sup> Allergan, Clinical Development, Madison- NJ, USA; <sup>3</sup> Allergan, Global Medical Affairs, Madison- NJ, USA

\* Corresponding author.

**Background and aims.**– Metabolic side effects and weight gain are major problems with antipsychotic treatment. They contribute to cardiovascular consequences, diabetes, poor adherence and impaired treatment response. Therefore, drugs with favorable metabolic safety profiles are preferred. The objective of this study was to analyze effects of cariprazine (CAR) treatment on metabolic parameters and weight in adults with schizophrenia.

**Methods.**– Pooled data of 1114 CAR and 584 placebo (PBO) treated patients with schizophrenia from four short term studies, and 1122 CAR and 99 PBO patients from four long-term studies was analyzed using descriptive statistics. Safety parameters included assessment

of adverse events, clinical laboratory values and body weight measures.

**Results.**– In the short-term studies, hyperlipidemia occurred in 0.8% of cariprazine treated patients (PBO 0.5%) while hyperglycemia occurred in 0.2% (PBO 1.0%). In the long-term studies, hyperlipidemia occurred in 2.2% of cariprazine treated patients (PBO 1.0%), while hyperglycemia occurred in 1.5% (PBO 1.0%). Shifts from normal to high in cholesterol (CAR 8.5%; PLO 9.3%), triglycerides (CAR 14.4%; PBO 14.1%) and fasting glucose (CAR 3.4%; PBO 2.0%) were similar in CAR and PBO groups. Weight increase over short term was 0.9 kg with CAR and 0.3 kg with PBO, and on long term 1.0 kg and 1.0 kg, respectively. 0.1% of patients in the CAR group discontinued due to metabolic side effects and 0% in the PBO group.

**Conclusions.**– Cariprazine was metabolically neutral and well tolerated in patients with schizophrenia. Its effects on weight were modest, offering an alternative therapeutic option in acute and long-term management of schizophrenia.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

### Oral Communications 10: Depression Part II/Old Age Psychiatry/Personality and Personality Disorders

OC-0104

#### Relation between the big-three and the hexaco: broader conceptualizations of perfectionism and its psychological outcomes

A. Araújo<sup>1</sup>\*, A. Pereira<sup>2</sup>, C. Cabaços<sup>2</sup>, C. Marques<sup>2</sup>, N. Madeira<sup>2</sup>, M. Bajouco<sup>2</sup>, V. Nogueira<sup>2</sup>, A. Macedo<sup>2</sup><sup>1</sup> Faculty of Medicine- University of Coimbra, Institute of Psychological Medicine, Coimbra, Portugal; <sup>2</sup> Institute of Psychological Medicine, Faculty of Medicine- Coimbra University-Portugal, Coimbra, Portugal

\* Corresponding author.

**Background and aims.**– Perfectionism is a personality disposition characterized by setting exceedingly high standards. The Big-Three Perfectionism Scale (BTPS) is the only available instrument capable of assessing positive perfectionism (Rigid Perfectionism–RigPerf) and negative perfectionism (Self-Critical Perfectionism–ScPerf) using a single self-report scale. It also measures Narcissistic Perfectionism (NarcPerf). The HEXACO model of personality postulates that personality structure consists of six dimensions – Honesty-Humility, Agreeableness, Emotionality, Extraversion, Conscientiousness and Openness-to-Experience. Aims: To study: a) the correlations between the HEXACO dimensions, perfectionism and Psychological Distress (PsychD; Depression, Anxiety and Stress); b) the mediator role of the HEXACO dimensions on the relationship between perfectionism and PsychD.

**Methods.**– 632 university students (65.5% girls; mean age  $21,4 \pm 2,28$  years) answered the Portuguese versions of the BTPS, HEXACO-60 and Depression, Anxiety and Stress Scales (DASS-21). Correlation and mediation analyses were performed using PROCES macro for SPSS.

**Results.**– Honesty-Humility and Agreeableness were: full mediators between NarcPerf and PyschD (Depression/Anxiety and Anxiety/Stress, respectively); mediators between RigPerf and PyschD (all variables); mediators between ScPerf and PyschD (only Depression and Anxiety, respectively). Emotionality and low Extroversion mediated the relationship between ScPerf and PyschD (all variables).

**Conclusions.**– The role of low Honesty-Humility and Agreeableness varies across the Big-Three: the effect of NarcPerf on PyschD



was fully mediated by Honesty-Humility/Agreeableness; they contributed to the effect of RigPerf (positive perfectionism) on PsychD; and they may represent a less negative facet of ScPerf (negative perfectionism). On the other hand, as we expected, Emotionality and low Extroversion were only related with ScPerf negative outcomes. *Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0105

### Variation in recognition of happy and sad facial expressions and depressive symptom severity: a prospective cohort study

J. Bone<sup>1\*</sup>, G. Lewis<sup>1</sup>, B. Katherine<sup>2</sup>, L. Duffy<sup>1</sup>, C. Harmer<sup>3</sup>, M. Munafò<sup>4,5</sup>, I. Penton-Voak<sup>4</sup>, N. Wiles<sup>6</sup>, G. Lewis<sup>1</sup>

<sup>1</sup> University College London, Division of Psychiatry, London, United Kingdom; <sup>2</sup> University of Bath, Department of Psychology, Bath, United Kingdom; <sup>3</sup> University of Oxford, Department of Psychiatry, Oxford, United Kingdom; <sup>4</sup> University of Bristol, School of Experimental Psychology, Bristol, United Kingdom; <sup>5</sup> University of Bristol, MRC Integrative Epidemiology Unit, Bristol, United Kingdom; <sup>6</sup> University of Bristol, Centre for Academic Mental Health, Bristol, United Kingdom

\* Corresponding author.

*Background and aims.*– Cognitive theories suggest people with depression interpret social information negatively, for example by identifying facial expressions less positively than healthy individuals. These biases could increase people's risk of depression or delay recovery. However, previous research has mostly used small case-control designs prone to selection bias and has been cross-sectional, making it unclear whether biases precede or follow depression. We investigated whether processing of happy and sad facial expressions was associated with the severity of depressive symptoms cross-sectionally and longitudinally.

*Methods.*– Prospective cohort study of people who had visited UK primary care in the past year reporting depressive symptoms ( $n=509$ ). Recognition of happy and sad facial expressions was assessed using a computerised task at three time-points, each 2 weeks apart. Depressive symptoms were assessed using the Patient Health Questionnaire (PHQ-9) at four time-points. Analyses were conducted using multilevel models.

*Results.*– For every additional face incorrectly classified as happy (positive emotion recognition bias), concurrent PHQ-9 scores reduced by 0.05 of a point (95% CI = -0.10 to 0.002,  $p=.06$  after adjustment for confounders). This association was strongest for more ambiguous facial expressions (interaction term  $p<.001$ ). There was no evidence for associations between sad face recognition and depressive symptoms or between happy face recognition and subsequent depressive symptoms.

*Conclusions.*– More severe depressive symptoms were characterised by reduced positive processing, rather than increased negative processing. Positive biases in interpreting ambiguous facial expressions could be a cognitive marker of depression. Psychological therapies may be more effective if they focus on reinstating positive biases that could be protective for mental health.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0106

### Changes in sleep quality as a predictor for response to vortioxetine in major depressive disorder

B. Cao<sup>1\*</sup>, J. Rosenblatt<sup>2</sup>, C. Park<sup>2</sup>, Y. Chen<sup>3</sup>, M. Iacobucci<sup>2</sup>, M. Subramanieapillai<sup>2</sup>, H. Zuckerman<sup>2</sup>, R. McIntyre<sup>2</sup>

<sup>1</sup> Peking University, School of Public Health, Beijing, China; <sup>2</sup> University Health Network, Mood Disorders Psychopharmacology Unit, Toronto, Canada; <sup>3</sup> University of Toronto, Dalla Lana School of Public Health-, Toronto, Canada

\* Corresponding author.

*Background and aims.*– Very few studies have investigated the effects of vortioxetine on sleep quality and continuity in patients with major depressive disorder (MDD). The objective is to investigate the effects of vortioxetine on sleep quality and quantity as well as the association between changes in sleep and response of depressive symptom.

*Methods.*– Ninety-two individuals (age 18–65) with moderate to severe MDD and 54 healthy controls (HC) participated in this study. All MDD participants received open-label vortioxetine (10–20 mg/day, flexibly-dosed) treatment for eight weeks as part of a prospective clinical trial (NCT03053362). For current post-hoc analysis, the outcomes of interest include changes of Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS) and Insomnia Severity Index (ISI) from baseline to week 2 and week 8 (i.e. endpoint), as well as their relationships with response of depressive symptoms as measured by MADRS.

*Results.*– All sleep measurements (i.e. PQSI, ESS, ISI) at weeks 0, 2, and 8 differed significantly between HC and MDD groups ( $p<0.05$ ) indicating that sleep quality was poorer in MDD at baseline and throughout the trial compared to HC. Within MDD group, there was a significant baseline-to-endpoint reduction in sleep problems ( $p<0.05$  for change in PQSI, ESS, ISI at week 8). A significant linear association was found between improvements in sleep (PSQI, ESS, and ISI) and overall depressive symptom severity (MADRS) throughout the trial.

*Conclusions.*– Vortioxetine treatment was associated with significant improvements in sleep. Improvements in sleep were predictive of antidepressant response and were linearly correlated with improvement in overall depressive symptom severity.

*Disclosure of interest.*– The authors have not supplied a conflict of interest statement.

OC-0107

### Asymmetry of effective connectivity during resting conditions in major depressive disorder: analysis on high-density EEG

A. Damborská<sup>1\*</sup>, M. Rubega<sup>1</sup>, R. Barteček<sup>2</sup>, E. Honzírková<sup>2</sup>, D. Drobisz<sup>2</sup>, C.M. Michel<sup>1</sup>

<sup>1</sup> University of Geneva, Department of Basic Neurosciences, Geneva, Switzerland; <sup>2</sup> Masaryk University, Department of Psychiatry, Brno, Czech Republic

\* Corresponding author.

*Background and aims.*– Deep brain stimulation (DBS) is a new approach for treating depression (Drobisz and Damborská, 2019). Optimal stimulation targets have not yet been determined. Effective connectivity analysis provides a model of the influence of one brain region on another and may provide evidence for the influence of brain regions potentially suitable as DBS targets.

Using Granger-causal modeling we investigated whether effective connectivity was altered in selected deep brain structures in patients with major depressive disorder (MDD) compared to healthy controls (HC).

**Methods.**– Twelve MDD patients (four women, mean ( $\pm$ SD) age: 55 ( $\pm$ 6.9) and twelve HC (four women, mean ( $\pm$  SD) age: 54 ( $\pm$ 7.9) underwent HD-EEG recording using 128 scalp electrodes during eyes closed resting conditions. Source activity was obtained for 90 regions of interest. The outflow from the Information Partial Directed Coherence matrix was computed for brain structures potentially involved in pathophysiology of MDD.

**Results.**– Abnormal left/right asymmetry in the information outflow was observed in MDD patients (Fig. 1).

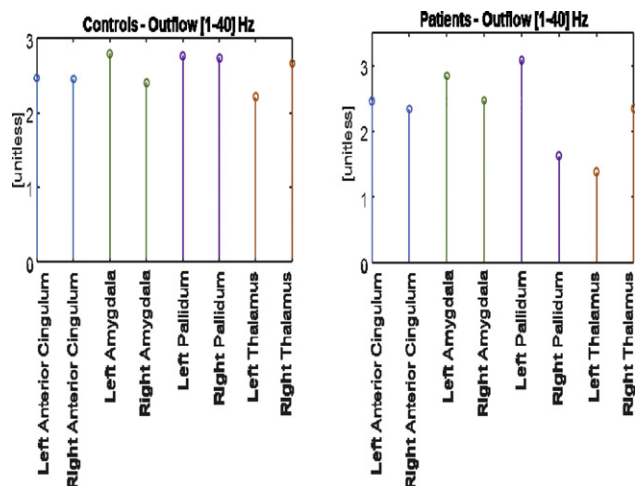


Fig. 1. Average outflow from eight regions of interest. Note the left/right asymmetry in outflow from pallidum and thalamus in patients. (Each subject was considered as a trial of the model).

**Conclusions.**– Our findings suggest existence of asymmetry in neuronal communication of some deep brain structures in depression and raise questions about the laterality of DBS treatment in depression.

D. Drobisz, A. Damborská. Deep brain stimulation targets for treating depression, *Behavioural Brain Research*, 359 (1) 266–273 <https://doi.org/10.1016/j.bbr.2018.11.004>

The study has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 739939.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0109

### Relationship between depression and suicidal risks in adolescence

N. Kornetov\*, A. Prikhodko

Siberian State Medical University, Department of Psychiatry-Narcology and Psychotherapy, Tomsk, Russia

\* Corresponding author.

**Background and aims.**– Depressive disorder (DD) is reaching epidemic proportions, and suicidal risk is correlated with DD. Older adolescents are undergoing profound hormonal tuning, and there is increasing frequency of depressions and suicides in this group.

**Objectives.**– Examining the relationship between certain points of Beck Depression Inventory (BDI) for adolescents and MINI Suicidal Scale (MSS).

