Internalizing symptoms trajectory

Externalizing symptoms trajectory

adolescence but not in adult age (Graph 1). Perinatal risk factors did not have a significant effect on externalizing symptoms at any time point, despite a non-significant trend is evident (Graph 2).

Conclusions: Our preliminary results suggest a trend of increased internalizing symptoms from childhood to adulthood and a significant role of perinatal risk factors in pre-adolescence. Further investigations are necessary to better understand symptoms trajectories and the role of biological and environmental factors.

Disclosure: No significant relationships.
Keywords: perinatal risk factors; internalizing psychopathology; externalizing psychopathology; psychopathology trajectories

O227

Creativity and psychopathology – an interdisciplinary view

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Introduction: Since ancient philosophy extraordinary creativity is associated with mental disorders, emotional and cognitive destabilization, and melancholia. We here summarize the results of empirical and narrative studies and analyze most prominent cases of highly creative persons who suffered from depression, bipolar and schizotypic disorders, drug- and alcohol addiction. Hereby, we focus on the interaction of creative processes with "bipolar" personality traits. Finally, we offer an interdisciplinary interpretation of the creative dialectics between order and chaos.

Objectives: An interdisciplinary concept of the relationship between creativity and psychopathology is shown to be essential for reasonable psychopharmacological and psychotherapeutic treatment of creative individuals.

Methods: On the basis of empirical-statistical and biographical studies we offer a comprehensive concept of the interaction between creativity and psychopathology.

Results: The exemplary cases of J. W. v. Goethe and Robert Schumann show a complex interaction of mood swings with creative achievements. Dysthymic and mild depressive phases were associated with creative efforts whereas severe depressive episodes inhibited their creativity. Mild mood swings and "bipolar personality traits" interacted constructively with their creative striving. With respect to the relationship of alcohol- and drug-abuse, we show on behalf of a detailed analysis of the life and work of prominent Pop-Icons that addiction mostly leads to psychosocial disintegration and destruction of creativity.

Conclusions: An interplay between cognitive coherence and incoherence, emotional stability and instability, order and chaos accompanies many creative processes. The interdisciplinary approach shows that psychopathology can motivate creative efforts. However, if expressed severely, mental disorders inhibit or even destroy creativity.

Disclosure: No significant relationships.
Keywords: Creativity; psychopathology; Creative Bipolarity; psychotherapy

Psychopharmacology and Pharmacoeconomics

O228

Olanzapine- induced metabolic syndrome pathogenesis: Hypothalamic "leptin resistance" or "pomc resistance"?

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Introduction: Olanzapine (OL) represents one of the main chooses for the treatment of psychosis. However, OL increase the risk of metabolic syndrome (MS). Previous literature proposes the "Leptin resistance" as a possible hypothalamic pathogenesis of OL induced MS because of the occurrence of weight gain with increased Leptin blood level.

Objectives: The aim of our study is to investigate in a murine model of full-MS phenotype induced by Olanzapine the hypothalamic gene expression of the pathways involved in Leptin receptor signalling to clarify if a Leptin resistance occurs.

Methods: For the experiment C57BL/6Jfemale mice are used.The OL group (n=15) received pure Olanzapine compounded into chow (54 mg/kg of diet). The vehicle group (n=15)is fed with the same chow without OL. Weight gain is measured every 5 days. After 4 weeks of treatment, mice are sacrificed by rapid cervical dislocation. Blood is collected for Glucose, Insulin and Leptin evaluation. Hypothalamus is dissected and RNA-seq is performed.

Results: The OL group shows a significantweight gain compared to Control (p= 0.02). Likewise blood glucose, Insulin and Leptin levels appear increased (p= 0,0089, p= 0,01, p= 0,0012). From the analysis of RNA-seq hypothalamic differentially expressed genes the anorexigenic POMC pathway downstream to the Leptin Receptor shows a 4-fold increased compared to control.

Conclusions: In our study the "Leptin resistance" involvement in OL induced MS is not confirmed. In fact, although there is an increase in blood Leptin, the expression of Leptin receptor downstream pathways shows a significant increase. This could suggest a possible "POMC resistance" mechanism for OL induced MS.

Disclosure: No significant relationships.

Keywords: Translational medicine; Metabolic syndrome; Hypothalamic RNAseq analysis; Psychopharmacology

O229

Predicting the risk of drug-drug interactions in psychiatric hospitals

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Introduction: The most common medical decision is the prescription of medicines. More than 130 different drugs with proven efficacy are currently available for the treatment of patients with mental disorders.

Objectives: The aim was to use routine data available at a patient's admission to the hospital to predict polypharmacy and drug-drug interactions (DDI).

Methods: The study used data obtained from a large clinical pharmacovigilance study sponsored by the Innovations Funds of the German Federal Joint Committee. It included all inpatient episodes admitted to eight psychiatric hospitals in Hesse, Germany, over two years. We used gradient boosting to predict respective

outcomes. We tested the performance of our final models in unseen patients from another calendar year and separated the study sites used for training from the study sites used for performance testing.

Results: A total of 53,909 episodes were included in the study. The models' performance, as measured by the area under the ROC, was "excellent" (0.83) and "acceptable" (0.72) compared to common benchmarks for the prediction of polypharmacy and DDI, respectively. Both models were substantially better than a naive prediction based solely on basic diagnostic grouping.

Conclusions: This study has shown that polypharmacy and DDI at a psychiatric hospital can be predicted from routine data at patient admission. These predictions could support an efficient management of benefits and risks of hospital prescriptions, for instance by including pharmaceutical supervision early after admission for patients at risk before pharmacological treatment is established

O230

Safety of esketamine nasal spray: Analysis of post-marketing reports submitted to the FDA adverse event reporting system in the first year on the market

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Introduction: The approval of the esketamine nasal spray for treatment-resistant depression in March 2019 by the Food and Drug Administration (FDA), and few months later by the European Medicine Agency, triggered a vivid debate and many concerns, mainly because of the lack of convincing evidence on its efficacy and safety, based on the development programs, approval trials and few post-marketing trials.

Objectives: We aimed to detect and characterize safety signals for esketamine, by analyzing relevant adverse events (AEs) reports in the FDA Adverse Event Reporting System (FAERS) database (March 2019-March 2020).

Methods: We performed disproportionality analysis through the case/non-case approach: reporting odds ratios (ROR) and information components (IC) with 95% confidence intervals (95%CI) were estimated for esketamine-related AEs with at least four counts. We compared serious and non-serious AEs using non-parametrical tests.

Results: The FAERS database registered 962 reports of esketamine-related AEs in one year. Signals (i.e., statistically significant disproportionality) were detected for several AEs, such as dissociation, sedation, feeling drunk, suicidal ideation and completed suicide. Signals for suicidal ideation, but not suicide attempt and completed