

10 Best DBP Articles of 2024

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Disclosures

We have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider of commercial services discussed in this CME activity.

We do not intend to discuss any unapproved/investigative use of a commercial product / device in my presentation.

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Menzin ER. The Pediatrician's Lament. *N Engl J Med.* 2025 Jan 23;392(4):320-321. doi: 10.1056/NEJMp2414640. Epub 2025 Jan 8. PMID: 39778184.

The Pediatrician's Lament

Eleanor R. Menzin, M.D.

“It's your fault!” the renowned infectious disease attending told the cluster of students and residents. In the late 1990s, the varicella vaccine was relatively new, and uptake was disappointingly low. “You pediatricians,” he

went on, “must correct your wording. Instead of telling parents their child is due for the MMR vaccine and then half-heartedly offering the varicella vaccine, you should include it with the same declarative certainty:

“Your child is due for varicella and MMR vaccines.”

Though it has been nearly 30 years, I remember that moment as one of those rare crystalline learning moments when a gifted teacher's wisdom solidifies in a recep-

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N ENGL J MED 392;4 NEJM.ORG JANUARY 23, 2025

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What To Do Differently on Monday

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Friedman, Sandra et al. Attention-Deficit/Hyperactivity Disorder in Medication Treated Preschool-Age Children Without and With Autism Spectrum Disorder: A Developmental-Behavioral Research Network Study. *Journal of Developmental & Behavioral Pediatrics* 45(4):p e372-e377, July/August 2024.

Brief Report
See the Video Abstract at www.jdbp.org

Attention-Deficit/Hyperactivity Disorder in Medication Treated Preschool-Age Children Without and With Autism Spectrum Disorder: A Developmental-Behavioral Research Network Study

Sandra L. Friedman, MD, MPH,* Justine Shultz, PhD, MS,† William Barbaresi, MD,‡ Ami Bax, MD,§ Jaclyn Cacia, MS,† Alexis Deavenport-Saman, DrPH,|| Angela LaRosa, MD,¶ Irene M. Loc, MD,** Shruti Mittal, MD,†† Douglas L. Vanderbilt, MD, MS,|| Nathan Blum, MD,† Elizabeth Harstad, MD, MPH‡

ABSTRACT. *Objectives:* The study objective was to compare preschool children with attention-deficit/hyperactivity disorder without autism spectrum disorder (ADHD – ASD) versus those with ADHD and ASD (ADHD + ASD) treated with stimulants or alpha-2 agonist (A2A) medications. *Methods:* We conducted a medical record review of 497 children from 7 developmental behavioral pediatrics research network sites. Children were younger than 72 months when treated with medication for ADHD from January 1, 2013, to January 7, 2017. We analyzed differences in children with ADHD – ASD versus ADHD + ASD treated with stimulants or A2As, including demographics, coexisting conditions, medication effectiveness, medication discontinuation factors, and adverse effects. *Results:* Of the 497 preschool-age children with ADHD, 389 had ADHD – ASD and 108 had ADHD + ASD. No statistically significant differences were found in demographics between the groups. At baseline, children with ADHD + ASD were more likely to have coexisting conditions. Stimulants were significantly more effective than A2As; no significant differences were found in medication effectiveness of stimulants versus A2As for the ADHD + ASD group. Children with ADHD – ASD experienced more appetite suppression and stomachaches on stimulants. No associations were found between ASD status and rates of common adverse effects for children initiated on A2As. *Conclusion:* We found more similarities than differences when comparing ADHD – ASD preschool-age children with those with ADHD + ASD. For children with ADHD – ASD, stimulant medications were significantly more effective than A2As. Overall, there was notable overlap in presentation, response to medication, coexisting conditions, and effectiveness of medication classes.

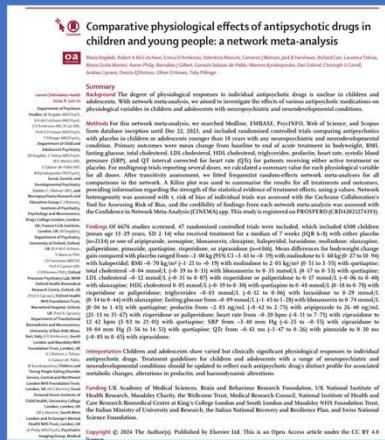
J Dev Behav Pediatr 45:e372–e377, 2024. Index terms: attention-deficit/hyperactivity disorder, preschool-age, autism spectrum, stimulants, alpha-2 adrenergic agonists.

