females and the 79.8% (n=79) lives with their parents. Disruptive, impulse-control, and conduct disorders are the prevalent disorders in the sample (32.3%, n=32). The 21.1% (n=21) was diagnosed with depression, the 13.2% (n=13) with bipolar disorder and the 9.1% (n=9) with psychosis. According to the DERS, patients with emotional dysregulation are the 82,2% (n=37) of the sample. The 25.3% (n=24) of the sample could be classified as alexithymic. The most represented temperaments in the sample are the dysthymic 24.4% (n=11) and cyclothymic 22.2% (n=10). The mean score of the DERS is 122.33±29.5, the mean score of the TAS-20 is 58.9±166 and the mean score of the AQ is 78.7±30.1, the mean score of the BIS-11 is 65.2±19.1. A simple linear regression between DERS and AQ (R=0.536, $R^2$=0.287, F(1)=15.284, p<0.001), TAS-20 (R=0.502, $R^2$=0.252, F(1)=12.819, p=0.001) and BIS-11 (R=0.534, $R^2$=0.285, F(1)=15.128, p<0.001) was observed. A multivariate linear regression was observed between the DERS (R=0.917, $R^2$=0.842, F(1) =25.708, p<0.001) and the subscale about physical aggressivity of the AQ (β=2.065, p=0.008), the dysthymic subscale of the TEMPS (β=1.87, p<0.001), the hostility subscale of the AQ (β=-3.321, p<0.001), the subscale about difficulty identifying feelings of the TAS-20 (β=1.598, p=0.001), the total score of the AQ (β=0.5, p=0.006) and the subscale about cognitive impulsivity of the BIS-11 (β=1.024, p=0.047).

**Conclusions:** The results suggest a link between emotional dysregulation, impulsivity, aggression, and alexithymia. Notably, emotional dysregulation appears in those with a dysthymic temperament, marked by high aggression, difficulty identifying feelings, cognitive impulsivity and low hostility. Further research is needed to explore these findings and develop treatment strategies.

**Disclosure of Interest:** None Declared

## EPV0370

## Pharmacogenetics and its impact on pharmacological management of severe attention deficit hyperactivity disorder

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**Introduction:** Attention Deficit Hyperactivity Disorder (ADHD) varies in presentation and associated comorbidity conditions. Diagnosis and treatment is often challenging, highlighting the need for individualized approaches in managing ADHD. Optimal therapy includes a combination of different methods such as psychological interventions and pharmacotherapy. Pharmacogenetics allows for a more personalized and effective treatment plan, which can reduce empirical prescribing of medication, meaning less side effects, faster treatment response and achieving remission. Altogether, this leads to improved compliance and outcomes.

**Objectives:** In our opinion this is an interesting case study which explores the challenging presentation, medical management, and treatment of a patient with ADHD and its comorbidity.

**Methods:** We present a male subject, age 14, who met DSM- V criteria for ADHD at the age of 8. The treatment effects of conventional approaches with psychosocial interventions and individual psychotherapy as well as child and parental psychoeducation had not proven sufficient, so pharmacotherapy was added to the treatment strategy. He was initially introduced to methylphenidate therapy and developed side effects in the form of depressive symptoms and motor tics. Regression of side effects occurred when the drug was discontinued. Impulsive and aggressive behaviors became severe so antipsychotics were prescribed, which resulted in improvement of behaviour. Attention and concentration disturbances remained, however. During this period, the subject experienced a growth spurt, gained in body weight and his laboratory findings showed high liver enzymes. We conducted a multidisciplinary approach that included a complete examination by a geneticist, an endocrinologist, and a cardiologist. EEG and psychological testing were performed. Due to a lack of progress in socio-emotional functioning, genotyping analyses of CYP2D6, CYP1A2, CYP2C9, CYP2C19, CYP3A4, CYP3A5, ABCB1, ABCG2, 5-HTTLPR, DAT1 VNTR was performed.

**Results:** The pharmacogenetic findings suggested a higher activity of the CYP2D6 enzyme than normal. Significantly reduced and weak transport function of protein ABCB1 was observed. Atomoxetine is not a substrate for ABCB1, so the introduction of atomoxetine is planned after the stabilization of liver enzymes.

**Conclusions:** Various treatment strategies can help ameliorate ADHD symptoms. Finding an effective medication and dosage for a given child with ADHD can be a complex process. Although pharmacogenetic testing is not a standard procedure in child and adolescent psychiatry, it can have an impact on the management of treatment-resistant symptoms and medication-related side effects. The potential for pharmacogenetics to enhance treatment precision remains a promising area for future research in psychiatry.

**Disclosure of Interest:** None Declared

## EPV0373

## Beyond the Rainbow: Suicide, Suicidal Gestures and Self Harm Disparities Among Gender Minorites

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**Introduction:** Transgender and Gender Non-Conforming (TGNC) individuals are at increased risk of diagnosis with mental disorders, including suicidality and suicidal gestures (Anderson & Ford. Nursing Inquiry 2022; 29). Patients' psychological distress may be secondary to gender dysphoria; however, the evidence may be unclear.

**Objectives:** The goal of this review was to compile current evidence to assess a relationship between gender dysphoria and suicidal ideation, suicidal attempt, and self-harming behavior.

