only groups were significantly different than the ASD and ASD+ADHD groups.

Conclusions: Although we had a small sample size, we found that communication skills but not motor skills are related to later communication skills. Future research could examine 24-month home videos.

ADHD, ASD, INF

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6.4 BEHAVIORAL DISTURBANCES IN CHILDREN WITH NEURODEVELOPMENTAL DISORDERS: RELATIONSHIP OF SCHOOL BREAK ON PSYCHIATRIC HOSPITALIZATIONS

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Objectives: The goals of our project are to discern the differences in demographics and co-occurring psychiatric conditions in children hospitalized for behavioral disturbances without vs with neurodevelopmental disorders (NDD), and to analyze the factors that increase the risk of hospitalization in children with NDD and the impact of the school period.

Methods: We conducted a cross-sectional analysis using the Nationwide Inpatient Sample (NIS, 2018-2019) and included 11,570 inpatients (ages 6-17 years) who were admitted for behavioral disturbances (ie, diagnoses of conduct disorder, ODD, and intermittent explosive disorder). We considered a month with ≥10 day of holidays a school break, and divided the school period as school year (September to November, January to April) and school break (May to August, and December). A binomial logistic regression model was used to evaluate the adjusted OR related to hospitalization for behavioral disturbances with NDD and the school period (year vs break).

Results: NDD patients consisted of 16.4% of pediatric inpatients. Of the NDD patients, 66.8% were adolescents, 80.5% male, and 60.4% White. The likelihood of hospitalization for behavioral disturbances with NDD was higher and statistically significant after controlling for confounders (OR 1.33; 95% CI, 1.19-1.48) during the school break compared to the school year. Co-occurring psychiatric conditions did not increase the likelihood of psychiatric hospitalization. The rate of hospitalization for behavioral disturbances with NDD was higher during school break (18.4% vs 15.1% in school year). It was highest in June (22.2%) and December (20.6%) followed by July (16.2%) and August (18%).

Conclusions: The likelihood of hospitalizations for behavioral disturbances was increased by 33% in youth with NDD during the months associated with school breaks. When children are on school break, they might lose access to their routine and the structured support that may increase the risk of a behavioral health crisis in youth with NDDs. We need to have a multidisciplinary approach to supporting children with NDD by addressing behavioral, psychological, and adaptive functioning as well as considering the child's functioning in the setting of family resources in order to provide caregiver-specific resources and thereby decrease behavioral crises.

ICP, ND, SAC

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6.5 INTRANASAL OXYTOCIN FOR AUTISM SPECTRUM DISORDER: ASSESSING LONG-TERM SAFETY AND EFFICACY IN A RANDOMIZED CONTROLLED TRIAL

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Objectives: Interventions for ASD that modify brain circuitry underlying the disease phenotype to improve core symptoms are lacking. Studies investigating single-dose effects or lasting 4 to 8 weeks have found intranasal oxytocin (IN OT) to improve social function in youth with ASD, but few have explored its long-term safety and efficacy beyond several months.

Methods: Males aged 15 to 30 years with ASD (IQ ≥ 70) participated in a 7-month double-blind randomized placebo-controlled trial. Participants (Px) sprayed 24 international units (IU)/day of IN OT (Syntocinon) or placebo (PB) for 24 weeks, and were assessed at week 24 and followed up after 6 weeks (week 30). Improvements in social cognition and interaction were measured via Ekman 60 Faces Test and Autism Diagnostic Observation Schedule 2 (ADOS) reciprocal social interaction, respectively. The final sample after attrition included N = 11 Px (5 OT, 6 PB). As assumptions of data normality were met, independent-samples *t* tests were conducted.

Results: Compared to PB, improvement in ADOS social reciprocity from baseline at week 24 was significant at $p < .05$ ($t(9) = -1.92$, $p = .04$, $M_{A\text{-}B} = -2.03$). Improvement in Ekman total score at week 24 was borderline significant at $p < .1$ ($t_9 = -1.58$; $p = .075$; $M_{A\text{-}B} = -4.77$). For recognition of specific emotions, disgust ($t_9 = -1.34$; $p = .11$; $M_{A\text{-}B} = -1.60$), fear ($t_9 = -1.24$, $p = .12$, $M_{A\text{-}B} = -1.70$), and sadness ($t_9 = -1.13$; $p = .14$; $M_{A\text{-}B} = -1.50$) just missed significance at $p < .1$. At week 30, improvement from baseline for Ekman total similarly missed significance ($t_8 = -1.30$; $p = .12$; $M_{A\text{-}B} = -3.17$); only the recognition of disgust significantly improved ($t_8 = -3.13$; $p = .007$; $M_{A\text{-}B} = -3.25$). Side effects (SE) noted by 2 OT and 1 PB Px included tearing, sneezing, and nose sensitivity. No SE were reported towards the end of the trial. One adverse event was reported: a case of viral herpangina with fever and oral ulcers at week 19. OT was suspended for 1 week until symptom resolution, but ulcers reappeared 2 days after resumption. OT was discontinued and Px recovered.

Conclusions: IN OT has the potential to improve social cognition over 6 months, with some improvements even after drug cessation. However, this study was limited by its sample size. IN OT was mostly well tolerated. No evidence of OT's correlation with viral infections has been found. Oral ulcers' recurrence upon resumption may thus indicate ulcers as an uncommon SE or related to the course of infection.

ASD, LONG, RCT

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6.6 THE IMPACT OF ADVERSE CHILDHOOD EVENTS ON SERVICE SUPPORT AND EDUCATIONAL OUTCOMES OF CHILDREN WITH ASD: A THEORY-GUIDED ANALYSIS USING STRUCTURAL EQUATION MODELING

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Objectives: Children with ASD (CWA) and their families often experience a range of family adversity, financial strain, and accessing services and support. These adverse childhood events (ACEs) likely play an important role in whether the child receives special education or other developmental services—which may in turn impact educational outcomes. Thus, our objective was to create and analyze such a model using the National Survey of Children's Health (NSCH).

Methods: From the 2016-2020 data cycles, we extracted data for school outcomes, use of special education and ASD-related services, and demographics among CWA. We then used structural equation modeling (SEM) to map the quasi-causal pathways.

Results: The sample included 4248 CWA from age 6 through 17 years of age. Among the sample, 47.06% reported mild ASD symptomology, 41.18% with moderate, and 11.76% with severe. Further, 89.0% lived in metropolitan areas, and 49.11% were reported as having experienced 1 to 3 ACEs, with 10.76% experiencing 4 or more. Higher prevalence of children with 4+ ACEs were: 1) living in nonmetropolitan areas; 2) not receiving special education; or 3) not receiving specialty services. The SEM showed a significant direct relationship between ACEs and school outcomes ($p = .034$) and indirect relationships