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What to do differently on Monday

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Rogdaki M, McCutcheon RA, D'Ambrosio E, Mancini V, Watson CJ, Fanshawe JB, Carr R, Telesia L, Martini MG, Philip A, Gilbert BJ, Salazar-de-Pablo G, Kyriakopoulos M, Siskind D, Correll CU, Cipriani A, Efthimiou O, Howes OD, Pillinger T. Comparative physiological effects of antipsychotic drugs in children and young people: a network meta-analysis. *Lancet Child Adolesc Health*. 2024 Jul;8(7):510-521.



7

Kim R, Margolis A, Barile J, Han K, Kalash S, Papaioannou H, Krevskaya A, Milanaik R. Challenging the Chatbot: An Assessment of ChatGPT's Diagnoses and Recommendations for DBP Case Studies. *J Dev Behav Pediatr*. 2024 Jan 1;45(1):e8-e13.

Challenging the Chatbot: An Assessment of ChatGPT's Diagnoses and Recommendations for DBP Case Studies

Rachel Kim, Alex Margolis, Joe Barile, BA, Kyle Han, BA, Saia Kalash, Helen Papaioannou, MD, Anna Krevskaya, MD, Ruth Milanaik, DO

Objective: Chat Generative Pretrained Transformer-3.5 (ChatGPT) is a publicly available and free artificial intelligence chatbot that logs billions of visits per day; parents may rely on such tools for developmental and behavioral medical consultations. The objective of this study was to determine how ChatGPT evaluates developmental and behavioral pediatrics (DBP) case studies and makes recommendations and diagnoses. **Methods:** ChatGPT was asked to list treatment recommendations and a diagnosis for each of 97 DBP case studies. A panel of 3 DBP physicians evaluated ChatGPT's diagnostic accuracy and scored treatment recommendations on accuracy (5-point Likert scale) and completeness (3-point Likert scale). Physicians also assessed whether ChatGPT's treatment plan correctly addressed cultural and ethical issues for relevant cases. Scores were analyzed using Python, and descriptive statistics were computed. **Results:** The DBP panel agreed with ChatGPT's diagnosis for 66.2% of the case reports. The mean accuracy score of ChatGPT's treatment plan was deemed by physicians to be 4.6 (between entirely correct and more correct than incorrect), and the mean completeness was 2.6 (between complete and adequate). Physicians agreed that ChatGPT addressed relevant cultural issues in 10 out of the 11 appropriate cases and the ethical issues in the single ethical case. **Conclusion:** While ChatGPT can generate a comprehensive and adequate list of recommendations, the diagnostic accuracy rate is still low. Physicians must advise caution to patients when using such online sources.

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What To Do Differently on Monday

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Wass SV, Smith CS, Mirza FU, Greenwood EMG, Goupil L. Needing to shout to be heard? Caregiver under-responsivity and disconnection between vocal signaling and autonomic arousal in infants from chaotic households. *Child Dev*. 2024 Nov 8.

DOI: 10.1111/cdev.14833

EMPIRICAL ARTICLE

CHILD DEVELOPMENT

Need to shout to be heard? Caregiver under-responsivity and disconnection between vocal signaling and autonomic arousal in infants from chaotic households

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 Grant/Award Number: RPG-2018-281

Abstract
 Children raised in chaotic households show affect dysregulation during later childhood. To understand why, we took day-long home recordings using microphones and autonomic monitors from 74 12-month-old infant-caregiver dyads (40% male, 60% white, data collected between 2018 and 2021). Caregivers in low-Confusion Hubbub And Order Scale (chaos) households responded to negative affect infant vocalizations by changing their own arousal and vocalizing in response; but high-chaos caregivers did not, whereas infants in low-chaos households consistently produced clusters of negative vocalizations around peaks in their own arousal, high-chaos infants did not. Their negative vocalizations were less tied to their own underlying arousal. Our data indicate that, in chaotic households, both communicating and responding are atypical: infants are not expressing their levels of arousal, and caregivers are under-responsive to their infants' behavioral signals.