**Methods:** A literature review on PubMed databases was conducted using the search terms "transgender," "gender non-conforming "suicidality," "self-harm," "suicidal gestures," "child," "adolescent," and "youth" in various permutations to assess recent evidence on suicidality and suicidal gestures among TGNC children and adolescents. We also reviewed relationships between gender-dysphoria, social support as a protective factor, and suicidality and/or suicidal gestures among TGNC youths.

**Results:** A study conducted across 19 states in the United States and large urban school districts found that within the last year, 43.9% of transgender students reported they have seriously considered attempting suicide compared to 20.3% in cis-females and 11.0% cis-males, 39.3% of transgender students reported having a suicide plan compared to <16.0% of cisgender students, and 16.5% of transgender students reported having a suicide attempt requiring medical treatment compared to <2.5% of cisgender students (Garthe et al. Transgend Health 2022; 7 416-422). Another study conducted across three different US cities found higher levels of suicidal ideation and behavior among TGNC youths, compared to their cisgender counterparts (Johns et al. MMWR 2019; 68, 67–71) . Also, chosen name use was associated with less suicidal ideation, behavior, and depressive symptoms (Russel et al, J Adolesc Health 2018; 63 503–505). Additionally, a surveillance analysis concluded that TGNC youths reported experiencing higher levels of emotional distress, bullying victimization, risk behaviors (substance use and sexual behavior), and lower levels of protective factors such as internal assets, family connectedness, and feeling safe in their community (Eisenberg et al. J Adolesc Health 2017;61 521–526)
**Conclusions:** Further research needs to be conducted regarding the relationship between gender dysphoria and suicidality, and the presence of suicidal gestures. However, the current data suggests decreased depressive symptoms, as well as suicidal ideation and behavior associated with increased chosen name usage.

**Disclosure of Interest:** None Declared

## EPV0375

## Attention deficit hyperactivity disorder in prematurely born children: role of neuroinflammation caused by human cytomegalovirus infection

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**Introduction:** Numerous studies have revealed the association between deficit hyperactivity disorder (ADHD) and brain inflammation due to immune system response to congenital or perinatal human cytomegalovirus (CMV) infection.
**Objectives:** The aim of study was to examine the impact of neuroinflammation caused by CMV infection on the development of ADHD in prematurely born children.
**Methods:** The medical records of 126 prematurely born children aged 7-11 were retrospectively analyzed. Participants were divided into two groups, the observed population of 56 children with ADHD and the control group without ADHD. Three parameters were observed, C-reactive protein (CRP) as an indicator of inflammation, IgM antibodies to CMV for etiological diagnosis of CMV infection and cranial ultrasound findings for the confirmation of structural changes in the brain.
**Results:** Statistical analysis of our data showed the association between the onset of ADHD and the presence of congenital/perinatal CMV infection in prematurely born children ($p<0.01$). Nevertheless, these two variables had a very low positive correlation (phi coefficient 0.07173). The results did not show the association between elevated levels of CRP and presence of ADHD in prematurely born children ($p>0.01$), which confirmed that not every inflammation, regardless of the cause, was associated with ADHD. The analysis also confirmed the positive correlation between the variables listed in pairs: elevated levels of CRP and positive IgM on CMV, elevated levels of CRP and altered ultrasound neuroimaging findings, as well as positive IgM on CMV and altered ultrasound neuroimaging findings. All of these correlations speak in favor of the CMV caused neuroinflammation as etiopathogenetic basis in ADHD.
**Conclusions:** In our sample CMV-induced neuroinflammation was associated with the development of ADHD in prematurely born children.

**Disclosure of Interest:** None Declared

## EPV0381

## Understanding the Overlap: Exploring the Complex Comorbidity of ASD and ADHD

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**Introduction:** Autism Spectrum Disorder (ASD) and Attention-Deficit/Hyperactivity Disorder (ADHD) are neurodevelopmental conditions that often co-occur, leading to complex clinical presentations. While ASD is characterized by deficits in social communication and restricted, repetitive behaviors, ADHD is marked by inattention, hyperactivity, and impulsivity. The comorbidity between these conditions is increasingly recognized, yet their combined impact on diagnosis, treatment, and patient outcomes remains underexplored.
**Objectives:** This study aims to investigate the prevalence and nature of the comorbidity between ASD and ADHD. We also seek to identify the shared and distinct cognitive, behavioral, and developmental features, and assess the implications of this overlap for clinical practice, especially in diagnosis and treatment planning.
**Methods:** A systematic literature review was conducted, examining peer-reviewed studies published in the last 10 years. Key databases such as PubMed, PsycINFO, and Scopus were searched for studies involving ASD and ADHD comorbidity in children and adolescents. Data on prevalence rates, diagnostic criteria, symptom overlap, and treatment approaches were extracted and analyzed.
**Results:** The findings confirm a high prevalence of comorbidity between ASD and ADHD, with estimates ranging from 30% to 50% in pediatric populations. Shared symptoms, particularly inattention and executive dysfunction, often complicate differential diagnosis. Children with both ASD and ADHD tend to exhibit more severe social and cognitive impairments, and have a higher risk for anxiety, mood disorders, and academic challenges. The results suggest that overlapping symptoms may delay or complicate accurate diagnosis, affecting treatment efficacy.
**Conclusions:** The comorbidity of ASD and ADHD presents unique challenges for clinicians and families. Early identification of both conditions is crucial for tailored interventions. A multidisciplinary approach, combining behavioral, cognitive, and pharmacological treatments, appears to be the most effective. Further research is needed to develop clearer diagnostic criteria and targeted