**Methods.**– 346 adolescents (aged 15–19 years) who receive secondary special education are involved in this study. There are 173 males and 173 females of them. A multivariate analysis of BDI items reflecting general and cognitive symptoms of DD in their conjugation with MSS is conducted.

**Results.**– The study shows that the main symptoms of depression: low mood, anhedonia, anergy are associated with suicidal thoughts ( $p < 0,00001$ ), suicidal plans ( $p < 0,00001$ ) and high suicidal risk in

general. Issues reflecting feelings of inferiority and guilt also have a link with high suicide risk. Loss of self-identity and cognitive dysfunctions in points of BDI are also associated with mild suicide risk ( $p < 0.00001$ ). There are noted gender differences on the points: “attractiveness – unattractiveness” ( $\chi^2 = 9.17$ ;  $p = 0.02$ ); “loss of self-identity” ( $\chi^2 = 8.76$ ;  $p = 0.03$ ); “mood disturbance” ( $\chi^2 = 11.00$ ;  $p = 0.01$ ) between males and females.

**Conclusions.**– BDI and MSS with a certain probability may reflect the direct relationship between the responses that characterize the main symptoms of depression, inferiority ideas, guilt and variation in the level of suicide risk. Losses of self-identity, mood instability predominate in female adolescent group.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0110

### Sleep deprivation with sleep phase advance as augmentation of pharmacotherapy in treatment-resistant depression: biochemical correlates of response

E. Kurczewska<sup>1</sup>\*, M. Chłopocka-Woźniak<sup>1</sup>, J. Rybakowski<sup>1,2</sup>

<sup>1</sup> Poznan University of Medical Sciences, Department of Adult Psychiatry, Poznań, Poland; <sup>2</sup> Poznan University of Medical Sciences, Department of Child and Adolescent Psychiatry, Poznań, Poland

\* Corresponding author.

**Background and aims.**–

**Introduction.**– Total sleep deprivation (TSD) is a method of chronotherapy for depression with a short-term therapeutic effect which can be enhanced by sleep phase advance (SPA). TSD influences the activity of the hypothalamic-pituitary-adrenal axis and cytokines what may affect the allostatic load. There are few reports on chronotherapy in treatment-resistant depression (TRD).

**Objectives.**– To assess the efficacy of pharmacotherapy augmentation by TSD with SPA in TRD and related changes of selected biological markers.

**Methods.**– The study included 26 bipolar and 17 unipolar patients with TRD, aged  $49 \pm 13$  years. Single TSD and three consecutive days with SPA were implemented during pharmacotherapy. The severity of depression was assessed by the Hamilton Depression Rating Scale (HDRS). Concentrations of hormones and cytokines were assayed by ELISA method.

**Results.**– The therapeutic response defined as a reduction of  $\geq 50\%$  in the HDRS, maintained up to the 14th day of the therapy was demonstrated in 42% of the patients ( $n = 18$ ). In the group of responders, but not in non-responders, cortisol significantly decreased to the 14th day of the study and interleukin (IL)-10 increased, in comparison to the baseline. The concentration of interferon (IFN)- $\gamma$  was significantly higher in non-responders compared to responders on the 1st day after TSD.

**Conclusions.**– TSD with SPA may augment the effect of pharmacotherapy in about half of patients with TRD. The results of our study show that the response to this procedure can be associated with a decrease of cortisol and with changes in some cytokines, especially IL-10 and IFN- $\gamma$ .

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0111

### The association between age-related hearing loss, speech discrimination and late-life depressive disorders: results from the greatage study

M. Lozupone<sup>1\*</sup>, R. Sardone<sup>2</sup>, M. La Montagna<sup>3</sup>, F. D'Urso<sup>3</sup>, M.R. Barulli<sup>4</sup>, P. Battista<sup>4</sup>, R. Tortelli<sup>4</sup>, R. Capozzo<sup>4</sup>, A. Grasso<sup>1</sup>, F. Coppola<sup>5</sup>, A. Bellomo<sup>3</sup>, F. Panza<sup>1</sup>, D. Seripa<sup>6</sup>, G. Giannelli<sup>2</sup>, N. Quaranta<sup>5</sup>, G. Logroscino<sup>1</sup>

<sup>1</sup> Neurodegenerative Disease Unit- University of Bari Aldo Moro, Department of Basic Medicine- Neuroscience- and Sense Organs, Bari, Italy; <sup>2</sup> National Institute of Gastroenterology "Saverio de Bellis", Research Hospital Castellana Grotte, Castellana Grotte, Italy; <sup>3</sup> Psychiatric Unit- University of Foggia, Department of Clinical and Experimental Medicine, Foggia, Italy; <sup>4</sup> Unit of Neurodegenerative Disease- University of Bari "Aldo Moro" at "Pia Fondazione Card. G. Panico", Department of Clinical Research in Neurology, Tricase, Italy; <sup>5</sup> Otolaryngology Unit, University of Bari Aldo Moro, Bari, Italy; <sup>6</sup> Geriatric Unit and Gerontology-Geriatrics Research Laboratory, Department of Medical Sciences- IRCCS Casa Sollievo della Sofferenza, San Giovanni Rotondo, Italy

\* Corresponding author.

**Background and aims.**– Preliminary studies suggests the link between age-related hearing impairment (ARHI) and Late-life Depression (LLD), where reliance on self-report data for hearing capacities and depressive symptoms may lead significant bias. This investigation studies the HI characteristics of the elderly of the GreatAGE population-based Study diagnosed with Early Onset (EO) depressive disorders distinguishing them from the Late Onset (LO) ones.

**Methods.**– The GreatAGE study, a population-based study on aging (Castellana, Southern Italy) performed in 1139 Italian cognitively health community-dwelling elderly a multinomial model of the association between HI [(distinguished in Central Auditory Processing Disorder - CAPD and peripheral (ARHI)] and depressive disorders (EOD and LOD) diagnosed according to the Semi-structured Clinical Diagnostic Interview for DSM-IV-TR Axis I Disorders.

**Results.**– Depressive disorders overall (LOD+EOD=18.44%) were equally distributed among the age strata. The frequency of hearing impairment was 22.48% for ARHL and 8.25% for CAPD respectively. LLD had a tendency to have more ARHL ( $p=.061$ ), compared to non-affected subjects. A statistically significant association was not found between pure tone average and LLD ( $p=.098$ ). After accounting for age, gender and level of education, having moderate ARHL increased the risk of LLD diagnosis (OR: 1.751,  $p=0.002$ , 95%CI:1.205–2.529). The strength of this association increased for more than moderate ARHL (OR: 2.046,  $p=0.0152$ , 95%CI:1.125–3.601). Only the LOD subtype had a significant association with continuous values of SDS and SSI-ICM.

**Conclusions.**– Peripheral HI alone, not CAPD, was associated with a significant risk of LLD. A trend towards an association between continuous variable of CAPD and LOD was also found.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0112

### Biological rhythm disturbances in major depressive disorder

A.M. Ozcelik<sup>1\*</sup>, C. Sahbaz<sup>2</sup>

<sup>1</sup> Bezmialem Vakif University, School of Medicine, Istanbul, Turkey; <sup>2</sup> Bezmialem Vakif University, Department of Psychiatry, Istanbul, Turkey

\* Corresponding author.

**Background and aims.**– Sleep-wake cycle, hormone levels, cognition, activities, and social interactions display a biological rhythm in humans. Misalignments between the sleep-wake cycle and the internal clock have been strongly associated with mood disorders. The purpose of the study is to compare biological rhythm disruptions among patients with depression and healthy controls and to qualify which component of the human biological rhythm affected in the major depressive disorder and to find if any component predicts the severity of the depression.

**Methods.**– Ninety drug-naïve subjects with depression and ninety-one age, gender, BMI, marital status, education, employment matched healthy controls were recruited for the study. The severity of depression was examined through the use of the Hamilton Rating Scale for Depression (HRSD). The biological rhythm evaluated using the Biological Rhythm Interview of assessment in Neuropsychiatry (BRIAN).

**Results.**– BRIAN total score and the BRIAN Sleep, Activity, Social and Eating scores were significantly higher in subjects with depression than healthy controls ( $p<.001$ ). There was a positive correlation between BRIAN total score with HRSD total score and HRSD total without sleep cluster score. Sleep and Activity component of BRIAN correlated highly HRSD total score ( $p<.001$ ), and Sleep ( $p=.008$ ), Activity ( $p<.001$ ) and Social ( $p=.040$ ) scores correlated HRSD total without sleep cluster score. Linear regression analysis was showed that the activity component of BRIAN ( $\beta=0.476$ ,  $t=5.07$ ,  $P=<.001$ ) may predict higher HRSD total score than other variables.

**Conclusions.**– Clinical examinations of patients with depression need to be considered with the understanding of biological rhythm and especially activity patterns of patients.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0113

### Management of people with emotionally unstable, borderline personality disorders (EU-BPD) in secondary psychiatric services: time to revise guidelines and get rid of the term EU-BPD?

H. Shahpesandy<sup>1\*</sup>, R. Mohammed-Ali<sup>1</sup>, M. Oakes<sup>2</sup>, T. Al-Kubaisy<sup>3</sup>, M. Anene<sup>3</sup>, B. Rajkumar<sup>3</sup>, P. Unniparambath<sup>3</sup>, U. Ramaiah<sup>4</sup>, F. Senthil<sup>5</sup>

<sup>1</sup> Lincolnshire NHS Foundation Trust, The Hartsholme Centre, Lincoln, United Kingdom; <sup>2</sup> University of Wolverhampton, Research Institute of Information and Language Processing- Reader in Computational Linguistics, Wolverhampton, United Kingdom; <sup>3</sup> Lincolnshire NHS Foundation Trust, Peter Hodgkinson Centre, Lincoln, United Kingdom; <sup>4</sup> Lincolnshire NHS Foundation Trust, Peter Hodgkinson Centre- Psychiatric Liaison Team, Lincoln, United Kingdom; <sup>5</sup> Lincolnshire NHS Foundation Trust, Carholme Court Community Mental Health Team, Lincoln, United Kingdom

\* Corresponding author.

**Background and aims.**– EU-BPD is an extremely challenging condition. In inpatient services its prevalence is 20%. Psychotherapy is the treatment of choice; nevertheless, the use of off-license medications are widespread.

We aim to identify socio-demographics, clinical and service-delivery characteristics of people with EU-BPD admitted to inpatient services between January 2017 and August 2018.

**Methods.**– Of 1404 inpatients, 221 (15.7%) identified with EU-BPD; 54 (24%) excluded; 31 (14%) – schizophrenia; 23 (10.4%) – bipolar disorders. 167 individuals (115 women, 52 men), average age 32 years were included. Statistical analysis of results was conducted by Pearson's Chi-squared test with Yates's continuity correction.

**Results.**– Five patients (3%) died of suicide. The average length of stay (LOS) was 91.7 days for the whole cohort; however, women



had significantly ( $p=0.0407$ ) longer (110.2 days) LOS than men (50.7 days). Significantly ( $p=0.017$ ) more women (70.4%) than men (50%) suffered sexual abuse. 53.2% of patients had at least one physical co-morbidity; 70% at least one, and 12% two psychiatric co-morbidities; significantly ( $p=0.0006$ ) more men (56%) than women (27%) abused substances. 42% patients received psychotherapy; 96.4% pharmacotherapy; equally, 75% were prescribed antidepressants and antipsychotics, but significantly ( $p=0.03$ ) more women (80%) than men (63%) used antipsychotics. 56.2% of patients were prescribed anxiolytics; 42.5% hypnotics and 24.5% mood stabilisers.

**Conclusions.**– EU-BPD is a complex condition with polypharmacy and comorbidity widespread. The term EU-BPD causes stigma to patients, does not reflect the true nature, gravity and psychopathology of this illness. Enduring personality changes or tardive PTSD instead should be considered. The current guidelines do also require revising.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0114

### Criminal acts in neurocognitive disorders

T. Talaslahti<sup>1\*</sup>, H. Koponen<sup>1</sup>, R. Vataja<sup>2</sup>, N. Lindberg<sup>3</sup>, T. Erkinjuntti<sup>4</sup>, J. Suvisaari<sup>5</sup>, H. Elonheimo<sup>6</sup>, H. Kautiainen<sup>7</sup>

<sup>1</sup> University of Helsinki and Helsinki University Hospital, Department of Psychiatry, Helsinki, Finland; <sup>2</sup> Helsinki University Hospital, Department of Psychiatry, Helsinki, Finland; <sup>3</sup> University of Helsinki and Helsinki University Hospital, Department of Forensic Psychiatry, Helsinki, Finland; <sup>4</sup> University of Helsinki and Helsinki University Hospital, Clinical Neurosciences- Neurology and Department of Neurology- Neurocenter, Helsinki, Finland; <sup>5</sup> National Institute for Health and Welfare, Department of Public Health Solutions, Mental Health Unit, Helsinki, Finland; <sup>6</sup> National Institute for Health and Welfare, Government Special Services, Helsinki, Finland; <sup>7</sup> Folkhälsan Research Center, Folkhälsan Research Center, Helsinki, Finland

\* Corresponding author.

