

Dimension (EQ-5D). Safety will be also assessed with Adverse Events collected during the study.

Results: The results will be disseminated in late 2022 and provide new insights on GAS-D as an effective strategy to assess MDD treatment in Japan.

Conclusions: We expect to observe patients treated with vortioxetine achieving their treatment goals as assessed by GAS-D and improvements on patient- and clinician-reported measures in real-world settings.

Disclosure: Prof. K. Watanabe reports consultancies undertaken for Eli Lilly, Otsuka Pharmaceutical, Sumitomo Dainippon Pharma, Taisho Toyama Pharmaceutical, and Takeda Pharmaceutical, honoraria received from Daiichi Sankyo, Eisai, Eli Lilly, GlaxoSmithKline, J

Keywords: real world evidence; vortioxetine; Depression; patient centricity

EPV0592

Prevalence of depressive symptoms and suicide risk among medical residents

C. Reyes*, V. Santana, G. Arocha, N. Martínez and K. Almonte

Pontificia Universidad Católica Madre y Maestra, Escuela De Medicina, Santiago De Los Caballeros, Dominican Republic

*Corresponding author.

doi: 10.1192/j.eurpsy.2022.1412

Introduction: Depression and suicide risk are disturbing issues within the medical community. In many countries, physician's mental health is not a concern, due to the fact that many do not even consider medical staff as potential mental health patients. However, health care providers are an at risk population for psychological affliction due to their heavy workload.

Objectives: We aim to describe the prevalence of depressive symptoms and suicidal risk among medical residents from health centers of Santiago de los Caballeros, Dominican Republic.

Methods: A cross-sectional descriptive study was made, between the months of February and May 2021, using the Beck Depression Inventory II (BDI-2) and the Plutchick Suicidal Risk Scale.

Results: There was a total population of 507 residents, where 231 completed the survey. Of these, 1 recanted his participation, and 14 were excluded according to the study's criteria, resulting in a total of 217 residents. The overall prevalence of depressive symptoms was 24.9% and suicidal risk was 22.94%. Residents who worked in a private center had 3.83 times more risk of suffering depressive symptoms compared to those who belonged to the public sector. Furthermore, residents from Internal Medicine (39.5%) had a higher prevalence of depressive symptoms, and residents from Anesthesiology (42.2%) suffered a higher suicide risk compared to other medical residences.

Conclusions: A disturbing percentage of the medical residents suffer from depressive symptoms and suicidal risk. Therefore, residency programs should offer assistance to help prevent and manage mental health disorders.

Disclosure: No significant relationships.

Keywords: Suicide; Depression; mental health; medical residents

EPV0593

Association between inflammation and neural plasticity biomarkers in olfactory neuroepithelium – derived cells and cognitive performance in patients with major depressive disorder

A. Toll^{1*}, M. Portella², P. Robledo³, M. Barrera-Conde³, R. De La Torre³, J.M. Ginés¹, C. Diez-Aja¹, V. Soria⁴, P. Lopez-Garcia⁴, V. Pérez-Solà¹ and P. Alvarez¹

¹Parc de Salut Mar, Institut De Neuropsiquiatria I Addiccions, Barcelona, Spain; ²Hospital de la Santa Creu i Sant Pau, Psychiatry, Barcelona, Spain; ³Universitat Pompeu Fabra, Neuropharmacology Laboratory, Barcelona, Spain and ⁴Hospital de Bellvitge, Psychiatry, Hospitalet de Llobregat, Spain

*Corresponding author.

doi: 10.1192/j.eurpsy.2022.1413

Introduction: Inflammation and neural plasticity play a significant role in major depressive disorder (MDD) pathogenesis and cognitive dysfunction. The olfactory neuroepithelium (ON), closely related to the central nervous system (CNS), allows a non-invasive, low-cost study of neuropsychiatric disorders. However, few studies have used ON cells to ascertain them as biomarkers for MDD.

Objectives: Determine the relationship between inflammatory/neural plasticity markers and cognitive functioning in MDD patients and healthy controls.

Methods: Sample: 9 MDD patients and 7 healthy controls. Exclusion criteria: other Axis I mental disorders (patients) or any mental disorder (controls) and any inflammatory, autoimmune, or CNS diseases. Assessment: sociodemographic, clinical, and cognitive variables (CANTAB) were recorded. mRNA was isolated from ON cells and MAPK14, IL6, TNF- α , Mecp2, BDNF, GSK3, GRIA2, and FosB gene expression levels were quantified using quantitative polymerase chain reaction.

Results: MDD patients showed decreased levels of BDNF ($p=0.022$), GSK3 ($p=0.027$), and working memory ($p=0.024$) compared with healthy controls. In healthy controls, planning was positively correlated with NRF2, BDNF, and MAPK14 gene expression. In MDD patients no correlation between cognitive parameters and inflammation/neural plasticity biomarkers was found.

Conclusions: These results reveal that: (1) Plasticity biomarkers such as BDNF and GSK3 could be useful diagnostic tools for MDD (2) MDD is associated with working memory deficits; (3) no association could be determined between planning and NRF2, BDNF, and MAPK14 gene expression in MDD and (4) the ON is a promising model in the study of neuropsychiatric disorders.

Disclosure: No significant relationships.

Keywords: biomarkers; cognition; inflammation; Depression

EPV0594

Depressive disorders among physician parents in times of COVID-19 pandemic

N. Regaieg*, D. Ben Touhemi, A. Fayala, J. Boudabous, W. Kammoun, K. Khemakhem, I. Hadj Kacem, H. Ayadi and Y. Moalla

Hedi Chaker University Hospital, Child And Adolescent Psychiatry, Sfax, Tunisia

*Corresponding author.

doi: 10.1192/j.eurpsy.2022.1414

Introduction: Studies have shown that physicians manifest a clear duty to work. For parents, reconciling work with parenthood is not easy and can even lead to depression.

