

**Conclusions:** Changes in levels of PUFAs in red cell membranes, but not in plasma, may be an important factor to evaluate the resistance to the pharmacological treatment.

**Keywords:** fatty acids; Treatment Resistant Depression; omega3; omega6

## EPP0506

### Behaviours of general practitioners in the city of Douala's in cameroon in front of depressive disorders

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**Introduction:** In Cameroon, skepticism and neglect of doctors towards patients with mental disorders is noted. In order to change this, it was important to have an objective assessment. Depressive disorders are the most common form of mental disorders and Douala has the second largest number of general practitioners in the country. Thus, we proposed to evaluate the behaviour of general practitioners in Douala in front of patients with depressive disorders.

**Objectives:** Evaluate the frequency of depressive disorders in outpatient general consultation Evaluate the competence of general practitioners at diagnosing depressive disorders Evaluate the practices of general practitioners towards depressive disorders Evaluate obstacles faced by general practitioners regarding depressive disorders

**Methods:** We conducted a cross-sectional descriptive study from February to June 2017 in the outpatient department. For each general practitioner include, we had 3 patients who complete the patient health questionnaire to find out if the patient has depression. During each consultation, we filled out a clinical fact sheet to determine if the general practitioner had diagnosed a depressive disorder. If so, what care has he taken? Finally, we gave the general practitioner a questionnaire to know his difficulties when facing depression.

**Results:** We obtained a frequency of 32.5% of depressive disorders in consultation of general medicine in Douala and a rate of diagnosis by general practitioners of 1.92%. Diagnosed cases have just received counseling.

**Conclusions:** in Cameroon, despite the low interest in depressive disorders, they constitute a public health issue in Douala, and surely in Cameroon; Because of its frequency and the harm, they inflict on patients.

**Conflict of interest:** I don't have any conflict of interest

**Keywords:** Practice; Obstacle; Depression; Diagnostic

## EPP0507

### Inverse autonomic stress reactivity in depressed patients with and without prior history of depression

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**Introduction:** There is a considerable association between major depressive disorder (MDD) and cardiovascular disease, most

possibly relying on abnormalities in the autonomic nervous system (ANS)-related cardiac reactivity, although the exact underlying pathophysiological pathway is unclear.

**Objectives:** This study tends to shed some additional light on this background by investigating ANS reactivity in MDD with respect to previous depression history through an objective stress challenge paradigm.

**Methods:** The study assessed the effects of an overnight hypothalamus-pituitary-adrenal (HPA) axis stimulation with metyrapone (MET) on baseline ANS activity through linear and non-linear heart rate variability (HRV) measures in the morning of two continuous days in a group of 14 physically healthy, antidepressant-free patients with clinical, non-psychotic MDD, to investigate differences in autonomic reactivity with respect to prior MDD history.

**Results:** The main findings of this study include statistically significant time x group interactions with respect to several HRV measures, suggesting substantial differences on autonomic reactivity between patients with and without depression history. Hereby, recurrent-episode MDD patients showed lower vagal activity, while first-episode MDD patients increased PNS activity after HPA axis stimulation.

**Conclusions:** These findings indicate that HPA axis stimulation in MDD patients leads to inverse vagal response according to MDD history. We suggest that chronic stress system overactivation, as found in MDD, might lead to a progressive inversion of the original stress response through HPA axis and ANS divergence over the course of a recurrent illness. HRV could, thus, represent a significant biomarker in MDD with temporal sensitivity.

**Keywords:** recurrent episode; history of depression; Depression; heart rate variability

## EPP0508

### Potential objective diagnostic biomarker platform of serum proteins for major depressive disorder: a preliminary exploration

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**Introduction:** Major depressive disorder (MDD) is a severe, disabling condition with unknown etiology. Misdiagnosis is common when clinical symptomology criteria are used solely. Considerable evidence suggests that the upregulation of inflammatory factors and cortisol, and a decrease in neurotrophic factors, are involved in the pathogenesis of MDD.

**Objectives:** This study explored the application of platforms composed of these serum proteins in the objective diagnosis of MDD.

**Methods:** Serum samples from all participants including 30 MDD patients and 30 well-matched healthy controls were collected at enrollment, eight serum proteins selected initially according to previous studies were analyzed with ELISA. A logistic regression model with these proteins was built to construct the diagnostic platform for the MDD and the receiver operating characteristic (ROC) curve was used to analyze the diagnostic potential of the model.