**Background and aims.**– Neurocognitive symptoms such as increased impulsiveness or misinterpretations of everyday situations are common in dementia. However, the data on criminal acts possibly related to behavioral symptoms of dementia is limited.

Our aim was to explore the incidence and type of criminal acts committed by patients with Alzheimer's dementia (AD), frontotemporal dementia (FTD), and Parkinson disease dementia/dementia with Lewy bodies (PaDLE) before the diagnoses.

**Methods.**– This retrospective cohort data of 92 101 patients with the diagnosis of AD, FTD, and PaDLE and their criminal acts were obtained from Finnish nationwide registers between 1998 and 2015. We analysed all crimes occurred during four years before the diagnosis. Further, we scrutinized the incidence of criminal offences by the type of dementia and by the main types of criminal offences.

**Results.**– During the follow-up, crimes against property and traffic offences counted for 94% of all criminal offences. The age and sex adjusted incidence rate ratio (IRR) comparing the first and the fourth year results for all criminal offences in FTD group was 2.23 (95% 1.19–4.19) in women and 1.98 (95% 1.34–2.95) in men (Fig. 1). The age adjusted IRR for all criminal offences in AD group was 2.72 (95% 2.09–3.54) and 2.30 (95% 2.01–2.63) or in PaDLE group 2.24 (95% 1.11–4.54) and 1.60 (95% 1.18–2.16) in women and men, respectively.

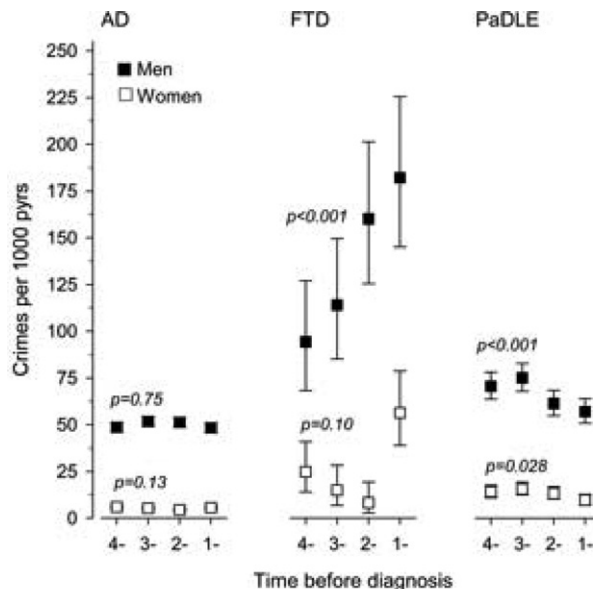


Fig. 1. Total number of crimes before the diagnosis of neurocognitive disorders. Adjusted with age and sex.

**Conclusions.**– Especially FTD patients have an increased risk for criminal offences years before the diagnosis. Crimes were more common in men.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

### Oral Communications 11: Posttraumatic Stress Disorder/Suicidology and suicide prevention Part II/Oncology and Psychiatry

OC-0116

#### What happens after an inpatient admission due to suicide attempt? Analysing the risk of re-attempts and death in a 10-year follow-up study

Á. Fernández-Quintana<sup>1\*</sup>, J. Alberdi-Sudupe<sup>2</sup>, S. Lantes-Louzao<sup>3</sup>, F. Iglesias-Gil-de-Bernabé<sup>2</sup>, S. Gómez-Pardiñas<sup>4</sup>, F. Cordido-Carballido<sup>5</sup>

<sup>1</sup> Clinical Hospital of Västmanland, Psychiatry, Västerås, Sweden; <sup>2</sup> Clinical University Hospital of La Coruña, Psychiatry, La Coruña, Spain; <sup>3</sup> Clinical University Hospital of La Coruña, Liaison Psychiatry, La Coruña, Spain; <sup>4</sup> Clinical Hospital of El Ferrol, Psychiatry, El Ferrol, Spain; <sup>5</sup> Clinical University Hospital of La Coruña, Endocrinology, La Coruña, Spain

\* Corresponding author.

**Background and aims.**– Long-term studies on death following a suicide attempt are scarce despite prior suicide attempts being a strong predictive factor for eventual suicide.

**Aims.**– To describe demographic and clinical variables in patients admitted following attempted suicide. To establish their risk of death by suicide.

**Methods.**– Observational study of a cohort of 327 patients with previous suicide attempts assessed by Psychiatry in a University Hospital over a 10-year period (1997–2007). Median prospective follow-up of 11.06 years to establish all-cause fatality and suicide re-attempts rates.

**Results.**– Mean age at index suicide attempt: 42.4 years. Most prevalent diagnoses (ICD-10): Affective Disorders (29.2%) and Personality Disorders (23.4%). Most frequent method of suicide attempt: phar-

macological drug overdose (48.0%). During the follow-up period 28.0% of the sample died, of whom 37.2% died from suicide (case-fatality rate: 10.7%). Most prevalent causes of death: diseases of the circulatory system (21.3%), diseases of the respiratory system (16%), cancer (9.6%). Probability of survival after 10-year follow-up: 75.8%. Specific survival in relation to suicide: 90.8%. Patients who committed suicide ( $46.16 \pm 14.50$  years) were younger than those who did not ( $53.79 \pm 17.31$  years). Highest percentage of suicide by diagnosis: Personality Disorder (15.8%) and Psychosis (15%). Suicide re-attempts were significantly more prevalent among patients who died by suicide (23.1%) than among survivors (9.6%). Most frequent mechanisms of suicide: pharmacological drug overdose (45.7%).

**Conclusions.**– One tenth of the cohort died by suicide at the end of the follow-up period. Previous suicide attempts was the variable most strongly associated with the risk of death by suicide.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0117

### **Suicide: why in the elderly?**

M.J. Gonçalves<sup>1</sup>, R. Saraiva, C. Sereijo, E. Fernandes, L. Castanheira, R. Santos, T. Cavaco, M. Lemos, C. Leite Rodrigues  
Centro Hospitalar Lisboa Norte- EPE, Psychiatry and Mental Health, Lisboa, Portugal

\* Corresponding author.

**Background and aims.**– Suicide among older adults is a major public health issue. According to US data, suicide in the general population has a 1:25 ratio to nonfatal suicidal behaviour. This ratio approaches 1:4 in older adults. Due to an incomplete understanding of the causes of suicide this issue has been intractable clinically and epidemiologically. Imprecision in the prediction and prevention of suicidal thoughts and behaviors is a major issue. The aim is to do a review of recent findings concerning specific risk factors and prevention strategies for suicidal behaviors among older people.

**Methods.**– A literature review was conducted using the PubMed search database.

**Results.**– As a group, older people have one of the highest suicide rates, perhaps due to choosing more lethal methods and reportedly greater suicidal intent. Factors in each of these five domains place older adults at increased risk for suicide—psychiatric illness, personality traits and coping styles, medical illness, life stressors, social disconnectedness and functional impairment. Due to the fact that older adults rarely look for mental health specialists, primary care physicians may be the most promising clinicians for initial interventions.

**Conclusions.**– Suicide in later life is complex and has multiple variables to consider. This complexity poses challenges to prevention but also indicates a wide range of possible avenues to intervene. Effective suicide prevention is likely to require a multi-layered approach. Further research is required regarding the optimal way of delivering such interventions.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0118

### **Clinical and genetic factors associated with insomnia in cancer patients: a cross-sectional study**

A. Hajji<sup>1</sup>\*, R. Khoury<sup>1</sup>, T. Nehme<sup>2</sup>, A. Awad<sup>2</sup>, B. Eljebbawi<sup>2</sup>, S. Hallit<sup>3</sup>, F. Nasr<sup>4</sup>, G. Chahine<sup>4</sup>, J. Kattan<sup>4</sup>, L. Khabbaz<sup>1</sup>

<sup>1</sup> Saint-Joseph University, Laboratory of Pharmacology- Clinical Pharmacy and Quality Control of Drugs- Faculty of Pharmacy, Beirut, Lebanon; <sup>2</sup> Saint-Joseph University, Faculty of Pharmacy, Beirut, Lebanon; <sup>3</sup> Holy Spirit University USEK, Faculty of Medicine and

Medical Sciences, Jounieh, Lebanon; <sup>4</sup> Hôtel-Dieu de France Hospital-Saint-Joseph University- Faculty of Medicine, Department of Hemato-Oncology, Beirut, Lebanon

\* Corresponding author.

**Background and aims.**– Sleep disorders, particularly insomnia, are prevalent in patients with cancer (ranging from 24% to 95% in advanced cancer) and significantly affect their quality of life (QOL). They are considered as one of the first concerns reported by these patients during/after cancer treatment. The aim of our study was to assess clinical and genetic factors affecting insomnia in a sample of patients with cancer undergoing chemotherapy.

**Methods.**– A cross-sectional study was carried out between December 2017-June 2018, using the Insomnia severity index -ISI, and the Hospital Anxiety and Depression Scale -HADS. The ethical committee approved the study (Reference:CEHDF1016) and all patients gave their written consent. DNA was obtained using a buccal swab (FTA<sup>®</sup> technology) and genotyping for circadian clock genes (CRY2, CLOCK, PER) was performed using the Lightcycler<sup>®</sup> (Roche).

**Results.**– A total of 50 patients were included (70% females). Almost half of the patients reported insomnia problems (18% subthreshold insomnia; 16% moderate insomnia; 12% severe insomnia). Bivariate analyses showed that insomnia scores were significantly higher in patients with breast cancer ( $p=0.01$ ) treated with chemotherapy including docetaxel ( $p=0.02$ ) and cyclophosphamide ( $p<0.001$ ) and having higher anxiety ( $p=0.001$ ) and depression ( $p=0.01$ ) scores. Moreover, tobacco was negatively associated with insomnia ( $p=0.006$ ). No association between the studied genetic polymorphisms and insomnia was noted. Anxiety, cancer type and smoking remained significantly associated with ISI scores in the multivariate analysis ( $p=0.006$ ; 0.011 and 0.006 respectively).

**Conclusions.**– Our study confirms the relationship between insomnia and psychosocial factors and highlights the importance of treating all associated factors to improve the overall QOL of patients.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0119

### **Interaction between comt polymorphism and childhood trauma on suicidal ideation in patients with post traumatic stress disorder**

A. Kwon, D. Min, Y. Kim, M.J. Jin, S.H. Lee\*

Inje University Ilsan Paik Hospital, Psychiatry, Goyang, Republic of Korea

\* Corresponding author.

**Background and aims.**– Patients with post-traumatic stress disorder (PTSD) have genetic predisposition which is triggered by environmental factors. Catechol-o-methyltransferase (COMT) gene has been known to be associated with suicidal ideation. The present study aimed to explore the relation of COMT polymorphism, childhood trauma, and suicidal ideation in patients with PTSD.

**Methods.**– Fifty patients with PTSD (12 males and 38 females) and 62 healthy controls (HCs) (17 males and 45 females) were recruited. COMT rs4680 and rs4633 genotyping through peripheral blood and psychological assessments such as childhood trauma questionnaire (CTQ), the Beck scale for suicidal ideation and posttraumatic stress disorder checklist (PCL) were administered. A regression analysis and the two-way analysis of covariance were conducted.

**Results.**– Interaction of COMT rs4680 polymorphism and childhood emotional abuse (a subscale of CTQ) predicted suicidal ideation in patients with PTSD. The score of 9.226 in emotional abuse was the turning point which the moderation effect existed on suicidal ideation in patients with PTSD. The COMT Val/Val genotype, com-

pared to Met carriers, showed a higher suicidal ideation when the emotional abuse was high in PTSD patients.

**Conclusions.**– Our results suggests that vulnerability to suicide could be increased in Val/Val genotype of COMT rs4680 in patients with PTSD. In addition, in PTSD patients with Val/Val genotype, the experience of high emotional abuse could cause a significantly higher suicidal ideation compared to the experience of low emotional abuse.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0120

### **Clinical implication of altered inhibitory response in post-traumatic stress disorder: electrophysiological evidence from a Go/NoGo task**

D.I. Min<sup>1</sup>, A.R. Kwon<sup>1</sup>, Y.R. Kim<sup>1</sup>, M.J. Jin<sup>1</sup>, S.H. Lee<sup>2\*</sup>

<sup>1</sup> Clinical Emotion and Cognition Research Laboratory, Inje University, Goyang, Republic of Korea; <sup>2</sup> Inje University Ilsan Paik Hospital, Psychiatry, Goyang, Republic of Korea

\* Corresponding author.

**Background and aims.**– Inhibitory dysfunction is a major pathophysiology of patients with posttraumatic stress disorder (PTSD). This study investigates the neurophysiological evidence and altered cortical volume related with inhibitory dysfunction in patients with PTSD.

**Methods.**– Fifty patients with PTSD and 63 healthy control (HC) subjects participated in a Go/NoGo task with electroencephalographic recordings. N2-P3 complexes of event-related potentials (ERP) elicited during the No-Go condition were compared between the two groups. All participants underwent T1 structural magnetic resonance imaging scanning to examine the cortical volume and completed questionnaires such as the hospital anxiety and depression scale (HADS), cognitive emotion regulation questionnaire (CERQ), and the perceived threat questionnaire. Correlation analyses were performed between the altered ERP components and the cortical volume of regions of interest (ROIs), and between the altered ERP components and PTSD symptoms.