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What to do differently on Monday?

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Corrigan NM, Rokem A, Kuhl PK. COVID-19 lockdown effects on adolescent brain structure suggest accelerated maturation that is more pronounced in females than in males. *Proc Natl Acad Sci U S A*. 2024 Sep 17;121(38):e2403200121.

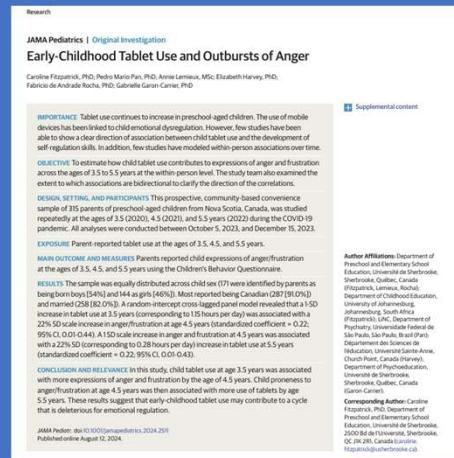


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What do you do differently on Monday?

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Fitzpatrick C, Pan PM, Lemieux A, Harvey E, Rocha FA, Garon-Carrier G. Early-Childhood Tablet Use and Outbursts of Anger. *JAMA Pediatr*. 2024 Oct 1;178(10):1035-1040. doi: 10.1001/jamapediatrics.2024.2511. Erratum in: *JAMA Pediatr*. 2024 Oct 1.



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What to do differently Monday

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Olfson M, McClellan C, Zuvekas SH, Wall M, Blanco C. Mental Health Impairment and Outpatient Mental Health Care of US Children and Adolescents. *JAMA Psychiatry*. 2024 Jun 1;81(6):606-610.

JAMA Psychiatry | Brief Report
Mental Health Impairment and Outpatient Mental Health Care of US Children and Adolescents

Mark Olfson, MD, MPH; Chandler McClellan, PhD; Samuel H. Zuvekas, PhD; Melaine Wall, PhD; Carlos Blanco, MD, PhD

IMPORTANCE Despite a federal declaration of a national child and adolescent mental health crisis in 2021, little is known about recent national trends in mental health impairment and outpatient mental health care among US children and adolescents.

OBJECTIVE To characterize trends in mental health impairment and outpatient mental health care among US children and adolescents from 2019 to 2020 across demographic groups and levels of impairment.

DESIGN, SETTING, AND PARTICIPANTS Longitudinal, retrospective, cross-sectional analysis of mental health impairment and outpatient mental health care use among youth (ages 6-17 years) within the 2019 and 2020 Medical Expenditure Panel Survey, nationally representative surveys of US households. Race and ethnicity were parent reported separately from 15 racial categories and 8 ethnic categories that were aggregated into Black, non-Hispanic White, and other (Asian, American Indian, and Other, non-Hispanic).

EXPOSURE Time period from 2019 to 2020.

MAIN OUTCOMES AND MEASURES Age- and sex-adjusted differences between 2019 and 2021 in mental health impairment measured with the Columbia Impairment Scale (a score \geq 16 indicates severe, 1-15, less severe; and 0, no impairment) and age-, sex-, and Columbia Impairment Scale strata-adjusted differences in the use of any outpatient mental health care in 2019 and 2020.

RESULTS The analysis involved 8331 participants, including 4031 girls and 4100 boys; among them, 1248 were Black and 3883 White. The mean (SD) age was 11.6 (4.0) years. The percentage of children and adolescents with severe mental health impairment increased from 5.9% in 2019 to 5.4% in 2020 (adjusted difference, -0.3%; 95% CI, -1.0% to 1.2%). Between 2019 and 2020, there was also no significant difference in the percentage of children and adolescents with less severe impairment and no impairment. The overall annual percentages of children and adolescents with any outpatient mental health care use increased from 10.8% in 2019 and 13.0% in 2020 (adjusted difference, 1.3%; 95% CI, -0.4% to 2.0%), however, this masked widening differences by race. Outpatient mental health care decreased for Black youth from 9.2% in 2019 to 8.4% in 2020 (adjusted difference, -0.8%; 95% CI, 0.0% to 1.6%), but increased for White youth from 15.7% to 18.4% (adjusted difference, 3.0%; 95% CI, 0.0% to 6.0%).

