substrate of given isoenzyme and its metabolite in urine. Therapeutic drug monitoring has been performed using HPLC-MS/MS.
Results: We didn't reveal a statistical significance for concentration/dose indicator of mirtazapine in patients with different genotypes: (GG) 0.229 [0.158; 0.468] and (GA) 0.290 [0.174; 0.526], p = 0.196). We revealed the relationship between the CYP2D6 enzymatic activity and the hsa-miR-370-3p plasma concentration: rs = -0.32, p < 0.001. At the same time, correlation analysis revealed a statistically significant relationship between the mirtazapine concentration and the hsa-miR-370-3p plasma concentration: rs = 0.31, p<0.001.
Conclusions: Thus, the effect of genetic polymorphism of the CYP2D6 gene on the efficacy and safety profiles of mirtazapine was demonstrated in a group of 192 patients with recurrent depressive disorder.

Conflict of interest: Authors do not have any conflict of interests.

EPP0958

Anticipating transitions in mental health in at-risk youth: A large-scale diary study into early warning signals

M. Schreuder*, J. Wigman, A. Smit, C. Hartman and M. Wichers

Department Of Psychiatry, Interdisciplinary Center Psychopathology And Emotion Regulation (icpe), University of Groningen, University Medical Center Groningen, Groningen, Netherlands

*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1215

Introduction: Transitions in mental health, such as the onset or sudden progression of psychopathology, are difficult to foresee. If mental health behaves like other complex systems, drops in mental health may be anticipated by early warning signals (EWS), which manifest in the dynamics of time series data.
Objectives: This study aimed to establish the sensitivity and specificity of EWS as personalized risk markers for sudden drops mental health.
Methods: Individuals (N=122, mean age 23.6 ±0.7 years, 57% males) at increased risk for psychopathology completed daily questionnaires on mental states for six consecutive months. Transitions in mental health were identified by change point analyses. EWS, operationalized as rising trends in the autoregressive coefficient of 36 negative mental states, were identified using generalized additive models.
Results: EWS were found for 59% of individuals with a drop in mental health, and for 47% without such a drop (sensitivity: 0-.12; specificity: .88-1). There were considerable individual differences in the prevalence, strength, and timing of EWS.
Conclusions: EWS might be informative of impeding transitions, yet they are also highly conservative. Present findings may inspire future research into the prerequisites for detecting EWS in the context of mental health, for instance with respect to the stability of pre- and post-transition phases, the magnitude of transitions, and the timescale at which EWS manifest. An improved understanding of the dynamics that govern psychopathology could ultimately allow us to determine whether a specific individual at a specific moment in time is at risk for a sudden onset or progression of mental health problems.

Keywords: diary study; complex systems; transdiagnostic psychopathology; early warning signals

EPP0959

Clozapine point of care testing in acute psychiatry: A precision approach to treatment resistant psychosis

X. Boland* and L. Dratcu

Inpatient Psychiatry, South London and Maudsley NHS Foundation Trust, London, United Kingdom

*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1216

Introduction: Clozapine, the antipsychotic of choice for treatment-resistant schizophrenia, has a narrow therapeutic range and high interpatient variability in the dose-response relationship. Serum clozapine levels are essential both for therapeutic dosing and to monitor adherence. Use of venepuncture and prolonged result turnaround times with standard laboratory based methods for drug monitoring together contribute to the suboptimal use of clozapine.
Objectives: A novel portable point-of-care (POC) device has been developed to measure whole blood clozapine concentrations using an automated homogenous immunoassay. It is as accurate and reliable as standard laboratory methods but only requires a drop of blood obtained by finger prick and can produce a result in minutes. We pioneered clozapine POC testing in the acute inpatient setting during the outbreak of the COVID-19 pandemic.
Methods: We report on the use of POC clozapine testing in the management of 4 acutely psychotic patients with treatment resistant schizophrenia.
Results: POC testing offered a more practical, less invasive and quicker alternative to conventional methods for monitoring of clozapine levels. Near immediate availability of clozapine levels expedited clinical decisions and helped ensure safe clozapine prescribing to severely unwell patients in a time of crisis. By facilitating patients' early safe discharge from hospital, clozapine point of care testing also reduced length of hospitalisation.
Conclusions: Point of care monitoring of other psychotropic medications in addition to clozapine brings about the prospect of personalised precision medicine for patients with severe mental illness, both in the acute setting and in the community.

Keywords: clozapine; Point of care antipsychotic monitoring; Inpatient psychiatry; schizophrénia

EPP0961

Phenomenological experience personality profile: A test to identify the affective dimensions of psychopathology in the context of precision psychotherapy.

