S384 e-Poster Presentation

#### **EPP0529**

### Lifetime number of affective episodes and functioning in a cohort of patients with bipolar disorder: A crosssectional study

L. Colomer<sup>1,2</sup>\*, G. Fico<sup>2</sup>, F. Gutiérrez<sup>1</sup>, E. Pujal<sup>1</sup>, N. Baldaquí<sup>1</sup>, A. Murru<sup>1,2</sup> and E. Vieta<sup>1,2</sup>

<sup>1</sup>Psychiatry and Psychology, Institute of Neuroscience and <sup>2</sup>Bipolar and Depressive Disorders Unit, Institute of Neuroscience, Hospital Clínic de Barcelona, Barcelona, Spain

\*Corresponding author. doi: 10.1192/j.eurpsy.2023.831

**Introduction:** Cognitive impairment has been commonly found in patients with bipolar disorder (BD). Recent evidence supports the view that global and cognitive functioning decrease as a function of number of prior mood episodes, but the relationship is still not clear. (2)

**Objectives:** We conducted a cross-sectional study to explore the associations between the lifetime number of affective episodes and functioning, in particular, cognitive functioning in a cohort of patients with BD.

Methods: Adult patients with BD were recruited if euthymic for at least 3 months. Socio-demographic and clinical variables were recollected at the baseline evaluation. Functioning was evaluated at baseline with the functioning assessment short test (FAST). The strength of the association between the lifetime number of affective episodes and FAST subscores was explored with Spearman's correlation test. Linear regression was computed using cognitive functioning as the dependent variable and a set of clinically relevant variables including the lifetime number of affective episodes as independent variables after controlling for illness duration.

**Results:** 261 BD patients were recruited. Patients with a higher number of lifetime affective episodes showed a significant positive correlation with higher FAST global score (r=0.334, p<0.001) and FAST cognitive functioning subscore (r=0.331, p<0.001). At the linear regression, a higher number of affective episodes was associated to worse cognitive functioning (b=0.037, 95%CI [0.011-0.064], p=0.005).

**Conclusions:** Poor cognitive functioning in BD could be the result of multiple affective relapses. A timely diagnosis with subsequent effective prophylactic treatment may prevent poor functional outcomes in real-world patients with BD.

Disclosure of Interest: None Declared

### **EPP0530**

## Culturally adapted psychoeducation for bipolar disorder in a low-resource setting: protocol for a multicentre randomized controlled trial

I. Husain<sup>1</sup>, M. Umer<sup>1\*</sup>, M. Asif<sup>2</sup>, A. Bukhsh<sup>2</sup>, T. Kiran<sup>2</sup>, M. Ansari<sup>3</sup>, H. Aslam<sup>4</sup>, M. Bhatia<sup>5</sup>, F. Dogar<sup>6</sup>, O. Husain<sup>1</sup>, H. A. Khan<sup>7</sup>, A. A. Mufti<sup>8</sup>, B. Mulsant<sup>1</sup>, F. Naeem<sup>1</sup>, H. A. Naqvi<sup>9</sup>, C. De Oliveria<sup>1</sup>, S. Siddiqui<sup>10</sup>, A. Tamizuddin<sup>11</sup>, W. Wang<sup>1</sup>, J. Zaheer<sup>1</sup>, N. Husain<sup>12</sup>, N. Chaudhry<sup>2</sup> and I. Chaudhry<sup>13</sup>

<sup>1</sup>Centre for Addiction and Mental Health, Toronto, Canada; <sup>2</sup>Ishrat Husain Pakistan Institute of Living and Learning, Karachi; <sup>3</sup>Liaquat University of Medical and Health Sciences, Hyderabad, Pakistan; <sup>4</sup>Allama Iqbal Medical College/Jinnah Hospital, Lahore; <sup>5</sup>Peoples University of Medical and Health Sciences for Women, Nawabshah; <sup>6</sup>Punjab Institute of Mental Health, Lahore; <sup>7</sup>Balochistan Institute of Psychiatry And Behavioral Sciences, Quetta; <sup>8</sup>Jinnah Medical College, Peshawar; <sup>9</sup>DOW University of Health Sciences, Karachi; <sup>10</sup>National Psychiatric Hospital, Multan; <sup>11</sup>Institute of Psychiatry, WHO Collaborating Centre for Mental Health Research and Training, Rawalpindi, Pakistan; <sup>12</sup>Division of Psychology and Mental Health, School of Health Sciences, Manchester, United Kingdom and <sup>13</sup>Ziauddin University, Karachi, Pakistan

\*Corresponding author. doi: 10.1192/j.eurpsy.2023.832

**Introduction:** Bipolar disorder (BD) is a source of marked disability, morbidity, and premature death. There is a paucity of research on personalized psychosocial interventions for BD, especially in lowresource settings. A previously published pilot randomized controlled trial (RCT) of a Culturally adapted PsychoEducation (CaPE) intervention for BD in Pakistan reported higher patient satisfaction, enhanced medication adherence, knowledge and attitudes towards BD, and improvement in mood symptom scores and health-related quality of life measures compared to treatment-asusual (TAU).

