

NEWS

# Co-occurring conditions alter timing of autism diagnosis

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Children with autism typically have four or five other conditions, such as attention deficit hyperactivity disorder (ADHD), a new study suggests<sup>1</sup>. And which conditions a child has influences whether she is diagnosed with autism sooner or later than average.

The findings indicate that clinicians should screen for these conditions in children with autism and consider treatment plans that take them into account.

“Pure autism is very rare,” says **Norbert Soke**, an epidemiologist at the U.S. Centers for Disease Control and Prevention (CDC). The analysis is based on data from five U.S. states, collected by the CDC in 2010.

The conditions that tend to accompany autism may point to biologically distinct subgroups of the condition and give clues about its roots, Soke says.

The researchers analyzed data from 783 children with autism at age 4, and 1,091 children with autism at age 8. They documented the prevalence of 18 conditions and features, including single-gene conditions associated with autism, ADHD, **sleep** issues or gastrointestinal problems.

More than 95 percent of the children have at least one condition in addition to autism, the researchers found. About 69 percent of the 8-year-olds and 53 percent of the 4-year-olds have four or more conditions; 26 percent of 8-year-olds and 13 percent of 4-year-olds have seven or more.

Previous research has yielded similar results, but those studies relied on parent reports, were smaller or did not look for common problems, such as **sleep disorders and seizures**<sup>2</sup>.

“It’s very important that data like these make it into the diagnostics practices,” says **Evdokia Anagnostou**, senior clinician scientist at the University of Toronto’s Bloorview Research Institute,

who was not involved with the study. “We hear stories about kids with significant sleep disorder or anxiety that has not been addressed.”

## Piling on:

To identify the co-occurring conditions, clinicians looked at school and medical records. They found that the prevalence of some conditions varies with age.

For example, children with autism are more likely to have ADHD, **anxiety** and **motor problems** at age 8 than at age 4.

However, this may be because these conditions are under-recognized among 4-year-olds, Soke says. At that age, children are not yet in school and so have few opportunities for evaluations.

Some conditions can significantly alter the timing of autism diagnosis. For example, children who show regression, **injure themselves** or have frequent **temper tantrums** received an autism evaluation 4 to 14 months earlier than those without these conditions, the researchers found.

By contrast, ADHD can delay autism diagnosis by a year on average. Anxiety and oppositional defiant disorder can also delay evaluations for autism by up to 10 months. The results appeared 9 March in the *Journal of Autism and Developmental Disorders*.

Other studies also suggest that **ADHD significantly delays** autism diagnosis, says **Amir Miodovnik**, a pediatrician at Maimonides Medical Center in New York, who was not involved in the study.

“We believe that co-occurring symptoms of ADHD or similar behavioral issues are masking the recognition of core autism symptoms, particularly at younger ages,” Miodovnik says.

Regardless of the cause, a delay in autism diagnosis may cause children to miss out on the **benefits of early intervention**, Miodovnik says.

Soke plans to examine how co-occurring conditions affect the health and functioning of children with autism.

## REFERENCES:

1. Soke G.N. et al. *J. Autism Dev. Disord.* Epub ahead of print (2018) [PubMed](#)
2. Boulet S.L. et al. *Arch. Pediatr. Adolesc. Med.* **163**, 19-26 (2009) [PubMed](#)