

⁴ Mansoura university, faculty of medicine, department of psychiatry, Mansoura, Egypt

⁵ Alexandria university, institute of public health, biostatistics department, Alexandria, Egypt

⁶ Ain Shams university, faculty of medicine, department of psychiatry, Cairo, Egypt

⁷ Zagazig university, faculty of medicine, psychiatry department, Zagazig, Egypt

* Corresponding author.

Objective to examine the longitudinal effect of depression on glycemic control in a sample of patients with type 2 diabetes.

Methods the patients were recruited from diabetes clinic in Saudi airlines medical center, in Jeddah, the base line study community consisted from 172 patients with type 2 diabetes. They were assessed for depression using BDI II, and diagnostic interview, and for diabetic control using HbA1c. We created a person-period data set for each patient to cover 6 months intervals up to 3 years. We used generalized estimation equation (GEE) for analysis of longitudinal data. HbA1C was the response variable while depression and time were the main covariates. Variables were included in GEE models based on clinical importance and preliminary analysis. Other variables included as covariates were gender, education, duration of diabetes, co-morbidity and LDL. All statistical analysis used $\alpha = 0.05$ level of significance and were performed using SPSS software version 21.

Results Unadjusted HbA1c means were significantly higher in depressed vs. non-depressed subjects at all time points. The adjusted HbA1c means in final GEE model were significantly higher in depressed vs. non-depressed subjects. In all adjusted models depression was a predictor of glycemic control whether it was BDI score (estimate = .049, $P = .002$), diagnoses of MDD (estimate = 2.038, $P = .000$), or other depressive diagnosis (estimate = 1.245, $P = .000$).

Conclusion This study on clinical sample of type 2 diabetic patients demonstrates that there is a significant longitudinal relationship between depression and glycemic control and that depression is associated with persistently higher HbA1c over time.

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

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.1461>

EV478

Agomelatine vs fluoxetine: Efficacy and improvement of cognitive functions in patients with MDD

E. Aydın^{1,*}, M. Güleç², E. Oral², A.G. Daloglu³

¹ Atatürk University School of Medicine, Psychiatry, Erzurum, Turkey

² İzmir Katip Çelebi University School of Medicine, Psychiatry, İzmir, Turkey

³ Mersin State Hospital, Psychiatry, Mersin, Turkey

* Corresponding author.

Introduction In major depressive disorder (MDD) neurocognitive functions are impaired. In addition to melatonergic properties of agomelatine, via 5-HT_{2C} antagonism it increases extracellular noradrenaline and dopamine in frontal cortex and may improve the neurocognitive functions of patients with MDD.

Aims and objectives To investigate the extent of neurocognitive improvement and efficacy of agomelatine and fluoxetine in patients with MDD.

Material and method Agomelatine 25 mg/day ($n = 24$) and fluoxetine 20 mg/day ($n = 24$) were administered to drug-naïve unipolar, non-psychotic, non-suicidal MDD patients according to DSM-IV. Evaluations were performed just before the treatment and at the sixth week of treatment via administering Hamilton Depression Rating Scale, Rey Auditory Verbal Learning Test, Controlled Oral Word Association Test (COWAT), Digit Span Test (DST), Trail

Making Test (TMT-A/B), Stroop Test and Wisconsin Card Sorting Test.

Results Both agomelatine and fluoxetine was found to be efficacious for the treatment of MDD ($P < 0.05$ for both). Further there was no difference between the antidepressant efficacy of two drugs. Both of the drugs improved measured neurocognitive functions ($P < 0.05$), except scores of DST ($P > 0.05$) and only fluoxetine improved significantly scores of COWAT ($P < 0.05$). Only in terms of TMT-B there was significant difference between groups and agomelatine was superior to fluoxetine ($P < 0.05$).

Conclusion Agomelatine and fluoxetine were efficacious in treatment of MDD. Furthermore both of the drugs improved cognitive functions in patients with MDD. Superiority of agomelatine in improvement of executive functioning (TMT-B) is important and therefore it could be an appropriate choice for MDD patients who have pronounced executive disturbances.