**Results.**– NoGo-N2 latencies at five electrode sites (Fz, FCz, Cz, CPz, Pz) were significantly delayed in the PTSD group compared to the HC group. In addition, N2 latency at FCz was significantly negatively correlated with the cortical volume of the inferior frontal gyrus, and N2 latency at Fz was significantly positively correlated with the CERQ-catastrophizing score, the HADS-anxiety score, and the perceived threat scores.

**Conclusions.**– These findings suggest that PTSD patients show inhibitory dysfunction, which is reflected by the delayed N2 latency. It also indicates that NoGo-N2 latency is associated with smaller cortical volume responsible for inhibition, and emotional symptoms of PTSD.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0121

### **Combining psychopharmacology and psychotherapy in MDMA-assisted psychotherapy for PTSD: progress in international clinical trials**

M. Mithoefer<sup>1\*</sup>, E. Vermetten<sup>2</sup>

<sup>1</sup> Medical University of South Carolina, Dept. of Psychiatry and Behavioral Sciences, Mount Pleasant, USA; <sup>2</sup> Leiden University Medical Center, Leiden, The Netherlands

\* Corresponding author.

**Background and aims.**– Psychotherapy is recognized as the definitive treatment for PTSD, however a significant percentage of patients do not respond to existing trauma-focused psychotherapy, so there is an urgent need for more effective treatments. A non-profit drug development program was launched in 2000 to investigate the safety and possible effectiveness of MDMA in conjunction with psychotherapy for treating PTSD. MDMA is known to decrease activity in the amygdala and increase activity in prefrontal cortex without depressing the sensorium. It is hypothesized that administering MDMA during psychotherapy could facilitate trauma processing by decreasing fear and defensiveness without interfering with memory or insight.

**Methods.**– Six phase 2 clinical trials have been completed in the US, Switzerland, Canada and Israel treating subjects with PTSD that had not responded to prior treatment. Based on these studies MDMA-assisted psychotherapy has entered Phase 3 trials in the US and Canada, with protocols under development in Israel Europe.

**Results.**– The combined results demonstrated a large effect size and good safety profile. Based on this Phase 2 data the FDA has granted Breakthrough Therapy designation for Phase 3 trials.

**Conclusions.**– MDMA-assisted psychotherapy shows promise as a novel treatment for PTSD. Using MDMA as a catalyst for psychotherapy as it has been in clinical trials has the advantage of limiting drug exposure to a small number of doses administered under direct supervision at monthly intervals. The results of Phase 3 trials will determine whether MDMA, used in this risk-mitigation format, will become an approved treatment within several years.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0123

### **Childhood and adulthood traumatization are differentially associated with the activity of the renin-angiotensin-aldosterone-system**

J. Terock<sup>1\*</sup>, A. Hannemann<sup>2</sup>, D. Janowitz<sup>3</sup>, H.J. Freyberger<sup>4</sup>, H.J. Grabe<sup>3</sup>

<sup>1</sup> University Medicine Greifswald- Helios Hanselinikum Stralsund, Psychiatry and Psychotherapy, Greifswald, Germany; <sup>2</sup> Clinical Chemistry and Laboratory Medicine, University Medicine Greifswald, Greifswald, Germany; <sup>3</sup> Psychiatry and Psychotherapy, University Medicine Greifswald, Greifswald, Germany; <sup>4</sup> Psychiatry and Psychotherapy, University Medicine Greifswald- Helios Hanselinikum Stralsund, Greifswald, Germany

\* Corresponding author.

**Background and aims.**– Previous evidence suggested lasting and cumulative effects of traumatization on the renin-angiotensin-aldosterone-system (RAAS). However, it is unclear whether childhood and adulthood trauma impact differentially on the RAAS.

**Methods.**– Plasma concentrations of renin and aldosterone were measured in a general population sample ( $n=2016$ ). Childhood trauma was assessed using the Childhood Trauma Questionnaire (CTQ), adult trauma was assessed using the PTSD module of the Structured Clinical Interview of the DSM-IV. Linear regression models were calculated to assess the relations between childhood or adulthood traumatization with log-transformed plasma renin and aldosterone concentrations.

**Results.**– Exposure to ( $\beta=0.08$ ;  $p=0.03$ ) and severity of childhood trauma ( $\beta=0.004$ ;  $p=0.01$ ) were associated with increased aldosterone, but not renin levels (Fig. 1). Results were carried by all dimensions of abuse, while neglect was not associated with altered RAAS activity. Adult trauma ( $\beta=0.12$ ;  $p<0.01$ ) and PTSD ( $\beta=0.35$ ;  $p=0.02$ ) were significantly associated with increased renin concentrations. Subjects with history of child and adult trauma showed



increases in aldosterone ( $\beta=0.13$ ;  $p<0.01$ ) as well as renin levels ( $\beta=0.18$ ;  $p<0.01$ ).

**Conclusions.**– Exposure to psychic trauma may be associated with differential alterations of the RAAS depending on the time period of traumatization. Moreover, subjects with exposure to childhood as well as adulthood trauma may be at specific risk for severe dysregulation of the RAAS. Our results may contribute to explain associations between trauma exposure, PTSD; and enhanced risk for physical disease.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0125

### Predictors of ICD-11 adjustment disorder in general population

P. Zelviene\*, E. Kazlauskas

Vilnius University, Center for Psychotraumatology, Vilnius, Lithuania

\* Corresponding author.

**Background and aims.**– Definition of adjustment disorder (AjD) has been significantly revised in ICD-11. AjD is now classified as a disorder specifically associated with stress. ICD-11 diagnostic profile of AjD requires at least one identifiable psychosocial stressor, and symptom profile is comprised of the two core symptoms (1) preoccupation with stressor, and (2) failure to adapt. ICD-11 AjD definition stimulated a new wave of research, however there is a lack of risk factors research of AjD. The main objective of the study was to analyze predictors of ICD-11 AjD in Lithuanian general population.

**Methods.**– The total sample consisted of 649 adults, 60.4% women from the general population, aged about 40 years on average who experienced at least one significant recent life stressor. ICD-11 AjD symptoms were measured using the self-report Brief version of Adjustment Disorder New Module (ADNM-8) measure. Probable AjD was diagnosed using the ADNM-8 diagnostic algorithm used in previous studies.

**Results.**– AjD prevalence in the sample was 16.5%. Significant predictors of AjD were: job-related, health-related stressors, female gender, and 60+ age group having higher risk for AjD.

**Conclusions.**– This is one of the first studies which explored predictors of ICD-11 AjD in general population. We conclude that further investigation is needed to explore predictors of AjD in clinical samples.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## Oral Communications 12: Schizophrenia and other psychotic disorders Part II/Mental Health Policies

OC-0127

### Auditory P300 and cognition in schizophrenia: findings from a multicentre study

G. Di Lorenzo<sup>1</sup>\*, A. Mucci<sup>2</sup>, A. Vignapiano<sup>2</sup>, G.M. Giordano<sup>2</sup>, F. Ferrentino<sup>1</sup>, C. Niolu<sup>1</sup>, D. Marasco<sup>3</sup>, A. Bellomo<sup>3</sup>, S. Galderisi<sup>2</sup>

<sup>1</sup> University of Rome Tor Vergata, Department of Systems Medicine, Rome, Italy; <sup>2</sup> University of Campania “L. Vanvitelli”, Department of Psychiatry, Naples, Italy; <sup>3</sup> University of Foggia, Department of Clinical and Experimental Medicine, Foggia, Italy

\* Corresponding author.

**Background and aims.**– Subjects with schizophrenia (SCZ) have abnormalities of event-related potentials (ERPs) and impaired cognitive performance. Among ERPs, P300 is considered an index of

global cognitive efficiency, measuring neural activations of attention and memory system during the stimulus processing. Despite the consistent findings in SCZ of abnormal P300 and impairment in cognitive domains, the relation between these deficits was not fully investigated in Schizophrenia. As an add-on to the Italian Network for Research on Psychoses study, we investigated the relation between P300 and cognitive indices.

**Methods.**– In 112 chronic, stabilized SCZ and 63 healthy controls (HC), ERPs were recorded during a standard auditory oddball task. Pz channel was used to measure P300 latency and amplitude. The cognitive assessment was performed with MATRICS Consensus Cognitive Battery (MCCB). Two separate stepwise multiple linear regression analyses were used to investigate MCCB domains that predicted, respectively, P300 latency and amplitude, controlling for sociodemographic and clinical variables.

**Results.**– Compared to HC, SCZ showed significant longer latency ( $p=0.001$ ; Cohen's  $d=0.52$ ) and lower amplitude ( $p<0.0001$ ; Cohen's  $d=0.71$ ) of auditory P300. In SCZ, a significant regression model (adjusted  $R^2=0.163$ ,  $p<0.0001$ ) revealed that independent predictors of P300 latency were MCCB working memory ( $b=-0.298$ ,  $p=0.002$ ) and age ( $b=0.275$ ,  $p=0.004$ ). No variable entered in the regression model with the P300 amplitude as dependent variable.

**Conclusions.**– Our results revealed in SCZ a relation between slower neural processes during an attentive task (as revealed by auditory P300 latency) and working memory impairment. Moreover, our findings confirmed a substantial independence of auditory P300 amplitude from other clinical variables.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0128

### Violence against psychiatry trainees in european region countries: an overview

G. Erzin<sup>1</sup>, A. Gürçan<sup>2</sup>, V. Pereira-Sanchez<sup>3</sup>, M. Asztalos<sup>4</sup>, E. Tasa Vinyals<sup>5</sup>, A.R. Szczegieliński<sup>6</sup>, Y. Rai<sup>7</sup>, J.E. Pinzon Espinosa<sup>8</sup>, A. Fontaine<sup>9</sup>, E.F.O. Psychiatry Trainees<sup>10</sup>

<sup>1</sup> Diskapı Yıldırım Beyazıt Education and Research Hospital, Psychiatry, Ankara, Turkey; <sup>2</sup> Yozgat State Hospital, Psychiatry, Yozgat, Turkey; <sup>3</sup> Clínica Universidad de Navarra, Psychiatry and Clinical Psychology, Navarra- Pamplona, Italy; <sup>4</sup> Aalborg University Hospital- Aalborg- Denmark- School of PHD Studies- Semmelweis University, Psychiatry, Budapest, Hungary; <sup>5</sup> Osona Mental Health Services. Hospital Universitari de Vic- Vic, Psychiatry and Mental Health, Barcelona, Spain; <sup>6</sup> Medical University of Silesia, Psychiatric Rehabilitation, Katowice, Poland; <sup>7</sup> Medical Training Initiative MTI Trainee- Essex Partnership University Trust, Psychiatry, Colchester, United Kingdom; <sup>8</sup> Institute of Neurosciences. Hospital Clínic, Adult Psychiatry and Psychology, Barcelona, Spain; <sup>9</sup> University of Lille- Lille's University Hospital, F-59000- General psychiatry, Lille, France; <sup>10</sup> EFPT Research Working Group, Group, Bruxelles, Belgium

\* Corresponding author.

**Background and aims.**– The violence against psychiatry trainees by their patients in the workplace is a serious issue that has severe consequences for psychiatry community. The Research Working Group of the European Federation of Psychiatric Trainees (EFPT-RWG) has conducted a survey to assess violence (verbal, physical and sexual) against psychiatric trainees. This issue has been previously studied in Turkey, France and Spain. Our aim is to investigate the extent of this problem across European psychiatry trainees.

**Methods.**– We carried out a web-based survey study, which is still ongoing. Social media and online communication channels of EFPT were used to spread the survey among current psychiatric trainees across all reachable countries. Participants were asked to fulfill an anonymous online survey on their experiences of physical, verbal or sexual violence at the workplace. For the present study, a descrip-

tive statistical analysis of the results regarding responders from the European region (WHO) was conducted with SPSS.

**Results.**– We analysed the answers of 667 psychiatric trainees from 16 European region countries (average age 31.0,  $t \pm 5.0$ ; 68.5% women, 31.3% men, 0.1% non-binary). The majority of trainees is being trained in adult psychiatry (79.5%), and child and adolescent psychiatry (12.7%). 84.9% of them have reported being assaulted while working in mental healthcare settings from which 38.5% of them have been exposed to physical assaults, 77.8% to verbal, and 7.5% to sexual.

