

# In utero stimulant exposure not tied to later neurodevelopmental issues

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Amphetamine/dextroamphetamine and methylphenidate exposure in utero does not appear to increase the risk for childhood neurodevelopmental disorders, according to a study [published](#) online Jan. 24 in *JAMA Psychiatry*.

Elizabeth A. Suarez, Ph.D., M.P.H., from Brigham and Women's Hospital in Boston, and colleagues evaluated the association between childhood neurodevelopmental disorders and in utero exposure to stimulant medications for attention-deficit/[hyperactivity disorder](#) (ADHD). The analysis included health care utilization data from publicly insured (Medicaid data from 2000 to 2018) and commercially insured (MarketScan Commercial Claims Database data from 2003 to 2020) pregnant individuals aged 12 to 55 years.

The researchers found that when adjusting for measured confounders, [amphetamine](#)/dextroamphetamine exposure was not associated with any outcome ([autism spectrum disorder](#): hazard ratio [HR], 0.80 [95% confidence interval (CI), 0.56 to 1.14]; ADHD: HR, 1.07 [95% CI, 0.89 to 1.28]; any neurodevelopmental disorder: HR, 0.91 [95% CI, 0.81 to 1.28]). There was an association seen between methylphenidate exposure and an increased risk for ADHD (HR, 1.43; 95% CI, 1.12 to 1.82) but not other outcomes after adjustment (autism spectrum disorder: HR, 1.06 [95% CI, 0.62 to 1.81]; any neurodevelopmental disorder: HR, 1.15 [95% CI, 0.97 to 1.36]). With stricter control for confounding by maternal ADHD, the association between methylphenidate and ADHD did not persist.

"Given the recent rise in use of stimulant medications for ADHD in adults and during [pregnancy](#), these results are reassuring for patients who depend on these medications throughout pregnancy for control of debilitating ADHD symptoms that interfere with daily functioning," the authors write.

**More information:** Elizabeth A. Suarez et al, Prescription Stimulant Use During Pregnancy and Risk of Neurodevelopmental Disorders in Children, *JAMA Psychiatry* (2024). [DOI: 10.1001/jamapsychiatry.2023.5073](#)

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