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

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.1463>

EV480

Associations among immune activation, the clinical characteristics, and the current severity of the “with anxious distress” specifier in patients with depressive disorders

W.M. Bahk^{1,*}, I.H. Shim², Y.S. Woo¹, S.Y. Lee³, Y.J. Kwon⁴, D.I. Jon⁵, H.J. Seo¹, B.W. Nam⁶, J.S. Seo⁶

¹ Yeouido St. Mary's Hospital, psychiatry, Seoul, Republic of Korea

² Dongnam Institute of Radiological & Medical Sciences, psychiatry, Busan, Republic of Korea

³ Wonkwang University School of Medicine, psychiatry, Iksan, Republic of Korea

⁴ Soonchunhyang Cheonan Hospital, psychiatry, Cheonan, Republic of Korea

⁵ Sacred Heart Hospital, Hallym University, psychiatry, Anyang, Republic of Korea

⁶ Konkuk University, Chungju Hospital, psychiatry, Chungju, Republic of Korea

* Corresponding author.

Introduction This study assessed the levels of immune factors, demographic and clinical characteristics, and pharmacological treatments of patients with depressive disorders and compared them between patients with mild-to-moderate and moderate/severe-to-severe anxiety.

Methods This study included 177 patients diagnosed with a depressive disorder who were hospitalized between March 2012 and April 2015. The patients were categorized into mild-to-moderate anxious distress and moderate/severe-to-severe anxious distress groups, based on the criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) based on the “with anxious distress” specifier. The current severity of symptoms was determined using the Hamilton Depression Rating Scale (HAM-D) scores on the Agitation and Anxiety-Psychic subscales. The charts of the patients were reviewed to evaluate immune factors, including C-reactive protein (CRP) and white blood cell (WBC) levels, confounding factors, such as smoking, other general medical disorders, and body mass index (BMI), and demographic and clinical characteristics.

Results The moderate-severe to severe anxious distress group tended to have higher CRP and monocyte levels compared with the mild to moderate anxious distress group. However, after adjusting for the total HAM-D scores, there was a significant difference only in monocyte levels. After this adjustment, patients with moderate-severe to severe anxious distress had a significantly greater trend toward significance for suicidality and a higher rate of antipsychotic use.

Conclusions High levels of anxiety symptoms may influence various underlying pathophysiological factors and modulate the inflammatory response and course of illness, affecting treatment planning.

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

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.1465>

EV481

The effectiveness of various potential predictors of response to treatment with SSRIs in patients with depressive disorder

M. Bares^{1,*}, T. Novak¹, M. Brunovsky²

¹ National Institute of Mental Health Czech Republic, 2nd Department, Klecany, Czech Republic

² National Institute of Mental Health Czech Republic, Department of Applied Electrophysiology of Brain, Klecany, Czech Republic

* Corresponding author.

Introduction The substantial non-response rate in depressive patients indicates a need to identify predictors of treatment outcome.

Objective and aims The aim of the open-label, 6-week study was: – to compare efficacy of a priori defined predictors: $\geq 20\%$ reduction in MADRS score at week 1, $\geq 20\%$ reduction in MADRS score at week 2 (RM $\geq 20\%$ W2), decrease of prefrontal theta cordance value (RC) and increase of serum/plasma brain-derived neurotrophic factor (BDNF) at week 1;

– to assess whether the combination of these factors yield more robust predictive power than when used singly.

Methods All patients ($n = 38$) were hospitalized and treated with various SSRIs. Areas under curve (AUC) as well as predictive values were calculated to compare predictive effect of single and combined predictor model.

Results Twenty-one patients (55%) achieved response. The RM $\geq 20\%$ W2 (AUC-0.83) showed better predictive efficacy compared to all other predictors with exception of RC. Other significant differences were not detected. The identified (logistic regression) combined predictive model (RM $\geq 20\%$ W2 + RC) predicted response with accuracy of 82% (AUC-0.92) and was significantly better than other predictors but not RM $\geq 20\%$ W2 and RC.