R. Sperandeo[1]*, V. Cioffi[1], L. Mosca[1], B. Muzii[2] and N. Maldonato[3]

[1]Phenomena Research Group, Sipgi, Post graduate School of Psychotherapy, Torre Annunziata, Naples, Italy; [2]Department Of Humanistic Studies, University of Naples Federico II, Naples, Italy, Naples, Italy and [3]Neurosciences And Reproductive And Odontostomatological Sciences, University of Naples Federico II, Naples, Italy, Naples, Italy

*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1217

Introduction: Artificial intelligence algorithms are increasingly used to highlight refined qualifiers of pathologies and to build

treatment protocols based on them. These possibilities open up new perspectives for personalized interventions in psychotherapy. The affective neurosciences that link psychopathological phenomena to the hypersensitization of emotional systems are an excellent field of application of deep learning algorithms
Objectives: In this contribution we present the standardization of a psychodiagnostic test that can be analyzed with a deep learning algorithm for the development of personalized treatments for depressive disorders in a perspective of precision psychotherapy
Methods: Previously we have constructed a psychodiagnostic test that correlates the psychopathological characteristics to the emotional systems described in affective neuroscience. The construction of this test was carried out with the use of a neural network that discriminated 161 items from a pull of 300 psychopathological and character descriptions. In the present work, the 161 selected items were compared, in a sample of 600 subjects, with the measurement of sadness described in the Panksepp model. Comparation was performed with linear and non-linear statistical analysis methods.
Results: The items emerging from the statistical analyzes as strongly indicative of a hypersensitivity of the sadness system outline a psychopathological profile for which it is possible to adapt specific psychotherapeutic treatment protocols.
Conclusions: In future prospect, neurobiological and psychophysiological variables such as heart rate variability, skin conductance and activity of the areas of the cortex, measured with a scanner of the near infrared photons, will be correlated to these descriptors of psychopathology.

Keywords: Personality; psychopathology; test; Artificial Intelligence

EPP0962

Mental health in time of pandemics: Study protocol to incorporate risk and protective factors contributing to psychological stress among portuguese and swiss higher education students

C. Laranjeira[1]*, A. Querido[1], O. Valentim[2], Z. Charepe[3] and M. Dixe[1]

[1]Citechcare, Polytechnic of Leiria, Leiria, Portugal; [2]School Of Health Sciences, Polytechnic of Leiria, Leiria, Portugal and [3]Instituto De Ciências Da Saúde, Universidade Católica Portuguesa, Lisboa, Portugal

*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1218

Introduction: The ongoing COVID-19 pandemic is inducing fear, and a timely understanding of mental health status is urgently needed for society. Previous research has revealed a profound and wide range of psychosocial impacts on people at the individual, community, and international levels. On an individual level, people are likely to experience fear of falling sick or dying themselves, feelings of helplessness, and stigma. Currently, there is little understanding of mental well-being assessment under scenarios of pandemics that oblige to social isolation and quarantine.
Objectives: This study aims to: a) establish the prevalence of psychiatric symptoms; b) identify risk and protective factors contributing to psychological stress; and c) identify coping strategies to promote better adjustment during and after the pandemic crisis.
Methods: We will adopt a mixed-method approach, firstly with a cross-sectional survey design (in both Portugal and Swiss context) to assess the higher education student's psychosocial response during and after the pandemic, by using an anonymous online questionnaire. In a 2nd phase, and in order to gain more insight into the psychological stress faced by the students as a result of pandemic, a qualitative approach was chosen, focusing on the experiences of the participants.
Results: This study has received ethical approval from both international and local institutional review boards. Data collection will start in November 2020 and will be completed at February 2021.
Conclusions: The findings of this study will provide important data to assist government agencies and healthcare professionals in safeguarding the psychosocial wellbeing of the community in the face of COVID-19 outbreak expansion.

Keywords: Study protocol; pandemics; psychological stress; higher education students

EPP0963

Professional stress-related disorders in first-line responders- how far are we from real prevention strategies?

O. Vasiliu*

Psychiatry, University Emergency Central Military Hospital Dr. Carol Davila, Bucharest, Romania

*Corresponding author.
doi: 10.1192/j.eurpsy.2021.1219

Introduction: In the context of COVID-19 pandemic, first-line responders (FLR) are exposed to multiple stress factors, ranging from lack of adequate protective equipment to worries about family health due to work-related exposure to the new coronavirus. Therefore, FLR became themselves a vulnerable population that need prevention strategies for professional stress-related disorders (PSRD).
Objectives: To explore the literature in order to find evidence-based prevention strategies for PSRD in FLR, strategies resulted from other epidemiological crisis situations (MERS-CoV, H1N1, SARS-CoV) that may be applied in the current pandemic.
Methods: A literature review was performed through the main electronic databases (PubMed, CINAHL, SCOPUS, EMBASE) using the search paradigm "professional stress-related disorders" AND "first line responders" AND "prevention". All papers published between January 2000 and June 2020 were included.
Results: Reported prevalence of post-traumatic stress disorder in FLR involved in epidemiological crises was between 10% and 33%. Evidence-based recommendations for PSRD prevention are lacking, and only general advices have been detected. These suggestions were clustered on institutional level (e.g., involving of medical personnel in administrative decisions, encouraging personal initiatives, longer pauses between shifts) and individual level (e.g., training of coping abilities, relaxation techniques, and peer-focused group support). Several guidelines for prevention of mental disorders in workplace exist, but they are not focused on FLR.
Conclusions: The need to elaborate guidelines for prevention of PSRD in FLR can not be overemphasized, especially in the pandemic period, in order to avoid the onset of stress-related complications, and to preserve a good quality of the medical activity.

Keywords: professional disorders; stress-related disorders; prevention strategies; COVID-19