CONCLUSIONS AND RELEVANCE Between 2019 and 2020, there was little change in the overall percentage of US children and adolescents with severe mental health impairment. During this period, however, there was a significant increase in the gap separating outpatient mental health care of Black and White youth.

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What would you do differently on Monday?

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Pezalla AE, Davidson AJ. "Trying to remain calm...but I do reach my limit sometimes": An exploration of the meaning of gentle parenting. PLoS One. 2024 Jul 31;19(7):e0307492.

PLOS ONE

RESEARCH ARTICLE

"Trying to remain calm...but I do reach my limit sometimes": An exploration of the meaning of gentle parenting

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Abstract

Raising young children has always been hard, but evidence suggests that it may be getting harder. The isolation of the pandemic, the pressures to fulfill exacting parenting standards, and the explosion of "expert" parenting advice on social media have fueled the rise of "gentle parenting," an approach that pivots away from strict, discipline-heavy parenting approaches and toward a more empathetic and flexible form of parenting. Despite its popularity of gentle parenting, it has received no empirical scrutiny. The current study represents the first systematic investigation of what gentle parenting entails. Data were gathered from a sample (N = 100) of parents of at least one child between the ages of 2 and 7 from the Midwest and the Northeast. Participants were asked to describe their parenting style as either "gentle parents." Inductive analyses identified this approach as one that emphasizes high levels of parental affect and parent- and children's emotion regulation. Gentle parenting appears to be distinct from well-established forms of parenting approaches. Overall, parents reported high levels of parenting satisfaction and efficacy, but a subset of gentle parents who were highly critical of themselves reported significantly lower levels of efficacy than the rest of the sample. Symptoms of parenting uncertainty and burnout were present in over one-third of the gentle parent sample. Implications are discussed for future research and increased support for those who identify as gentle parents.

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What to do differently Monday

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Keehn B, Monahan P, Enneking B, Ryan T, Swigonski N, McNally Keehn R. Eye-Tracking Biomarkers and Autism Diagnosis in Primary Care. *JAMA Netw Open*. 2024 May 1;7(5):e2411190.

The image is a screenshot of a digital journal article. At the top, it says 'JAMA Network Open'. Below that, it says 'Original Investigation | Pediatrics'. The title of the article is 'Eye-Tracking Biomarkers and Autism Diagnosis in Primary Care'. The authors listed are Brandon Keehn, PhD; Patrick Monahan, PhD; Brett Enneking, PhD; Tylia the Ryan, PhD; Nancy Swigonski, MS, MPH, MBA; and Rebecca McNally Keehn, PhD. The abstract, key points, design, setting, and participants, outcomes, and results sections are visible, providing a detailed summary of the study's findings and methodology.

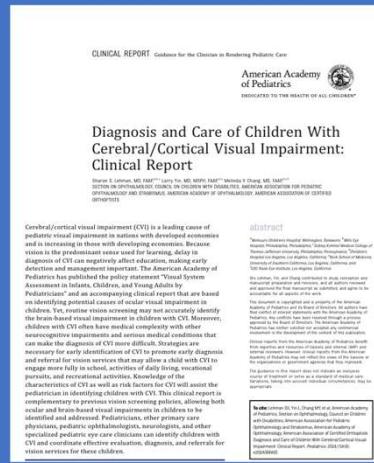
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What will you do differently on Monday?

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Lehman SS, Yin L, Chang MY; SECTION ON OPHTHALMOLOGY; COUNCIL ON CHILDREN WITH DISABILITIES; AMERICAN ASSOCIATION FOR PEDIATRIC OPHTHALMOLOGY AND STRABISMUS; AMERICAN ACADEMY OF OPHTHALMOLOGY; AMERICAN ASSOCIATION OF CERTIFIED ORTHOPTISTS. Diagnosis and Care of Children With Cerebral/Cortical Visual Impairment: Clinical Report. Pediatrics. 2024 Dec 1;154(6):e2024068465.



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What to do differently on Monday