Conclusions Our findings indicate that the RM $\geq 20\%$ W2 alone and in combination with RC may be useful in the prediction of response to SSRIs. Serum/plasma BDNF did not show strong predictive potential.

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

Acknowledgements This study was supported by the grants of MZ CR No. AZV 15-29900A, MH CZ - DRO (NIMH-CZ, 00023752) and projects National Institute of Mental Health (NIMH-CZ) number ED2.1.00/03.0078 and the European Regional Development Fund.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.1466>

EV482

Seasonal affective disorder associate with common chronic diseases and symptoms in a population-based study

S. Basnet^{1,*}, I. Merikanto², T. Lahti³, T. Partonen¹

¹ National Institute for Health and Welfare THL, Department of Health, Helsinki, Finland

² National Institute for Health and Welfare-Helsinki Finland, Department of Health, Helsinki, Finland

³ University of Health, Public health, Helsinki, Finland

* Corresponding author.

Background Seasonal affective disorder (SAD) is a recurrent mood disorder with 22%–42% of the patients experiencing symptoms even after 5–11 years after diagnosis, and 33%–44% developing non-seasonal symptoms. The purpose of this study was to assess how seasonality is associated with some of the most common non-communicable diseases in the general Finnish population.

Methods The global seasonality score (GSS) and the experiences of problems due to the seasonal variations from FINNRISK 2012 dataset were used to measure the seasonality in 4689 Finns aged 25–74 years living in five geographical regions in Finland, and assess their association with common non-communicable diseases (NCDs). The regression models and odds ratios were adopted to analyze the associations adjusted for covariates.

Results The prevalence of SAD in the Finnish general population is 21%. Seventy percent of the participants had seasonal variations in sleep duration, social activity, mood and energy level, while 40% had seasonal variations in weight and appetite. Angina pectoris and depression were significantly associated with seasonality, including seasonal variations in sleep duration, mood, weight, appetite, social activity and energy level. Depression was significantly associated with the increased odds for experiencing a problem due to the seasonal variations (OR = 4.851, $P < 0.0001$) and SAD symptoms (OR = 4.075, $P < 0.0001$), and with the GSS ($P < 0.0001$).

Conclusion Our data suggest that seasonality is associated with depression and angina pectoris. The co-occurrence of the seasonal variations in mood and behavior with common NCDs warrants the need for future research to have insights into the etiology and potentially shared pathways and mechanisms of action.

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

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.1467>

EV483

The presence of chronic pain in patients with major depressive disorder and its inter-correlation

B. Batinic^{1,*}, J. Nesvanulica², I. Stankovic²

¹ Clinic of Psychiatry- Clinical Centre of Serbia, Faculty of Philosophy-Department of Psychology, Belgrade, Serbia

² Faculty of Philosophy, Department of Psychology, Belgrade, Serbia

* Corresponding author.

Introduction Chronic pain is a common experienced symptom among patients diagnosed with major depressive disorder (MDD). The intensity of depression and chronic pain inter-correlated, having negative impact on the daily functioning of the patients.

Objectives Our aim was to explore the presence of chronic pain in patients diagnosed with MDD (single episode or recurrent), correlation between intensity of depression and chronic pain, its interference on daily functioning, as well as sex differences regarding the explored variables.

Methods The study sample consisted of 51 (62.2%) female and 31 (37.8%) male patients diagnosed with MDD ($n = 82$), aged between 18 and 65 years old (mean age of 46.21). Assessment instruments included The Beck Depression Inventory-II (BDI-II), The Brief Pain Inventory-Short Form (BPI) (consisting of BPI-I factor of pain intensity, and BPI-II-factor of pain interference with daily functioning), and semistructured questionnaire for sociodemographic characteristics.

Results The presence of chronic pain was found in the 51 (62, 2%) of patients with MDD. The mean score on the BDI-II for the whole sample was 22.5 (SD 12.8). There was a positive correlation between intensity of depression (BDI-II) and intensity of chronic pain (BPI-1), and its interference on the level of daily functioning (BPI-2) ($P < 0.01$). Women diagnosed with MDD experienced