**Conclusions.**– Our study identified a relatively high prevalence of self-reported violence amongst psychiatric trainees, thus suggesting that this is a relevant and sensitive issue in the European region countries.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0129

### Neurometabolic correlates of cognitive processing speed in patients with schizophrenia and their healthy siblings – a 1h MRS spectroscopy application

M. Futyma- Jędrzejewska<sup>1\*</sup>, P. Krukow<sup>2</sup>, D. Juchnowicz<sup>3</sup>, E. Żmuda<sup>4</sup>, J. Moryłowska-Topolska<sup>5</sup>, A. Makarewicz<sup>6</sup>, K. Karakula<sup>7</sup>, H. Karakuła-Juchnowicz<sup>8</sup>

<sup>1</sup> I Department of Psychiatry- Psychotherapy and Early Intervention Medical University of Lublin- Poland, I Department of Psychiatry- Psychotherapy and Early Intervention Medical University of Lublin- Poland, <sup>2</sup> Department of Clinical Neuropsychiatry, Department of Clinical Neuropsychiatry Medical University of Lublin- Poland, Lublin, Poland; <sup>3</sup> Medical University of Lublin- Poland, Department of Psychiatric Nursing Medical University of Lublin- Poland, Lublin, Poland; <sup>4</sup> Oncology Centre in Bydgoszcz- Poland, Department of Radiology- Oncology Centre in Bydgoszcz- Poland, Bydgoszcz, Poland; <sup>5</sup> Medical University of Lublin- Poland, Department of Clinical Neuropsychiatry University of Lublin- Poland, Lublin, Poland; <sup>6</sup> Medical University of Lublin- Poland, I Department of Psychiatry- Psychotherapy and Early Intervention Medical University of Lublin- Poland, Lublin, Poland; <sup>7</sup> Medical University of Lublin- Poland, Students Scientific Club at I-st Department of Psychiatry- Psychotherapy and Early Intervention Medical University of Lublin- Poland, Lublin, Poland; <sup>8</sup> Medical University of Lublin- Poland, I Department of Psychiatry- Psychotherapy and Early Intervention Medical University of Lublin- Poland and Department of Clinical Neuropsychiatry University of Lublin- Poland, Lublin, Poland  
\* Corresponding author.

**Background and aims.**– There is a growing body of evidence suggesting that slowing in cognitive processing speed may be a central cognitive deficit and endophenotypic marker of schizophrenia.

Proton Magnetic Resonance Spectroscopy (<sup>1</sup>HMRS) is a non-invasive diagnostic method providing important information on brain metabolites, including N-acetyl asparagine (NAA), creatine (Cr), choline (Cho).

**Methods.**– 42 inpatients diagnosed with schizophrenia according to DSM-IV (SCH) and their 43 healthy siblings (HSB) were examined with combined cognitive speed tests. Metabolite concentrations were evaluated by a single-voxel technique in the prefrontal cortex, caudate nucleus, centrum semiovale, hippocampus, cerebellum and thalamus.

**Results.**– Patients and their siblings differed significantly in both simple and complex cognitive speed parameters. The difference remained significant after controlling for age, IQ, and years of education. Different neurometabolic correlates of this speed parameters were noted between SCH and HSB groups. In SCH group, the regression analysis yielded significant main effects of Cr in the

left caudate nucleus and NAA levels in the left thalamus nuclei ( $R^2 = 0.67$ ,  $p < 0.01$ ) as significant predictors of processing speed. In siblings, cognitive speed correlated with Cho levels in the left centrum semiovale and the left thalamus while with NAA levels in the right caudate nucleus.

**Conclusions.**– The results of our study indicate the differences in simple and complex speed parameters and their neurometabolic correlates between these study groups.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0130

### Clinical and genetic factors associated with resistance to treatment in patients with schizophrenia: a case-control study

A. Hajj<sup>1\*</sup>, S. Obeid<sup>2</sup>, S. Sahyoun<sup>3</sup>, C. Haddad<sup>2</sup>, L. Khabbaz<sup>1</sup>, S. Hallit<sup>4</sup>  
<sup>1</sup> Saint-Joseph University, Laboratory of Pharmacology- Clinical Pharmacy and Quality Control of Drugs- Faculty of Pharmacy, Beirut, Lebanon; <sup>2</sup> Psychiatric Hospital of the Cross, Psychiatry, Jal Eddib, Lebanon; <sup>3</sup> Saint-Joseph University, Faculty of Pharmacy, Beirut, Lebanon; <sup>4</sup> Holy Spirit University of Kaslik, Faculty of Medicine and Medical Sciences, Kaslik, Lebanon

\* Corresponding author.

**Background and aims.**– Schizophrenia is a severe neurodevelopmental disorder characterized by positive, negative and cognitive symptoms. Around one third of SCZ patients are claimed to be resistant to antipsychotic treatment but the exact etiological factors are not fully understood. The objective of this study was to assess the clinical and genetic factors affecting response to treatment in a sample of patients with schizophrenia.

**Methods.**– We conducted a case-control study on 53 treatment-resistant patients and 47 good responders. Patients were stratified in two groups based on the established criteria for treatment-resistant schizophrenia using the Brief Psychiatric Rating Scale (BPRS score  $\geq 45$  for resistance). The study was approved by the hospital ethical committee (Reference: CEHDF1017) and all patients/legal representatives gave their written consent. Clinical factors were assessed. DNA was obtained using a buccal swab (FTA<sup>®</sup> technology) and genotyping for *OPRM1*, *COMT*, *DRD2* et *MTHFR* genes using the Lightcycler<sup>®</sup> (Roche).

**Results.**– The bivariate analysis showed that gender ( $p < 0.001$ ), treatment by psychoactive substances ( $p = 0.023$ ), equivalent dose of chlorpromazine ( $p = 0.05$ ), adherence to treatment ( $p = 0.005$ ) and time since the beginning of treatment ( $p = 0.029$ ) were significantly associated with resistance to treatment. The multivariable analysis, taking the presence versus absence of treatment resistance as the dependent variable, showed that longer years of treatment (ORa = 0.597), higher treatment adherence (ORa = 0.52), having the *COMT*-VM (Beta = 0.205) compared to *COMT*-VV gene were significantly associated with lower resistance to treatment.

**Conclusions.**– Uncovering the clinical and genetic factors associated with resistance to treatment could help us better treat our schizophrenic patients in a concept of personalized medicine.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0132

### Remission and recovery in first-episode psychosis: the coimbra early psychosis unit

S. Magano<sup>1\*</sup>, S. Ferreira<sup>2</sup>, N. Madeira<sup>2</sup>, V. Santos<sup>2</sup>, S. Morais<sup>2</sup>, H. Costa<sup>2</sup>, S. Caldeira<sup>2</sup>, J. Silva Ribeiro<sup>2</sup>, M. Coroa<sup>2</sup>, P. Oliveira<sup>2</sup>, M. Bajouco<sup>2</sup>

<sup>1</sup> Centro Hospitalar e Universitário de Coimbra, Psychiatry, Coimbra, Portugal; <sup>2</sup> Centro Hospitalar e Universitário de Coimbra, Department of Psychiatry, Coimbra, Portugal  
\* Corresponding author.

**Background and aims.**– In the last decades, early intervention in psychosis programs have been established worldwide with the purpose of improving care and long-term outcomes for patients in the early stages of psychotic disorders. In a recent meta-analysis, Lally et al found that 58% of patients with first episode psychosis (FEP) met criteria for remission and 38% met criteria for recovery.

We aimed to evaluate remission and recovery rates in a cohort of FEP patients followed-up by our early intervention team.

**Methods.**– We performed a retrospective analysis of clinical status and global functioning of FEP patients in active follow-up by our early psychosis unit. Symptomatic remission was defined according to Andreasen's remission criteria. We also evaluated functioning with the Personal and Social Performance Scale (PSP).

**Results.**– In our FEP cohort, 70 patients were in active follow-up (74% Males; 26% Females; mean age: 29 years-old); 55% were diagnosed with schizophrenia, while remaining patients had other psychotic disorders. We found that 79% of all patients were in symptomatic remission; in this subgroup, 80% had functional recovery. In total, 63% of patients met criteria for recovery. In patients without symptomatic remission, 47% had positive symptoms and 29% of those were under treatment with clozapine.

**Conclusions.**– Coimbra Early Psychosis Unit's remission and recovery rates were above average when compared to a recent meta-analysis. Opportunities for improvement include facilitating patient access in a catchment area over half a million inhabitants and offering treatment-resistant options like clozapine to more patients with partial remission and inadequate recovery.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0133

### **Attachment styles and theory of mind abilities non-psychotic adult offspring of patients with schizophrenia**

C. Sahbaz<sup>\*</sup>

Istanbul Bezmialem Vakıf University, Department of Psychiatry, Istanbul, Turkey

\* Corresponding author.

**Background and aims.**– Theory of Mind (ToM) impairments suggested that an endophenotypic characteristic in patients with schizophrenia, even though these impairments continue through the remission period in schizophrenic patients. Therefore, the objective of our study is to investigate this candidate endophenotype in non-psychotic adult offspring of patients with schizophrenia and the attachment styles in this sample group as well as its correlation with ToM.

**Methods.**– 47 healthy adult offspring of hospitalized patients followed-up with diagnosis of schizophrenia and 49 controls whose parents do not have any psychotic impairment according to DSM IV-TR, matched in terms of age, gender and education level were included in the study. Socio-demographic Data Form, SCID-I Structured Clinical Interview Patient Form, Experiences in Close Relationships Inventory (ECRI), and Reading Mind in the Eyes Test (RMET) were performed.

**Results.**– Evaluated RMET points of the ToM functions in the sample group were statistically significantly lower than controls. In the scale where we evaluated attachment styles, ECRI Avoidance and Anxiety points were both significantly higher compared to control group statistically. Reverse relation anticipated in the correlation of both scales was not significant statistically.

**Conclusions.**– ToM impairment and highly avoidant and anxious attachment styles established in this sample group with

schizophrenic parents can contribute to the schizophrenia endophenotype concept. There are common neurobiological factors that can affect both attachment and ToM and their further investigation might be helpful in etiological explanation and concept of schizophrenia.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0134

### **First psychotic episode in female taking dietary supplement cocktail**

A.F. Teixeira<sup>1\*</sup>, T. Ventura Gil<sup>1</sup>, S. Castro<sup>2</sup>

<sup>1</sup> Psychiatry Resident Doctor, Psychiatry and Mental Health Department- ULS Guarda, Guarda, Portugal; <sup>2</sup> Psychiatrist, Psychiatry and Mental Health Department- ULS Guarda, Guarda, Portugal

\* Corresponding author.

**Background and aims.**– People's interest on dietary supplements, as a way to improve health and well being, has been increased all over the years. The easy accessibility of these “natural” products makes important that the physicians keep aware of the virtual side effects and interactions resulting of the use of dietary supplements.

The clinical case we present emphasizes the value of identifying potential interactions and side effects in a patient taking multiple supplements simultaneously.

**Methods.**– Patient's clinical record review.

**Results.**– A 54-year-old female was admitted at the psychiatric department, after being lead to the emergency for exhibiting behavioral alterations for the past two months, including increased speech output, sometimes with soliloquy and unfounded fears of being disadvantaged by third parties, along with almost total insomnia. The patient had no prior history of psychiatric disorder. She denied recreational use of tobacco, alcohol or any drugs. The physical study, including blood tests and CT-scan showed no alterations. The described symptoms coincided with the start of a “treatment” recommended by a “fortune teller”, including: “Borututu tea (Cochlospermum Angolensis), Thyme tea, Cranberry tea, Probiotics, Chamomille + Passionflower + Valerian tea, Cherry pie + Corn bean + Pink ipê (Handroanthus impetiginosus) tea.

**Conclusions.**– The patient remained in recovery for 10 days, treated with: oral Paliperidone 6 mg, and oral Lorazepam 2,5 mg. She had favorable evolution. At the time of discharge had stabilized levels of anxiety, fluent speech. No changes in the content of thinking that may be configured as delusional. Regularized sleep cycle. Acquired partial criticism about the initial symptoms.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0135

### **Nuclear magnetic resonance spectroscopy has revealed serum albumin conformational disturbances in patients with first episode of schizophrenia**

M. Uzbekov<sup>1\*</sup>, T. Babushkina<sup>2</sup>, T. Klimova<sup>2</sup>, A. Peregudov<sup>2</sup>, T. Syrejschchikova<sup>3</sup>, N. Smolina<sup>1</sup>, V. Brilliantova<sup>1</sup>, G. Dobretsov<sup>4</sup>

<sup>1</sup> Moscow Research Institute of Psychiatry, Brain Pathology, Moscow, Russia; <sup>2</sup> AN Nesmeyanov Institute of Elementoorganic Compounds, Nuclear spectroscopy, Moscow, Russia; <sup>3</sup> Lebedev Physical Institute, High Energy, Moscow, Russia; <sup>4</sup> Research and Clinical Center of Physic-Chemical Medicine, Medical biophysics, Moscow, Russia

\* Corresponding author.

**Background and aims.**–

**Introduction.**– High-tech approaches can give wide perspectives for the development of new diagnostic and prognostic methods



and new methods for evaluation of efficacy of therapy of mental disorders.

**Objectives.**– High resolution nuclear magnetic resonance  $^1\text{H}$  (HRNMR  $^1\text{H}$ ) spectroscopy in strong magnetic field gives possibility to revealed qualitative and quantitative changes of different metabolites in biological fluids in pathological conditions.

**Aim.**– To investigate HRNMR  $^1\text{H}$  spectra of blood serum and its albumin fraction in first episode schizophrenia (FES) patients.

**Material and methods.**– There were investigated 19 patients with FES and 6 healthy controls. HRNMR  $^1\text{H}$  spectra of blood serum and serum albumin were measured on Avance-600 (Bruker, USA).

