chronicity. The content is often paranoid and persecutory in nature but not complex or bizarre like those found in schizophrenia. These symptoms are not limited to flashback episodes and the content may or may not be trauma related.
Conclusions: Although the studies show PTSD-PS presents characteristic symptoms, more research about is needed.

Disclosure: No significant relationships.
Keywords: psychosis; Posttraumatic Stress Disorder; trauma

EPV0458

The overlap between complex posttraumatic stress disorder and borderline personality disorder

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Introduction: Research has shown the relationship between borderline personality disorder (BPD) and complex posttraumatic stress disorder (cPTSD), pointing out the overlapping nature and expression of both conditions. In order to understand their differences and similarities, we present a case of a 22-years-old patient with a history of repeated sexual trauma throughout all her adolescence, whose diagnose was changed from BPD to cPTSD after she was admitted in an acute inpatient mental health unit.
Objectives: To gather the similarities between borderline personality disorder and complex posttraumatic stress disorder.
Methods: A narrative review of the literature through the presentation of a case. Articles were chosen based on its clinical relevance.
Results: cPTSD merges the clinical features and symptoms of PTSD with affect dysregulation, negative self-perception, unstable relationships and somatization, also present in BPD. Furthermore, BPD is known to frequently have a traumatic etiology.
Conclusions: It is not always simple to draw a clear line between cPTSD and BPD conditions. However, each diagnosis may have a different impact on patient understanding and treatment.

Disclosure: No significant relationships.
Keywords: cPTSD; BPD; overlap

EPV0459

Trauma and sexual risk behaviors in an adolescent victim of sexual abuse: A case report

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Introduction: Childhood and adolescence sexual abuse (CSA) is a risk factor for psychological trauma and a strong predictor of lifetime psychopathology, including depression, anxiety, inappropriate sexual behavior, anger, guilt, shame and other emotional and relationship problems.
Objectives: Describe a clinical case of a sexually abused adolescent admitted in a psychiatric unit for young adults and to correlate sexual abuse with trauma and sexual risk behaviors.
Methods: The data was collected through clinical and family interviews. The revision was made with the search terms "trauma", "child and adolescence sexual abuse", "sexual risk behaviors" in scientific databases.
Results: 16 year-old girl, high-school student, living with her nuclear family, was admitted in a psychiatric hospital with feelings of sadness and anxiety since the previous month, that lead to a voluntary medicine ingestion. She has been continuously sexually abused from the age of 12 to 16 by an older man, and once by her cousin and his friends. Since than, she refers feelings of anger, sadness, dissociative symptoms and intrusive images and nightmares related to the abuses, and continues to seek attention from older men. With medication and individual and family psychotherapeutic interventions, depressive, anxiety and dissociative symptoms have improved.
Conclusions: Literature concludes that there's a strong correlation between CSA, trauma and sexual risk behaviors throughout adulthood. In fact, our patient met criteria for Pos-traumatic Stress Disorder and has sexual risk behaviors that must be worked through therapy. Due to it's complexity, treatment of the adolescent and familial system after sexual abuse is multifaceted and requires a biopsychosocial approach.

Disclosure: No significant relationships.
Keywords: post-traumatic stress disorder; sexual abuse; sexual risk behaviors; trauma

Precision psychiatry

EPV0460

Application of the decision tree model in ADHD screening

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Introduction: Attention Deficit Hyperactivity Disorder (ADHD) is a Neurodevelopmental Disorder characterized by persistent pattern of inattention and hyperactivity / impulsivity. There is considerable difficulty in diagnosing ADHD, mainly to discriminate what could be symptoms arising from ADHD or typical age behaviors. The decision tree model is a statistical algorithm, a predictive model built with comparisons of values for a given objective that can be compared with other constant values, placing these variables in a database at hierarchical levels.
Objectives: This study aims to apply the decision tree model in directing the screening of ADHD complaints to analyze which cognitive and behavioral parameters would be better associations with ADHD accurate diagnosis
Methods: We used a database of research protocol with 202 children assessed with complaints of ADHD and a control group with 185 participants. Decision tree analyzed parameters selected from

the cognitive instruments, such voluntary attention, Continuous Performance Test indexes, WCST indexes, Wechsler Intelligence indexes and behavioral scales from CBCL/6-1 and TRF/6-18.
Results: The highlighted results points to WCST index like: "Perseverative answers" and "Perseverative errors" and "learning to learn" joint to "CPT omissions" and behavioral scales as "CBCL ADHD", and "CBCL Problems of Attention" produces accuracy of diagnosis discrimination from 84.7% to 60% in the precision of the decision tree.
Conclusions: The decision tree and machine learning approaches can be effective in directing the screening of typical ADHD complaints.

