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

A. Spinrad*, S. Darki-Morag and D. Taliaz

Data Science, Taliaz, Tel Aviv, Israel
*Corresponding author.
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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

L.R. Carreiro, R.L. Marino* and A. Souza

Developmental Disorders Graduate Program, Mackenzie Presbyterian University, São Paulo, Brazil
*Corresponding author.
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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

F. Gomes Tavares*, M. Viseu De Carvalho, M. Pinto, C. Solana and S. Batista

Departamento De Psiquiatria E Saúde Mental - Faro, Centro
Hospitalar Universitário do Algarve, Faro, Portugal
*Corresponding author.

Introduction: Corticosteroids may induce psychiatric symptoms (agitation, fear, hypomania, insomnia, irritability, labile mood, pressured speech and restlessness) with incidence rates ranging from 1,8% to 57%. We present a case of corticosteroid-induced mania and psychosis.

Objectives: Non-systematic review on corticosteroid therapy induced psychiatric symptoms. Analysis and comparison of a patient's case with the existing literature.

Methods: Case report and a non-systematic review through databases as Pubmed, UpToDate, Medscape, between 2000 and 2020.

Results: We present a female 70 year-old patient without psychiatric background, diagnosed with Rhizomelic Pseudopolyarthritis, who started treatment with prednisone 20 mg. During the third month of treatment the patient started progressively worse behavior changes (such as destruction of the neighbor's property), developed persecutory delusions, decreased sleep and increased energy. The patient was committed to our psychiatric ward and started on diazepam 10 mg and olanzapine 15 mg per day. Despite introduction of antipsychotics, which has evidence for mood stabilization, the patient maintained the symptoms, so it was necessary to gradually reduce corticosteroids until symptomatic control.

Conclusions: Psychosis (24%), hypomania and mania (35%), are the most common psychiatric reactions to corticosteroid therapy. Several studies show that even a low dosage may induce psychiatric disturbances, most frequently during the first two weeks of treatment. However, as reported in this case, symptoms may occur at any time. Thus, a multidisciplinary team, as well as training of professionals from different specialties, such as psychiatry, rheumatology and endocrinology, are needed, since these syndromes may be confused with pure psychiatric conditions and consequently delay treatment and compromise prognosis.

Disclosure: No significant relationships.
Keywords: corticosteroid; manía; psychosis; prevention

EPV0464

Internet-related problems and learning motivation of the students of medical university

E. Sedova*, T. Goryacheva and M. Zavadskaya

Psychological-social Department, Pirogov Russian National Research Medical University, Moscow, Russian Federation
*Corresponding author.

Introduction: Nowadays the cyberspace penetrates all the spheres of our lives: work, leisure and learning activity. However, uncontrolled presence in the virtual reality can form Internet-addictive behavior. Young people seem to be in increased risk of Internet-related problems.

Objectives: The research aim is to study the motivational shpere of the students with different level of Internet dependency.

Methods: The research methods are: Chen Internet Addiction Scale (CIAS), Internet Perception Inventory, Learning Motivation

Diagnostics Inventory, Test of Motivation of Success or Fear of the Failure. The sample consists of 37 students of the medical university in the age from 21 to 24 years. According to the results of the CIAS 3 groups have been marked out: Group 1 - with the highest level of Internet-related problems, Group 2 – the risk group of forming the Internet addiction, Group 3 – students who have not demonstrated proneness to Internet-addictive behavior.

Results: The motivational sphere of the students with a low risk of Internet addiction seem to be more differenciated comparing with the one of the rest students. The motives of creative self-realization; communicative, social and learning motives have been demostrated. However, we have not found a significant differance between the groups in motivation for success. The motives of professional self-realization are equally important for all the research participants.

Conclusions: The obtained data can be implemented when designing Internet addiction prevention programs. We assume that including the motivational component into such programs can make them more effective.

Disclosure: No significant relationships.
Keywords: Internet addiction; motivational sphere

EPV0466

A systematic review: Investigation of effectiveness of the web based online interventions to manage and reduce stress of university students

A. Ozogul

Care Management, United Medical LLC, Ankara, Turkey

Introduction: The literature shows a high prevalence of psychopathological problems, anxiety and depression among university students because of academic expectations, uncertain future plans, staying away from their family, economic issues and peer relationships. Although these problems show high prevalence among university students, providing them a professional care is limited so most of problems remain untreated. Nowadays the students use digital technologies commonly therefore web based and computer delivered interventions may be useful for them to improve resilience and coping strategies.

Objectives: The intent of the study was to review systematically the impacts of web based and computer delivered interventions regarding stress management among university students.

Methods: Several databases were searched with using key words such as university students, online interventions, web based interventions and stress management. Randomised controlled studies were reviewed.

Results: We found 284 article with the key words. Only four of them met the including criterias. All results of reviewed articles show that web based online interventions have an impact to reduce depression, stress and anxiety level among students. According to the results students improved coping skills against stress after web based online sessions.

Conclusions: The findings show that web based and computed delivered interventions can be effective to improve resilience and reduce students` depression, anxiety and stress symptoms when compared non-interactive and inactive controls. In addition online interventions regarding stress management may provide us to reach out large group of university students.