**Results.**– There was detected amplification of intensity CH<sub>2</sub> –proton lipid signals in blood serum. It points out on increase of long chain lipids concentration in serum of FES patients. At the same time there was observed in albumin water solution spectra amplification of intensity of methyl protons signals of non esterified fatty acids of albumin molecule of FES patients using HRNMR  $^1\text{H}$  spectroscopy. That indicates on the increase of quantity of fatty acid molecules, i.e. on the changes in albumin ligand loading, or on the amplification of fatty acids methyl group mobility, i.e. on changes of albumin molecule conformation.

**Conclusions.**– HRNMR  $^1\text{H}$  spectra of serum albumin support our hypothesis about different albumin ligand loading in controls and FES patients that points out on albumin conformational disturbances in FES patients.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

## Oral Communications 13: Child and Adolescent Psychiatry Part I/Philosophy and Pshychiatry (1)/Cultural Psychiatry/Quality Management

OC-0136

### Vitamine deficiency in child and adolescent psychiatric inpatients: a 3-year retrospective study. a comprehensive anthropometric and diagnostic analysis

G. Anmella Diaz<sup>1\*</sup>, N. Prades<sup>2</sup>, A. Gimenez<sup>1</sup>, L. Espinosa<sup>3</sup>, C. De Castro<sup>4</sup>, R. De la Mata<sup>5</sup>, E. Varela<sup>6</sup>, I. Baeza<sup>7</sup>

<sup>1</sup> Hospital Clinic of Barcelona, Barcelona, Catalonia, Spain, Department of Psychiatry and Psychology, Department of Child and Adolescent Psychiatry, Barcelona, Spain; <sup>2</sup> Hospital Santa María of Lleida, Department of Psychiatry, Lleida, Spain; <sup>3</sup> Hospital Clinic of Barcelona, Barcelona, Catalonia, Spain, Hospital of Manresa, Althaia, Manresa, Catalonia, Spain, Department of Psychiatry and Psychology, Department of Child and Adolescent Psychiatry, Barcelona, Spain; <sup>4</sup> Hospital Sant Joan de Déu, Barcelona, Infanto-Juvenile Mental Health Center CSMIJ Granollers, Granollers, Spain; <sup>5</sup> Hospital of Salamanca, Department of Child and Adolescent Psychiatry, Salamanca, Spain; <sup>6</sup> Hospital Clínic of Barcelona, Barcelona, Catalonia, Spain, Department of Child and Adolescent Psychiatry, Barcelona, Spain; <sup>7</sup> Hospital Clínic of Barcelona, Centro de Investigación Biomédica en Red de Salud Mental CIBERSAM, IDIBAPS, Barcelona Clinic Schizophrenia Unit BCSU, University of Barcelona, SGR-881, Department of Child and Adolescent Psychiatry, Barcelona, Spain

\* Corresponding author.

**Background and aims.**–

**Introduction.**– Vitamin-deficiencies have been proved as major contributors to impaired child-neurodevelopment<sup>1</sup>. Folate (B9) and cyanocobalamin (B12) deficiencies have been linked to psychotic disorders in adult-age<sup>2</sup>. Few literature has been published about vitamin-deficiencies in psychiatric child-and-adolescent-population.

**Objectives.**– To examine the B9 and B12-deficiencies (B9-def/B12-def) in psychiatric child-and-adolescent-population and determine the anthropometric and diagnostic correlates.

**Methods.**– A 3-year retrospective-observational-design including all child-and-adolescent-psychiatric-inpatients in the hospitalization-unit (01/01/2015–31/12/2017). Anthropometric, clinical and analytical variables were included. SPSS-Statistical-analysis: Chi-square, ANOVA and *t*-student-tests.

**Results.**– 779 inpatients were included.

**Anthropometrics:** Female = 60.8%; Age ( $\bar{x}$  = 15.2; SD = 1.99; Range = 7.1–17.99); Female/Male-median-age (15.4/14.8-years;  $F$  = 17.42;  $p$  < 0.0001); Adolescents (>13-years = 87.5%). Vitamin-deficiencies: B9-def = 42.4%; B12-def = 19.2%; B9-and-B12-def = 11%.

**Differences-by-sex:** Female/Male-B9-mean (6.4/5.9 ng/ml;  $F$  = 4,325;  $p$  = 0.038). No B9/B12-def-differences were found comparing by sex.

**Differences-by-age:** Children/Adolescents-B9-def (26.1%/44.7%;  $\chi^2$  = 11.44;  $p$  = 0.001); B12-def (9.7%/20.7%;  $\chi^2$  = 6.3;  $p$  = 0.012). A negative-correlation was found by mean-B9/B12-and-age: ( $R$  = –0.169;  $R^2$  = 0.029;  $p$  = 0.0001); mean-B9-age ( $R$  = –0.120;  $R^2$  = 0.015;  $p$  = 0.001).

**Differences-by-diagnostic:**

– Psychotic-patients ( $n$  = 150; 19.3%); Psychotic/Non-Psychotic-B12-mean (403.6/437.5 pg/ml;  $t$  = 2.3;  $p$  = 0.022). No B9/B12-def-differences were found.

– Eating-disorder-patients ( $n$  = 131; 16.8%); Eating-disorders/Other: B9-def (25.8%/45.7%;  $\chi^2$  = 16.11;  $p$  = 0.0001); B12-def (8.6%/21.3%;  $\chi^2$  = 10.05;  $p$  = 0.002).

– Depressed-patients ( $n$  = 188; 24.1%); Depression/Other: B12-def (26%/17%;  $\chi^2$  = 6.87;  $p$  = 0.009). No other differences were found.

**Conclusions.**–

1. Almost 1/2 of inpatients presented with B9-def and 1/5 with B12-def, showing a serious-neglected problem in underage-patients.
2. B9/B12-def are doubled in adolescents compared with children. Age-correlation was also indicative.
3. Psychotic-and-Depressed-patients are prone to less mean-B12 levels in contrast with Eating-disorder-patients, showing fewer comparative-deficits with other diagnostic-subgroups, probably due to more healthy-diet and supplementary consideration by mental-health professionals.
4. Correlation studies between vitamin-deficiencies and cognitive-function should be performed in order to take this problem into consideration.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0137

### Analysis of the European Commission's mental health research projects funding

J.B. Hazo

INSERM ECEVE, UMRS-1123 ECEVE, Paris, France

**Background and aims.**– With the ROAMER project perspective, aiming at setting a mental health research roadmap for 2015–25 period, we looked for the European Commission (EC) investment in such research to see its main trends in terms of theoretical approaches and disorders covered.

**Methods.**– All research projects funded by the EC during FP7 (2007–14) and H2020 (2014–18) included in the Cordis database were searched through keywords in their title and abstract. Each project matching a mental health keyword was screened to retained the mental health dedicated research projects. Main theoretical approach and disorder covered by the project were noted. Amount of funding received by theoretical approach and disorder were computed.

Funding received by disorder was compared with the DALYs represented by such disorder in Europe over the period.

**Results.**– Mental health research represented around 5% of health research funding.

Main theoretical approach funded by EC during the period was the neurosciences one (37% of funding), followed by genetic approach. Psychosocial, biomedical, research on practices, cognitive behavioural, psychodynamic and recovery approaches were behind.

Compared to their respective burden of disease in DALYs, psychotic, behavioural, autistic and eating disorders seem over-funded while drug-related disorders, suicidal behaviours, bipolar and depressive disorders would be under-funded.

**Conclusions.**– Research investments made by EC might be unbalanced in favor of neurosciences and basic science, which could be linked to the over-funding of research on disorders representing a low burden of disease. In times of restrictive research budgets, reliable indicators of such public investments should be discussed by the scientific community, including users and clinicians.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0139

### **Coping and acculturation in Spanish and Mexican immigrants in Poland**

Z. Lebiecka\*, J. Samochowiec

*Pomeranian Medical University, Department of Psychiatry, Szczecin, Poland*

\* Corresponding author.

**Background and aims.**– In light of the dynamic, global demographic changes linked to intensive worldwide migration, exploring how contemporary migrants adjust and cope with acculturation to their new host environment seems well-suited and timely, especially given the key role of coping strategies in the acculturation process and outcomes for those experiencing cultural adaptation. This study was designed to examine psychosocial aspects of migration and capture its correlations with preferred acculturation and coping strategies.

**Methods.**– A sample of 60 immigrants of Spanish ( $n = 30$ ) and Mexican origin ( $n = 30$ ), residing in Poland, completed questionnaires assessing selected demographics, acculturation strategies (the Vancouver Index of Acculturation) and preferred coping styles (the Coping Inventory for Stressful Situations) to determine meaningful associations between them.

**Results.**– No significant links were found between coping and acculturation. Most participants exhibited mixed coping and adopted integration as their acculturation strategy. There were trend-level associations between length of stay and host culture identification. Mexicans exhibited stronger heritage identification than the Spanish, with no differences in identification with the Polish culture. Nationality strongly differentiated acculturation, while gender did not affect it.

**Conclusions.**– Study findings suggest that Spanish and Mexican migrants in Poland prefer mostly adaptive coping and acculturation strategies, facilitating their cultural adaptation and suggesting intensive globalization, which enriches the body of evidence regarding current approaches to cross-cultural psychology. There are reasons to assume that cultural distance may affect acculturation process, while longer residence in host country may enhance adjustment.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0140

### **Effect of cardio-metabolic monitoring on HbA1c levels in patients on antipsychotics in an outpatient clinic**

P. Manocha<sup>1</sup>, F. Walyzada<sup>1</sup>, R. Cheema<sup>2</sup>, A. Martin<sup>1</sup>, M. Gashi<sup>1</sup>, C. Odom<sup>1</sup>, J. Chowdhury<sup>1</sup>, M. Upadhyaya<sup>1</sup>, Z. Ahmad<sup>1</sup>, A. Sharha<sup>1</sup>, S. Gunturu<sup>1</sup>, K. Shah<sup>1</sup>, P. Korenis<sup>1</sup>

<sup>1</sup> *BronxCare Health System, Psychiatry, Bronx, USA;* <sup>2</sup> *Baylor College of Medicine, Child and Adolescent Psychiatry, Houston, USA*

\* Corresponding author.

**Background and aims.**– Patients with serious and persistent mental illness (SPMI) have frequent comorbid coronary artery disease, diabetes mellitus (DM), and other cardio-metabolic (CM) risk factors. Mortality due to DM in patients with SPMI is twice as common when compared to the general population. CATIE schizophrenia trial estimated 43% prevalence (54% in Females; 36% in Males) of metabolic syndrome in patients with schizophrenia. The patients who were not treated for CM risk factors had high prevalence of DM (30.2%), Hypertension (HTN) (62.4%) and Dyslipidemia (88.0%). This necessitates CM risk monitoring in patients on antipsychotics. The aim of this study is to understand if CM monitoring, specifically HbA1c levels in patients with antipsychotics lowers the HbA1c levels.

**Methods.**– This quality improvement project was designed to understand whether we were following APA guidelines for CM monitoring. Retrospective chart review was done for 1055 patients during one year period in phase 1. Phase 2 involved Intervention included provider education on CM monitoring and development of CM screening order set. In phase 3, post-intervention data was collected for 3055 patients.

**Results.**– Baseline data showed underperformance of CM monitoring with following result: fasting glucose (52%), HbA1c (24%), LDL (37%), Cholesterol (38%) and BMI (67%). The HbA1c monitored patients (242) from Phase 1 had a mean HbA1c of 6.69 mmol/mol (sd = 1.9) and in 2017 the mean HbA1c were lowered to 6.29 mmol/mol (sd = 1.8). Paired sample t test showed that this difference was statistically significant ( $p = 0.04$ ).

**Conclusions.**– The CM monitoring was under performed in patients on antipsychotics. The post-intervention data showed a decline in mean HbA1c values.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0141

### **Outcomes of narrative therapy with indigenous people who have attempted suicide**

L. Mehl-Madrona<sup>1</sup>, B. Mainguy<sup>2</sup>

<sup>1</sup> *University of Maine, Graduate School, Orono- Maine, USA;* <sup>2</sup> *University of Maine at Orono, School of Social Work, Orono, USA*

\* Corresponding author.

**Background and aims.**– On average, indigenous people have higher rates of suicide attempts and completions than non-indigenous people around the globe. Conventional psychotherapies are often unsuccessful due to their assumptions being incompatible with indigenous world views. We conducted psychotherapy with indigenous people who had attempted suicide using narrative concepts of exploring the story in which suicide makes sense, developing stories about what happens after death, exploring alternative stories for how to accomplish the goals for which suicide was intended, countering stories about death, and developing restitution narratives that excluded suicide.

**Methods.**– Fifty-two clients received short-term narrative therapy adapted for indigenous people in North America. A comparison group consisted of 53 clients who were evaluated for suicide

attempts and who received cognitive-behavior therapy. A third group of 52 patients were evaluated and received no psychotherapy. The process began with what has been called clinical yarning in which stories are elicited to build rapport and respect; diagnostic yarning, in which stories are elicited to explain the suicide attempt, and therapeutic yarning, in which stories are created for strategies for problem resolution/response that exclude suicide.

**Results.**– Clients receiving narrative therapy statistically significantly decreased suicidal ideation and attempts when compared to CBT ( $p < 0.039$ ) and no therapy ( $p < 0.004$ ). Clients stayed in narrative therapy longer than CBT ( $p < 0.014$ ). A greater proportion of clients saw the cognitive-behavioral therapist as judgmental and out of touch.

