Children with autism far less likely to have vision screening despite high risk of serious eye disorders

March 21 2023

Credit: Pixabay/CC0 Public Domain

Young children with autism spectrum disorder (ASD) are much less likely to receive vision screening than their peers, despite high risk for

serious eye disorders, according to a study by Nemours Children's Health published today in *Pediatrics*.

"I noticed that many of our patients with autism have never had vision screening, even though it's recommended for all young children," said the study's senior author Brittany Perry, DO, a pediatrician at the Nemours Swank Autism Center. "So, I wanted to study whether this might be a broader disparity—whether kids with autism receive vision screening less often than other kids."

The study found that only 36.5% of children with ASD had completed vision screenings at well visits, substantially less than the 59.5% rate for children without ASD. Moreover, among children with ASD, the screening rate for Black children (27.6%) was considerably lower than that for White children (39.7%) and for children classified as multiracial (39.8%).

Early childhood is crucial for vision development, and early detection and treatment of eye problems can prevent long-term vision loss. The research team examined data from 63,829 well visits of children ages 3 to 5 from 2016 to 2019, across a primary care network encompassing Delaware, Pennsylvania and Florida.

Researchers said that the Florida facilities had much higher rates of vision screening for kids with ASD (45.7%) than those in the Delaware and Pennsylvania (28.1%). They noted that 80% of Florida medical practices used the vision-testing method of photoscreening, compared to only 13% in the Delaware and Pennsylvania.

Photoscreening, which uses a specialized camera or video system to capture detailed images of a child's eyes, is particularly helpful for children with ASD because they cannot always understand and verbally respond to instructions or questions in conventional visual acuity tests.

The American Academy of Pediatrics (AAP) recommends annual instrument-based vision screening particularly for children with developmental delays. The researchers said that reimbursement is necessary for greater photoscreening use in primary care—a concern that AAP has also noted.

"Increased use of photoscreening may prove to be a great tool for reducing disparities and increasing vision screening in more vulnerable populations with autism," Perry said.

"The key takeaway from this study for providers is to be aware that these disparities exist for all children with autism, so we can work to provide better care," she added. "And for parents, it may help them to better advocate for their children with autism and to request a vision screening at a well visit, or a referral to an eye specialist, if their child is overdue."

Perry's team is currently studying the effect of the COVID-19 pandemic on pediatric vision screening, and plans to examine national data on this topic, in collaboration with other children's hospitals.

More information: Disparities in Vision Screening in Primary Care for Young Children with Autism Spectrum Disorder, *Pediatrics* (2023).

PAS 2022: 2022.pas-meeting.org/fsPopup.a … 1876&mode=posterinfo

Provided by Nemours Children's Health System