



Study Summary

Does prenatal depression affect autism-related traits in children?

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Who sponsored this study?

The Environmental influences on Child Health Outcomes (ECHO) Program, Office of The Director, National Institutes of Health supported this research.

Why was this study needed?

Previous research suggests an association between prenatal depression or a history of depression prior to pregnancy and autism spectrum disorder (ASD) in children, but most studies have focused on a formal ASD diagnosis, rather than autism-related traits. Studying social communication and other autism-related traits can help researchers and clinicians understand how prenatal depression may be associated with these traits present in children at varying levels without a formal diagnosis. This is critical because autism-related traits can impact children's physical, social, and psychological development, regardless of whether they receive a clinical diagnosis.

What were the study results?

Children of mothers with prenatal depression had slightly more autism-related traits compared to those without. The association was similar among boys and girls. Prenatal depression also increased the likelihood of moderate to severe autism-related traits, indicating a higher likelihood of ASD diagnosis.

Footnote: Results reported here are for a single study. Other or future studies may provide new information or different results. You should not make changes to your health without first consulting your healthcare professional.

What was the study's impact?

This study adds to the understanding of how prenatal depression may be associated with neurodevelopment in children, such as social communication and behavioral characteristics that may not reach a clinical threshold but can still impact a child's social and behavioral functioning. These findings highlight the need for early ASD screening for children whose parents had prenatal depression to promote early intervention and support their healthy development. Mental health screening and prevention efforts for depression in pregnant individuals could also be beneficial.

Who was involved?

The study involved 33 prenatal and pediatric research sites with information on depression in birth parents and autism-related traits in children. The primary analysis included 3,994 parent-child pairs with

prenatal depression diagnosis data; a secondary analysis included 1,730 parent-child pairs with depression severity data.

What happened during the study?

Researchers measured the incidence and severity of prenatal depression and assessed autism-related traits using the Social Responsiveness Scale (SRS) for children up to 12 years of age.

What happens next?

While this study didn't explore the reason for the association between autism-related traits in children and prenatal depression in mothers, future research may analyze parent and child genetic data to clarify whether certain genes increase the likelihood of depression and autism-related traits, or what other factors affect the findings.

Where can I learn more?

Access the full journal article, titled "Prenatal Depression and Risk of Child Autism-Related Traits Among Participants in the Environmental Influences On Child Health Outcomes Program," in [Autism Research](#).

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