**Conclusions.**– Indigenous people in North America who attempt suicide appear to relate better to a story-based approach than a cognitive approach.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0142

### **What do we know about minors who attend the child and adolescent mental health outpatient unit? conclusions after a two-year follow-up**

A. Novo-Ponte<sup>1\*</sup>, A. Prieto-Pérez<sup>1</sup>, Á. Fernández-Quintana<sup>2</sup>, M. González-Santos<sup>3</sup>, M. Serrano-Vázquez<sup>1</sup>

<sup>1</sup> Clinical Hospital of La Coruña, Psychiatry, La Coruña, Spain; <sup>2</sup> Clinical Hospital of Västmanland, Psychiatry, Stockholm, Sweden; <sup>3</sup> Clinical Hospital of La Coruña, Child and Adolescent Psychiatry, La Coruña, Spain

\* Corresponding author.

**Background and aims.**– At least one in ten children aged 5 to 16 years has a mental disorder. The characteristics and outcomes in this vulnerable population need to be targeted further.

**Aims:** To underpin the socio-demographic and clinical variables associated to mental health problems in the sample. To analyse the prevalence of first referrals to a Child and Adolescent Mental Health Services (CAMHS) over a 2-year follow-up.

**Methods.**– Retrospective epidemiological study. Sample composed by 620 patients aged under 16 years old referred to CAMHS from March 2016 to April 2018. Clinical histories were reviewed.

**Results.**– 87.09% attended the scheduled first appointment. Mean age: 10.88 years (SD=3.14), 67.8% were males. Most prevalent referring services: Pediatrics (82%), Psychology (11%), school (6.9%). Among reason for referral, ADHD was predominant in males ( $p < 0.001$ ) and depressive symptoms in females ( $p < 0.005$ ). Dysfunctionality in the primary support nucleus was found in 11.3% of cases. Obstetric complications during pregnancy outlined in 13.7% of the sample. Prevalence of family history of psychiatric disorders: 58.6%. Personal history of mental health concerns: 53%, the most prevalent diagnoses being ADHD (30.9%), Conduct Disorders (11.3%) and Autism Spectrum Disorders (9.8%). 64.4% met the criteria for the diagnosis of a Psychiatric Disorder: ADHD (26.5%) Pharmacological treatment was prescribed in 32.2% of cases. Over half of the sample received Psychiatric follow-up care.

**Conclusions.**– More than half of children who attend CAMHS have a family history of psychiatric concerns. Unfavourable socio-economic and medical factors are also highly prevalent in the sample. Addressing such risk factors is a promising prevention strategy.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0143

### **The effect of social stigmatization fear and self-stigmatization on psychological help-seeking in high school students**

A. Metin<sup>1</sup>, F. Oflaz<sup>2\*</sup>

<sup>1</sup> Şişli Hamidiye Etfal Vocational and Technical High School, Nursing, Istanbul, Turkey; <sup>2</sup> Koç University, School of Nursing, Istanbul, Turkey

\* Corresponding author.

**Background and aims.**– Adolescent period is very important for the beginning of mental disorders and being aware of the adolescents' attitudes towards psychological help seeking can be crucial for preventing and early diagnosis of mental disorders.

**Aim:** This study aimed to display the role of self-stigmatization and social stigmatization fear on psychological help-seeking attitude of high school students.

**Methods.**– This descriptive and correlational study has been done with 420 students who have been studying in a Vocational and Technical High School in Istanbul in 2016–2017 academic year. The Scales of “Attitudes Toward Seeking Psychological Help-Short Form”, “Social Stigma For Receiving Psychological Help” and “Self Stigma for Seeking Psychological Help” were used as data collection tools. Kruskal Wallis and Mann Whitney *U* tests were performed to compare the groups and variables. Additionally, Pearson correlation and linear regression analysis were carried out.

**Results.**– The gender and age differences were decisive in psychological help-seeking attitude of students. The attitudes and views of female students toward psychological help seeking were more positive than male students. The students aged between 18–19 were more positive than the younger ones towards psychological help seeking. Male students and 14–15-age group had higher self-stigmatization and social stigmatization fear. Self-stigmatization had more negative effect on the attitudes of the students for receiving psychological help. Parental features had no effect on any of scores.

**Conclusions.**– Male and younger adolescents are under the risk of self-stigmatization and needs more attention about their help seeking behaviors.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0144

### **Exploring associations between “body size perception, disordered eating, BMI and mental distress” and “dieting” in a Norwegian community adolescent sample, the Nord-Trøndelag health study (YH3)**

F. Saeedzadeh Sardahaee<sup>1,2\*</sup>, T. Lingaas Holmen<sup>1</sup>, N. Micali<sup>3,4,5</sup>, E.R. Sund<sup>1,6</sup>, K. Kvaløy<sup>1,7,8</sup>

<sup>1</sup> Norwegian University of Science and Technology NTNU, HUNT Research Center, Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, Trondheim, Norway; <sup>2</sup> St. Olav University Hospital, Drug Addiction and Rehabilitation Department, Trondheim, Norway; <sup>3</sup> University of Geneva, Child and Adolescent Psychiatry- Faculty of Medicine, Geneva, Switzerland; <sup>4</sup> Icahn School of Medicine at Mount Sinai, Dept. of Psychiatry, New York, USA; <sup>5</sup> University College London UCL, Behavioural and Brain Science Unit, London, United Kingdom; <sup>6</sup> Nord University, Faculty of Nursing and Health Sciences, Levanger, Norway; <sup>7</sup> The Arctic University of Norway UiT, Centre for Sami Health Research- Department of Community Medicine, Tromsø, Norway; <sup>8</sup> Levanger Hospital, Department of Research and Development, Levanger, Norway

\* Corresponding author.



**Background and aims.**– Despite its potential negative consequences on physical and mental wellbeing of adolescents at a critical developmental period, weight reduction measures such as dieting are increasingly promoted and employed at younger age. Careful study of the determinants of dieting at younger age is warranted. We investigated whether level of engagement in weight reduction amongst participants varied based on their body size perception, existing traits of disordered eating or BMI.

**Methods.**– Multinomial logistic regression (SPSS 25) was employed to test for associations in data drawn on 5,172 individuals (aged 13–19) from Young HUNT 3 survey. Analyses were done in gender stratified populations and adjusted for age, mental distress (anxiety/depression and self-esteem) and socioeconomic status (SES).

**Results.**– Irrespective of their actual BMI, girls tended to overestimate their body size and diet more; boys showed an opposite trend. Irrespective of actual BMI, perceiving oneself as “very fat” increased odds for dieting 30 folds in girls ( $p$ -value <0.001, 95% CI:7.25–126.89) and 21 folds in boys ( $p$ -value <0.001, 95% CI:8.34–55.63). Irrespective of how they perceived their body size, being obese increased odds for dieting in both girls (OR:9.73,  $p$ -value <0.001, 95% CI:4.58–20.66) and boys (OR:6.53,  $p$ -value <0.001, 95% CI:4.21–10.15). Disordered eating increased odds for dieting very slightly.

**Conclusions.**– Dieting correlates to a much higher degree with body size perception than it does with actual BMI or presence of disordered eating. Shifting focus to body size perception provides a potential area for interventions targeting unnecessary dieting and its undesired consequences among adolescents, both at a primary and secondary prevention level.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0145

### The ‘suicidality: treatment occurring in paediatrics’ (STOP) project: a comprehensive web-based method for the assessment and monitoring of suicidality in children and adolescents

P. Santosh<sup>1,2,3\*</sup>, K. Lievesley<sup>1,2,3</sup>, N. Iakovidou<sup>1</sup>, C. Arango<sup>4</sup>, J. Buitelaar<sup>5</sup>, J. Castro-Fornieles<sup>6,7,8</sup>, D. Coghill<sup>9,10,11</sup>, R. Dittmann<sup>12</sup>, P. Hoekstra<sup>13</sup>, C. Llorente<sup>4</sup>, D. Purper-Ouakil<sup>14</sup>, U. Schulze<sup>15</sup>, A. Zuddas<sup>16</sup>, F. Fiori<sup>1,2,3</sup>, J. Singh<sup>1,17</sup>

<sup>1</sup> King’s College London, Child and Adolescent Psychiatry, London, United Kingdom; <sup>2</sup> South London and Maudsley NHS Foundation Trust, Centre for Interventional Paediatric Psychopharmacology and Rare Diseases, London, United Kingdom; <sup>3</sup> HealthTracker, HealthTracker, Gillingham, United Kingdom; <sup>4</sup> Hospital General Universitario Gregorio Marañón, Child and Adolescent Psychiatry, Madrid, Spain; <sup>5</sup> Radboud University Medical Centre, Cognitive Neuroscience- Donders Institute for Brain- Cognition and Behaviour, Nijmegen, The Netherlands; <sup>6</sup> Hospital Clinic of Barcelona, Institute Clinic of Neurosciences, Barcelona, Spain; <sup>7</sup> University of Barcelona, Psychiatry and Clinical Psychology, Barcelona, Spain; <sup>8</sup> CIBERSAM, Centro de Investigación Biomédica en Red de Salud Mental, Madrid, Spain; <sup>9</sup> University of Melbourne, Paediatrics and Psychiatry, Melbourne, Australia; <sup>10</sup> University of Dundee, Division of Neuroscience, Dundee, United Kingdom; <sup>11</sup> Murdoch Children’s Research Institute, Murdoch Children’s Research Institute, Melbourne, Australia; <sup>12</sup> University of Heidelberg, Child and Adolescent Psychiatry, Mannheim, Germany; <sup>13</sup> University of Groningen, Child and Adolescent Psychiatry, Groningen, The Netherlands; <sup>14</sup> CHRU Montpellier, Médecine Psychologique de l’Enfant et de l’Adolescent, Montpellier, France; <sup>15</sup> University of Ulm, Child and Adolescent Psychiatry/Psychotherapy, Ulm, Germany; <sup>16</sup> University of Cagliari, Child and Adolescent Neuropsychiatry Unit, Cagliari, Italy; <sup>17</sup> South

London and Maudsley NHS Foundation Trust, Child and Adolescent Psychiatry, London, United Kingdom

\* Corresponding author.

**Background and aims.**–

**Introduction.**– Suicidal behaviour encompasses a range of heterogeneous behaviours and characteristics that can be interrelated to one another. This has been marked as a pressing public health concern and despite its high prevalence, suicidal behaviour in young children and adolescents often goes undetected by healthcare professionals. The period of adolescence and early adulthood poses the greatest risk of suicidal behaviour and ideation.

**Objectives.**– The objective of the STOP study was to develop to a web-based suite of measures that could capture and assess suicide risk and its mediators in children and adolescents longitudinally.

**Methods.**– The methods were developed using a multi-modal web-based health monitoring platform - HealthTracker™. This allowed the suite of measures to be tested and validated in three paediatric observational trials involving 1002 children and adolescents aged from 8–18 years consisting of seven cohorts from six European Union countries (UK, Italy, Spain, France, Netherlands and Germany).

**Results.**– This EU, FP7 funded project allowed for the online monitoring of suicidality and its risk factors across time. Results will be presented for the seven cohorts.

**Conclusions.**– The findings from the STOP project have imparted new knowledge on suicidality, its mediators and the associated risk factors in young people. This contributes to our understanding of suicidality research, particularly behaviour and ideation in children and adolescents and helps in moving the overall research on suicidality forward.

On behalf of the STOP consortium.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

### Oral Communications 14: Forensic Psychiatry/Sexual Medicine and Mental Health/Substance related and Addictive disorders

OC-0150

#### Sexuality in schizophrenia: a 20-year systematic review

F. Almeida\*, I. Murta

Centro Hospitalar e Universitário de Coimbra, Psychiatry Unit, Coimbra, Portugal

\* Corresponding author.

**Background and aims.**– Sexuality is difficult to describe accurately, but is considered essential to human experience. Schizophrenia is a chronic illness, affecting not only sensorimotor processing, but also cognition, social interaction, emotion and pleasure responses. It has been classically considered that these compromise the sexual expression of people with schizophrenia.

The aim of this work was to understand how people with schizophrenia experience their sexuality, what are the relevant issues and what are the therapeutic and social responses to these phenomena.

**Methods.**– Literature research on the PubMed database after 1998, using the terms “sexuality [Title/Abstract] AND schizophrenia [MeSH Terms]” and “sexuality [Title/Abstract] AND psychosis [MeSH Terms]”. Papers with no clear mention to a schizophrenia diagnosis were excluded.

**Results.**– Selected papers were analysed and divided as: previous reviews, quantitative studies, cultural studies and criminology studies. Most describe sexual dysfunction, as defined for the nor-

mal population, as frequent in their subjects. However, subjects also showed interest in maintaining sexual and intimate experiences and discussing them with health professionals. Furthermore, cultural and criminology studies pointed towards the difficulties deriving from the interplay of disease symptoms, sexuality expression and society intruments of regulation. The studies analysed for this review also stressed the absence of evidence in this field and of specific treatment.