Disclosure: No significant relationships.
Keywords: ADHD; Behavioral profile; Decision tree; Neuropsychological profile

EPV0461

Optimizing prediction of response to antidepressant medications using machine learning and environmental data

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Introduction: Major depressive disorder (MDD) is complex and multifactorial, posing a major challenge of tailoring the optimal medication for each patient. Current practice for MDD treatment mainly relies on trial-and-error, with estimated 42%-53% response rates for antidepressant use.
Objectives: We sought to generate an accurate predictor of response to a panel of antidepressants and optimize treatment selection using a data-driven approach analyzing combinations of clinical and demographic factors.
Methods: We analyzed the response patterns of patients to five antidepressant medications in the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study and the Pharmacogenomic Research Network Antidepressant Medication Pharmacogenomic Study (PGRN-AMPS), and employed state-of-the-art machine learning (ML) tools to generate a predictive algorithm. To validate our results and confirm the algorithm's external generalizability outside of its training groups, we assessed its capacity to predict individualized antidepressant responses on a separate validation and test sets consisting of 1,021 patients overall from both studies.
Results: The algorithm's ML prediction models achieved an average accuracy of 0.6416 (64.16%, SD 4.4) across the analyzed medications, and a cumulative accuracy of 0.6012 (60.12%), AUC of 0.601, sensitivity of 0.6034 (60.34%) and specificity of 0.599 (59.9%).
Conclusions: These findings support applying ML to accumulating data derived from large studies to achieve a much-needed improvement in the treatment of depression. By an immediate analysis of large amount of combinatorial data at the point of care, such prediction models may support doctors' prescription decisions, potentially allowing them to tailor the right antidepressant medication sooner.

Disclosure: Dekel Taliaz is the founder and CEO of Taliaz and reports stock ownership in Taliaz. Amit Spinrad and Sne Darki-Morag serve as data scientists in Taliaz.
Keywords: Precision psychiatry; Depression; Treatment optimization; machine learning

EPV0462

Inventory construction to track cognitive profiles compatible with intellectual disability, ADHD, and dyslexia in children between 6 to 11 years old

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Introduction: The most frequent complaints from children referred to psychiatry and psychologist are related to academic and attentional impairments, or developmental delay, which are shared by many conditions.
Objectives: To develop an inventory that evaluates cognitive functions of children between 6 to 11 years old to track cognitive profiles compatible with Intellectual Disability, ADHD, and dyslexia to assist in differential diagnosis.
Methods: In study 1 (identification of the relevant constructs, operational definition, and items development), data were collected from parents of children and professionals who serve this population; articles, verification of screening instruments and identification of cognitive impairments by the DSM-5. In study 2, an analysis of judges with professionals was carried out, as well as a verification of the items' clarity by the target population; In study 3, we looked for evidence of validity and precision indicators with a sample of 272 parents and 178 teachers of 72 children diagnosed with one of the three disorders and 207 that had no suspect of neurodevelopmental disorders.
Results: For the parent version, the four-factor solution was the most appropriate, with the following Scales: Attention, Executive Functions, Intelligence and Oral Language. The final version for parents was composed of 60 items, with excellent internal consistency indices (coefficients> 0.90).
Conclusions: ROC curves expressed good sensitivity and specificity of the scales for each disorder. Future studies have to expand the sample size of children diagnosed with one of the three disorders so that new analyzes can be performed and the results can be generalizable to the population.

Disclosure: No significant relationships.
Keywords: Screening Inventory; ADHD; Dyslexia; intellectual disability

EPV0463

Corticosteroid induced mania with psychotic symptoms

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