**Objectives:** This protocol describes a larger multicentre RCT to confirm the clinical and cost-effectiveness of CaPE in Pakistan.

Methods: A multicentre individual, parallel arm, RCT of CaPE in 300Pakistani adults with BD. Participants over the age of 18, with adiagnosis of bipolar I and II and who are currently euthymic, will be eccruited from seven sites including Karachi, Lahore, Multan, Rawalpindi, Peshawar, Hyderabad and Quetta. Time to recurrence will be the primaryoutcome assessed using Longitudinal Interval Follow-up Evaluation (LIFE). Secondary measures will include mood symptomatology, quality of life and functioning, adherence to psychotropic medications, and knowledge and attitudes towards BD.

**Results:** Full ethics approval has been received from National Bioethics Committee (NBC) of Pakistan and Centre for Addiction and Mental Health (CAMH), Toronto, Canada. The study has completed sixty-five screening across the seven centres, of which forty-eight participants have been randomised.

**Conclusions:** A successful trial will lead to rapid implementation of CaPE in clinical practice, not only in Pakistan, but also in other low-resource settings including those in high-income countries, to improve clinical outcomes, social and occupational functioning, and quality of life in South Asian and other minority patients with BD.

Disclosure of Interest: None Declared

### **EPP0531**

# Association between oxidative stress and altered cholesterol metabolism in patients with Bipolar Disorder

W. Guidara<sup>1</sup>, M. Messedi<sup>1</sup>, M. Naifar<sup>1</sup>, K. Ben Hassen<sup>1</sup>, D. Bonnefont-Rousselot<sup>2</sup>, F. Lamari<sup>2</sup>, M. Maalej<sup>3</sup>, M. Maalej<sup>3</sup>\* and F. Makni-Ayadi<sup>1</sup>

<sup>1</sup>Laboratory of Research "Molecular Basis of Human Diseases", LR19ES13, Faculty of Medecine of Sfax, SFAX, Tunisia; <sup>2</sup>Service de Biochimie Métabolique, AP-HP. Sorbonne Université, Hôpitaux Universitaires Pitié-Salpetriére-Charles Foix, DMU BioGeM, F-75013 European Psychiatry S385

Paris, France, Sorbonne Université, Hôpitaux Universitaires Pitié-Salpetriére-Charles Foix, PARIS, France and <sup>3</sup>Psychiatry "C" department, Hedi Chaker University Hospital, SFAX, Tunisia \*Corresponding author.

doi: 10.1192/j.eurpsy.2023.833

**Introduction:** Oxidative stress is the main characteristic of several diseases including Bipolar Disorder (BD). The involvement of oxysterol derivatives has recently been reported. In this study, the involvement of oxidative stress in the alteration of cholesterol in PTB patients will be evaluated.

**Objectives:** To assess the association of oxidative stress and oxysterol profiles in subjects with BD and compare them to healthy physical and mental controls.

Methods: This is a case-control study involving subjects with BD. Selected based on DSM-5 criteria, an assessment of positive and negative symptoms was performed using the Positive and Negative Syndrome Scale (PANSS). Controls included in this study were matched to patients by age and gender. For all patients and control. Eight parameters of oxidative status were assessed: plasma ferric reducing capacity (FRAP), carbonyl proteins (PC), protein products of advanced oxidation (AOPP), reduced glutathione (GSH), total thiols, malondialdehyde (MDA), glutathione peroxidase activity (GSH-Px) and catalase activity (CAT) analyzed by colorimetric methods. In addition, six cholesterol derivatives: oxysterols are measured by ULPC MS/MS.