**Results:** Among the eight selected proteins, three (TNF-alpha, IL-6 and IL-1beta) were removed because the measurements in more than

1/3 participants were below the detectable limits of ELISA kits. Forward logistic stepwise regression analysis screened out three serum proteins including BDNF, cortisol and IFN-gamma to build the model. The regression equation was  $Z = 1/[1 + e^{-(1.438+0.005(BDNF)-0.049(\text{cortisol})-0.007(\text{IFN-gamma}))}]$ , and the diagnostic efficacy of these three proteins-combined achieved an area under the ROC curve of 0.884 with sensitivity of 86.7% and specificity of 83.3%.

**Conclusions:** The results of this study provided a more reliable method to diagnose MDD, and the combination of serum BDNF, cortisol and IFN-gamma may provide an objective diagnostic platform for MDD.

**Keywords:** major depressive disorder; biomarkers; multiple serum proteins; diagnostic platform

### EPP0509

#### Association of perceived stress and coping strategies with depressive symptoms in students at a private medical college in islamabad

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**Introduction:** The environment at medical colleges is competitive and typically generates higher stress levels. Both academic and psychosocial stresses appear to play a role, and the resourceful students who are able to employ effective coping strategies to deal with their stress are shown to outperform their peers in the academic settings.

**Objectives:** Objective: To determine the Association of Perceived Stress and Coping Strategies with Depressive symptoms in students at a private medical college in Islamabad

**Methods:** Fourth and Final year medical students of Foundation university medical college were enrolled in the study. Beck's Depression Inventory was used to assess the depressive symptoms, Perceived Stress Scale (PSS) was the tool used to look for the perceived stress and the coping strategies were assessed using the Brief COPE Inventory. Association of Perceived Stress and Coping Strategies with Depressive symptoms and other sociodemographic factors was established.

**Results:** Out of 262 medical students studied, 211 (80.5%) had no or mild depressive symptoms while 51 (19.5%) had moderate to severe depressive symptoms. 66 (25.2%) had low stress, 127 (48.4%) had moderate stress while 69 (26.3%) had high stress. Chi-square test revealed that perceived stress, self-distraction, active coping, denial, substance use, behavioral disengagement, positive reframing, acceptance, religion/ spirituality and self-blaming had statistically significant relationship with presence of depressive symptoms among the target population.

**Conclusions:** Considerable number of medical students had presence of moderate to severe depressive symptoms in our study. Perceived stress and some specific kinds of coping strategies had significant association with presence of depressive symptoms among target population

**Keywords:** coping strategies; depression; perceived stress.

### EPP0512

#### Third generation cognitive-behavioral therapies for major depressive disorder- a literature review

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**Introduction:** Cognitive behavioral therapies (CBT) represent a heterogeneous group of psychotherapies in continuous development that share a directive, structured, collaborative approach. Due to a high degree of treatment-resistant cases of major depressive disorder (MDD), new augmentation therapies are urgently needed, in order to increase the chance of recovery in these patients.

**Objectives:** To analyze data that may support the indication of third wave CBT in patients with MDD.

**Methods:** A literature search was performed in the main electronic databases, and papers published between January 2000 and August 2020 were included.

**Results:** Acceptance and commitment therapy has been associated with positive results, but data are derived from low quality trials (n=2). Dialectical-behavioral therapy (DBT)-based skill group have been also associated with favorable outcome, in MDD patients (n=2). Mindfulness-based cognitive therapy (MBCT) was also proven effective in the treatment in MDD (n=4), treatment-resistant MDD included, but the difference between MBCT and active comparators was not always significant. Metacognitive therapy (MCT) has been evaluated in good quality clinical trials (n=4), and its efficacy was confirmed. Mild and moderate MDD patients may benefit from compassion-focused therapy (CFT) (n=1). Behavioral activation (BA) is dedicated to MDD patients and according to a meta-analysis (n=26 randomized controlled trials) BA is superior to other active comparators, although the quality of clinical trials was modest.

**Conclusions:** Third generation CBT could be useful in MDD patients as augmentative strategy, but more good-quality data are necessary before recommending them in an evidence-based treatment guideline as a distinctive intervention from classical CBT.

**Keywords:** cognitive-behavioral therapy; major depressive disorder; mindfulness

### EPP0514

#### Differences in the preferred food tastes characteristics in patients with depressive disorder and healthy subjects

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