Objectives: To determine the prevalence and the factors for depression in Tunisian physician parents.

Methods: This was a descriptive and analytical cross-sectional study of 93 Tunisian physician parents, conducted on google drive in March 2021, including a questionnaire containing the parents' personal and professional data and the Beck Depression Inventory (BDI).

Results: In our study, the sex ratio (M/F) was 0.05. The average age was 34.43 years old. Almost three-quarters of doctors (71.3%) were providing on duty services in the hospital while 69% were providing at least one call per month in COVID units. The average BDI score was 6.16. According to the BDI score, 60.9% of participants had depression. The BDI score was correlated with several types of dissatisfaction: dissatisfaction with the relationship with his child ($p = 0.002$), time devoted to the partner (0.001), time devoted to the child ($p = 0.004$), child's educational style ($p < 0.001$), time spent on leisure or personal activities ($p < 0.001$), child's academic performance ($p = 0.001$) and child's behavior ($p < 0.001$). Furthermore, the BDI score was associated with postponing having a child for career reasons ($p = 0.038$) and thinking that his career is slowed down by parenthood ($p < 0.001$).

Conclusions: Depression's rate among physician parents appears to be significant. It's associated with a feeling of guilt and dissatisfaction, hence the necessity of an early detection and management.

Disclosure: No significant relationships.

Keywords: physician parents; Covid-19; Depression

EPV0595

White matter integrity and pro-inflammatory cytokines as predictors of antidepressant response in MDD

S. Breit^{1*}, E. Mazza², S. Poletti² and F. Benedetti²

¹University Hospital of Psychiatry and Psychotherapy of Bern, University Hospital Of Psychiatry And Psychotherapy, Bern, Switzerland and ²IRCCS Ospedale San Raffaele, Milano, Psychiatry And Clinical Psychobiology/neuroscience, Milan, Italy

*Corresponding author.

doi: 10.1192/j.eurpsy.2022.1415

Introduction: Major depressive disorder (MDD) often involves immune dysregulation with high peripheral levels of pro-inflammatory cytokines that might have an impact on the clinical course and treatment response. Moreover, MDD patients show brain volume changes and white matter (WM) alterations that are already existing in the early stage of illness.

Objectives: The aim of the present review is to elucidate the association between inflammation and WM integrity and its impact on the pathophysiology and progression of MDD as well as the role of possible novel biomarkers of treatment response to improve MDD prevention and treatment strategies.

Methods: We conducted an electronic literature search of PubMed on studies that examined the role of inflammation in depression and that focused on WM integrity and pro-inflammatory cytokines as predictors of antidepressant response.

Results: There is evidence for central effects of peripheral inflammation which could activate microglia which, in turn, might trigger a cascade of inflammatory processes leading to neurotransmitter

imbalances. Numerous studies indicated that both altered levels of peripheral inflammatory markers, particularly TNF- α , IL-6, and CRP as well as WM integrity might predict antidepressant treatment outcome.

Conclusions: Despite mounting evidence on the impact of the immune system on WM microstructure, no study has yet addressed the interaction between the two factors in influencing antidepressant response. There is a lack of reproducible biomarkers predicting treatment response on an individual basis. The availability of such biomarkers would enable more efficient and personalized treatments with a faster treatment response and better prevention of treatment resistance.

Disclosure: No significant relationships.

Keywords: white matter integrity; biomarkers; MDD; pro-inflammatory cytokines

EPV0596

The effects of Cumulative Trauma and Cognitive Rigidity on the Severity of Depressive Disorder: Preliminary Results

M. Salla^{1*}, M. Aguilera², C. Paz³, J. Moya-Higueras⁴ and G. Feixas¹

¹Universitat de Barcelona, Department Of Clinical Psychology And Psychobiology, BARCELONA, Spain; ²Universitat de Barcelona, Department Of Cognition, Development And Educational Psychology, BARCELONA, Spain; ³Universidad de Las Américas, School Of Psychology, Quito, Ecuador and ⁴Universitat de Lleida, Department Of Psychology, Lleida, Spain

*Corresponding author.

doi: 10.1192/j.eurpsy.2022.1416

Introduction: The long-lasting effects of trauma on mental health and the cumulative effect during the lifetime is one of the great interest in research and applied psychology. However, the effect of cumulative trauma in combination with cognitive biases, such as cognitive rigidity ("all-or-nothing" thinking pattern), on the severity of depression has not been tested yet.

Objectives: The aim of this study was to analyse these variables, while considering for differential gender effects on a sample of patients with the diagnosis of depressive disorder.

Methods: A total sample of 177 patients (137 women) were assessed using the Cumulative Trauma Scale. Cognitive rigidity was measured with the Repertory Grid Technique and severity of depressive symptoms with the Beck Depression Inventory.

Results: indicated that high levels of cognitive rigidity and high frequency of perceived negative cumulative trauma predicted depressive symptoms; while high frequency of perceived positive trauma did not predict depressive symptoms. Moreover, gender did not explain variability of depression, and its interaction with frequency of perceived trauma was not significant.

Conclusions: Overall, traumatic cumulative trauma frequency and its negative appraisal are key to the understanding the severity of depression but also cognitive rigidity seemed to be a relevant factor to consider. Thus, these results highlight the need to focus on traumatic and cognitive aspects to increase the efficacy of psychological interventions in depression.

Disclosure: No significant relationships.

Keywords: traumatic events; dichotomous thinking; Depression