Study (Year) Country	Sample description (n)	Instruments	Results
Simons et al. (2016) India	Married women with schizophrenia (65)	Female Sexual Function Index (FSFI) Marital Quality Scale LUCI Side Effects Rating Scale Positive and Negative Syndrome Scale (PANSS)	Sexual dysfunction – 79%; Arousal dysfunction – 92.1% Lubrication dysfunction – 47.6%; Orgasm dysfunction – 76.2% Significant association with (in decreasing order): marital relationship quality; greater scores on PANSS, medication side effects
Hampstead et al. (2015) Switzerland	Women with schizophrenia (18) Healthy controls (21)	Sexual Desire Scale FSFI Multidimensional Sexuality Questionnaire (MSQ)	Similar sexual interest, less sexual activity compared to controls Greater prevalence of sexual dysfunction compared to controls Less self-esteem, satisfaction, motivation related to sexuality Greater self-ignitance, depression, anxiety, fear related to sexuality
Yee et al. (2014) Malaysia	Men with schizophrenia (111)	International Index of Erectile Function PANSS	Erectile dysfunction – 95.5%; Orgasm dysfunction – 78.4%; Arousal dysfunction – 93.7% Distraction with intercourse – 97.1%; General dissatisfaction – 83.6% Greater scores for the PANSS positive symptoms subset were related to less orgasm dysfunction
Forster et al. (2003) Canada	45 young adults with schizophrenia (20 women, 25 men) Healthy controls (61)	PANSS Scale for the Assessment of Negative Symptoms (SANS) MSQ Specially designed questionnaire (Forster, 1994)	Less sexual activity and arousal compared to controls Greater prevalence of sexual dysfunction compared to controls More negative feelings related to sexuality

**Conclusions.**– There is a surprising lack of information on this subject, despite its clinical and academic potential. However, it is clear that there is a need of people with schizophrenia to discuss their sexuality and identify and properly treat sexual dysfunction, with potential positive results regarding adherence to treatment and quality of life.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0151

### Association between problem gambling, problem gaming and problematic internet use – general population data from seven European countries

N. Broman\*, A. Hakansson

Lund University- Faculty of Medicine, Dept of Clinical Sciences Lund, Malmö, Sweden

\* Corresponding author.

**Background and aims.**– Problem gambling in recent years is often associated with online gambling. Thus, a link to problematic video game behaviour and internet use pattern may intuitively be suspected but has been insufficiently addressed in the literature. Aims: to study the association between problem gambling, problem gaming and problematic internet use, controlling for psychological distress, substance use problems and sociodemographic data.

**Methods.**– This is a cross-sectional web survey to pre-existing panels of respondents (adults and adolescents above 15 years) in seven countries (Sweden, Denmark, Poland, United Kingdom, Italy, Switzerland, and Spain). For each problem behaviour, validated structured screening tools were used; the 3-item NODS-CLiP (for problem gambling, Volberg et al., 2011), the 7-item Gaming Addiction Scale (Lemmens et al., 2016), and the 3-item PRIUSS (for problem internet use, Moreno et al., 2016).

**Results.**– A total of 10,500 respondents (approximately 1,500 in each country) answered the survey. Analysis of data is currently ongoing. Preliminary data is hitherto available for one country (Sweden,  $n = 1,593$ , 49 percent male). Problem gambling was detected in 10 percent of respondents, and associated with both

problem gaming and problematic internet use, and with male gender ( $p < 0.001$ ). In logistic regression, the association with problematic gaming, internet use and male gender remained. At the conference, full data for all seven countries will be presented.

**Conclusions.**– Preliminary data indicates that problem gambling may be linked to both gaming and internet use on a problematic level, but further study in larger samples is needed, and will be presented at the conference.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0152

### Effect of adolescents' depression on internet gaming disorder: result of one-year follow-up

S.J. Jo<sup>1</sup>, H.W. Yim<sup>1</sup>, H. Jeong<sup>1</sup>, H.J. Son<sup>1</sup>, J.Y. Choi<sup>1</sup>, Y.S. Kweon<sup>2</sup>, H.K. Lee<sup>2</sup>

<sup>1</sup> The Catholic University of Korea, Dept. of Preventive Medicine, Seoul, Republic of Korea; <sup>2</sup> The Catholic University of Korea St. Mary's Hospital, Dept. of Psychiatry, Uijeongbu, Republic of Korea

\* Corresponding author.

**Background and aims.**– Many cross-sectional studies have reported that depression is associated with Internet gaming disorder (IGD), but the results of prospective observations are insufficient. This study was conducted to investigate whether depression in children and adolescents increases the incidence of IGD.

**Methods.**– Of the 2,319 enrolled to the iCURE study<sup>a</sup> at baseline (2015–2016), 2,144 participants without IGD were included in the study. Among them, a total of 2,035 people have been followed up after one year. In this study, their self-reported data of baseline and one-year follow-up were analyzed. CDI score  $\geq 22$  was defined as depression, and IGUESS (Internet game use-elicited symptom screen)<sup>b</sup> score  $\geq 10$  was defined as IGD. One year incidence rate ratio of IGD was calculated adjusted by sex, self-control trait and time spent on Internet gaming per week of the baseline.

**Results.**– Prevalence of depression was 5.2% at baseline, and one-year cumulative incidence of IGD was 4.8%. As a result of multiple logistic regression, The depressive group had a 2.5-fold higher incidence than the non-depressive group (IRR = 2.48,  $P = 0.044$ ). Profile of the 71 participants with depression at the baseline showed that the depressive group performed significantly fewer types of exercise than the non-depressive group, but there was no significant difference in gaming time per week or depression score between the two groups.

**Conclusions.**– Depression could increase the risk of IGD in adolescents. In adolescents' depression, attention to physical activity might be more important than attention to how long Internet games are used to prevent Internet gaming disorder.

**References**

- a. BMJ 2017;7: <https://doi.org/10.1136/bmjopen-2017-018350>.  
b. Acta Paediatrica 2018;107:511–516. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/apa.14087>

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0153

### Benzodiazepine use among patients in a buprenorphine treatment for opioid dependence: findings of a cross-sectional study

C. Oliveira<sup>1\*</sup>, R. Filipe<sup>2</sup>, M. Carvalho<sup>3</sup>, G. Leme<sup>3</sup>, C. Machado<sup>3</sup>, M. Maia<sup>3</sup>, C. Fiuza<sup>3</sup>, L. Sampaio<sup>4</sup>, J. Meira<sup>4</sup>, L. Teixeira<sup>4</sup>, J. Rodrigues<sup>4</sup>, I. Nunes<sup>4</sup>, J. Tavares<sup>5</sup>

<sup>1</sup> Hospital Prof. Dr. Fernando Fonseca, Psychiatry, Lisboa, Portugal; <sup>2</sup> Community Health Center of Western Lisbon and Oeiras, Public

Health, Oeiras, Portugal; <sup>3</sup> Drug Addiction Treatment Unit, Psychology, Agualva-Cacém, Portugal; <sup>4</sup> Drug Addiction Treatment Unit, Methadone Division, Agualva-Cacém, Portugal; <sup>5</sup> Drug Addiction Treatment Unit, Psychiatry, Agualva-Cacém, Portugal  
\* Corresponding author.

**Background and aims.**– Portugal has one of the highest rates of benzodiazepine's (BZD) consumption in Europe. Although the combination of buprenorphine with BZD is generally not recommended, the prevalence use of BZD in buprenorphine-treated patients is still high (13–47%).

This study aims to characterize the prevalence and patterning of BZD consumption in a buprenorphine treatment programme.

**Methods.**– We conducted a cross-sectional study involving 65 patients treated with buprenorphine in the Agualva-Cacém Drug Addiction Treatment Unit. A descriptive analysis was made of the BZD use characteristics.

**Results.**– The prevalence of BZD consumption was 27.7% ( $n=18$ ). However, 73.8% ( $n=48$ ) had a history of lifelong BZD regular use, and the prevalence of BZD consumption at the programme admission was 43.1% ( $n=28$ ). Of these, 66.7% diminished the BZD use, 55.6% stopped, and the remaining 21.4% maintained the BZD dose. Among the BZD users, 77.8% had a regular use (>3days/week), and 94.4% took one BZD type. The most prescribed BZD was Diazepam (36%). The BZD were obtained with a prescription (54.8%) or on the black market (38.7%). The main reasons for BZD intake were the anxiolytic (32%) and the hypnotic effects (29%). Although only 1/3 of the BZD users considers themselves as having a BZD dependency, 2/3 of those patients had a high level of motivation to stop the BZD intake.

**Conclusions.**– Our results suggest there was a substantial reduction in current BZD consumption, which highlights the importance of BZD use evaluation of BZD in opioid dependence treatment programmes.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0155

### Relapsing risk factors in poliaddictions: is also about positive emotions

R. Santos<sup>1\*</sup>, I. Silva<sup>1</sup>, C. Leite Rodrigues<sup>1</sup>, L. Castanheira<sup>1</sup>, E. Fernandes<sup>1</sup>, P. Pestana<sup>1</sup>, J. Rema<sup>1</sup>, M.J. Gonçalves<sup>1</sup>, T. Cavaco<sup>1</sup>, E. Reis<sup>1</sup>, S. Pombo<sup>2</sup>

<sup>1</sup> CHLN - Santa Maria Hospital, Psychiatry, Lisbon, Portugal; <sup>2</sup> CHLN - Santa Maria Hospital, Psychology, Lisbon, Portugal

\* Corresponding author.

**Background and aims.**– Disorders due to substance use are multi-dimensional chronic conditions often associated with a long term relapsing process. Relapse prevention is a key aspect to be addressed in substance abusers' recovery. We aimed to access differences in relapse's risk factors between patients with only alcohol use disorder and multiple substance use disorder.

**Methods.**– Comparative study with patients from the alcoholism and addiction unit of the Santa Maria University Hospital. The sample was divided in two groups: one with alcohol use disorder (AUD) and the other with AUD and drug use disorder (poliaddicted group). Variables measured: socio-demographic information, substance use habits, craving symptoms (measured with Penn Alcohol Craving Scale (PACS)) and relapse risk situations (measured with Inventory of Drug-Taking Situations (IDTS)). Data were analysed using the Statistical Package for Social Sciences (SPSS).

**Results.**– Sample size of 123 patients, 100 males (81.3%) and 23 females (18.7%). Age varied between 27 and 66 years. Poliaddicted group ( $n=54$ ) were younger, presented a lesser educational status and started to use, misuse and depend on alcohol significantly earlier, when comparing to pure AUD patients ( $n=69$ ) ( $p<0.01$ ). PACS scores were significant higher among poliaddicted patients when compared to AUD patients ( $p<0.01$ ). IDTS showed significant differences in pleasant emotions, social pressure to use and positive situations ( $p<0.05$ ).

**Conclusions.**– The scores of “pleasant emotions”, “social pressure to use” and “pleasant times with others” were significant higher among the poliaddicted subgroup when in comparison with the pure AUD subgroup, showing that the poliaddicted patients are more prone to relapse when exposed to positive emotions.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OC-0156

### Sexual therapy in the management of premature ejaculation: when and for whom? Practice patterns and attitudes for sexual therapy in Turkish urologists

N.G. Usta Saglam<sup>1\*</sup>, O. Ozman<sup>2</sup>, N.C. Cilesiz<sup>2</sup>, S. Turan<sup>3</sup>

<sup>1</sup> Istanbul Gaziosmanpasa Taksim Research and Training Hospital, Psychiatry Department, Istanbul, Turkey; <sup>2</sup> Istanbul Gaziosmanpasa Taksim Research and Training Hospital, Urology Department, Istanbul, Turkey; <sup>3</sup> Istanbul University- Cerrahpasa, Psychiatry, Istanbul, Turkey

\* Corresponding author.

**Background and aims.**– Premature ejaculation (PE) is defined as diminished latency time between penile penetration and ejaculation, a lack of feeling of control over ejaculation, dissatisfaction with intercourse, and patient and/or partner distress over the condition. Sexual therapy for PE is an integration of psychodynamic, behavioral and cognitive approaches within a short-term period. The present study aimed to ascertain Turkish urologists' patterns of treatment and referral choice of sexual therapy for PE.

**Methods.**– A specifically designed survey was mailed to urologists and urology residents. The survey assessed several practice-related factors and attitudes towards sexual therapy in the management of PE.

**Results.**– A total of 206 respondents, 14.6% of whom were residents, were enrolled. Most of the urologists (70.9%) experienced 2 to 10 PE patient per week. The preferred initial management for PE among participants was dapoxetine (84%). 22.8% percent of the urologists report that they 'never', 33.5% 'rarely', offer referral to a patient with PE to sexual therapy. Most of them suggest sexual therapy when pharmacological interventions failed (58.3%), but also acquired PE was another frequent indication (26.7%). Participants identified themselves as more knowledgeable about sexual therapy as their age increased ( $p=0.0001$ ). Physicians who examine  $\geq 10$  PE cases per week found sexual therapies more effective for management of PE than physicians who examines  $<10$  PE per week ( $p=0.037$ ).

**Conclusions.**– Most of urologists are favoring pharmacologic management for PE. As a result of the study, psychiatrists need to increase collaboration with urologists, in order for sexual therapy to be more common and favored in the treatment of PE.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.