**Results:** This study included 33 patients with BD and 40 controls. Plasma GSH levels were significantly reduced in patients compared to controls (p < 0.001). Moreover, MDA, AOPP, PC and GSH-Px activity were significantly increased in patients compared to controls (p=0.005; p=0.003; p<0.001 and p=0.05, respectively). Significantly higher levels were observed for cholestane-3β, 5α, 6β-triol, 27-hydroxycholesterol (27-OHC), and cholestanol in patients with PTB. The concentration of 24(S)-hydroxycholesterol (24-OHC) was significantly lower in patients compared to controls. 25-OHC was positively and significantly correlated with CAT and GSH-Px activities (p=0.035 and p=0.010). 27-OHC was negatively and significantly correlated with MDA (p=0.014). Binary logistic regression revealed an association between the parameters: 27-OHC, 24-OHC, PC and MDA and the occurrence of PTB (OR = 1.007, 95% CI= 1.002-1.013), (OR = 0.956; 95% CI = 0.927 - 0.986), (OR = 39.925; 95% CI = 1.101 - 44.483) and (OR = 4.238; 95% CI = 1.091 - 16.466), respectively.

**Conclusions:** Our data support the relationship between disruption of redox homeostasis and oxidation of lipids and cholesterol in BD.

Disclosure of Interest: None Declared

### **EPP0532**

### Coping strategies in bipolar patients: A comparative study with siblings and healthy controls

M. Stambouli\*, B. N. Saguem, S. Bouhlel, I. Ben Mahmoud, W. Chebbi and J. Nakhli

psychiatry department, faraht hached hospital, sousse, Tunisia \*Corresponding author.

doi: 10.1192/j.eurpsy.2023.834

**Introduction:** Data regarding coping strategies used by bipolar patients to deal with psychosocial stress and their consequences in adaptational outcomes are scant. Moreover, family studies have reported the presence of several similarities between bipolar patients and their relatives regarding genetics, biology, personality traits, temperaments and stressful lived life experiences. Bipolar patients and their siblings had significantly higher global score of life events and more events in the field of work, socio-family events and health than control subjects. This might suggest that patients with bipolar disorder would be distinguished from their family members by the coping strategies they use to deal with stress.

**Objectives:** In this study, we aimed to compare perceived stress and coping strategies of remitted bipolar I patients with those of their siblings and controls.

**Methods:** A descriptive and comparative study of case-control type was conducted. Were included 46 bipolar I patients, 46 siblings and 50 controls. The three groups were matched for age and sex. Assessments of perceived stress and coping strategies were performed using the 10-item Perceived Stress Scale (PSS) and the 28-item Brief COPE respectively.

**Results:** Mean age of bipolar I patients was  $39 \pm 13$  years. Thirty-one patients (67%) reported family history of one or more psychiatric disorders. Mean duration of bipolar disorder was  $11.83 \pm 9.92$  years.

There was no significant difference between the three groups on PSS scores. Bipolar patients and siblings were more likely to use emotion-focused coping strategies than controls (p=0.001). Controls used problem-focused coping strategies more than bipolar patients (p=0.02). Compared to controls, bipolar patients were less likely to use active coping and planning, but they showed higher scores in the dimensions of humor, religion and behavioral disengagement with intergroup p value: 0.02; 0.019; 0.002 respectively. Conclusions: Our findings suggest that bipolar I patients were more likely to use maladaptive coping strategies to deal with stress than their siblings. Based on this observation, it seems advisable to study coping strategies used by bipolar patients, in order to reinforce adaptive strategies and to reduce maladaptive ones.

Disclosure of Interest: None Declared

### **EPP0533**

## Gut permeability and low-grade inflammation in bipolar disorder

M. Couce $^{1*}$ , G. Paniagua $^{1,2}$ , L. González-Blanco $^{1,2,3,4,5}$ , A. García-Fernández $^{2,3,5}$ , C. Martínez-Cao $^{2,3,5}$ , P. Sáiz $^{1,2,3,4,5}$ , J. Bobes $^{1,2,3,4,5}$  and M. P. García-Portilla $^{1,2,3,4,5}$ 

<sup>1</sup>Central University Hospital of Asturias. Health Service of the Principality of Asturias; <sup>2</sup>Department of Psychiatry, University of Oviedo; <sup>3</sup>Health Institute Research of the Principality of Asturias (ISPA); <sup>4</sup>Biomedical Research Networking Centre in Mental Health (CIBERSAM) and <sup>5</sup>Institute of Neurosciences of the Principality of Asturias (INEUROPA), Oviedo, Spain

\*Corresponding author. doi: 10.1192/j.eurpsy.2023.835

**Introduction:** Systemic inflammation has been increasingly related to bipolar disorder -BD- (Tanaka et al. Neurosci Res 2017;115