Medical Xpress

Antidepressant use in pregnancy tied to affective disorders in offspring; no causal link

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Major depressive disorder is highly prevalent, with one in five people experiencing an episode at some point in their life, and is almost twice as common in women than in men. Antidepressants are usually given as a

first-line treatment, including during pregnancy, either to prevent the recurrence of depression, or as acute treatment in newly depressed patients. Antidepressant use during pregnancy is widespread and since antidepressants cross the placenta and the blood-brain barrier, concern exists about potential long-term effects of intrauterine antidepressant exposure in the unborn child.

Using the Danish National Registers to follow more than 42,000 singleton babies born during 1998-2011 for up to 18 years, researchers at the Icahn School of Medicine at Mount Sinai investigated whether exposure to antidepressants in the womb would increase the risk of developing affective disorder like depression and anxiety in the child. In a study published April 5 in *Neuropsychopharmacology,* the scientists found that children whose mothers continued antidepressants during pregnancy had a higher risk of affective disorders than children whose mothers stopped taking antidepressants before pregnancy.

However, to understand whether the underlying disorder for which the antidepressant was given or the medication itself was linked to the child's risk of developing an affective disorder, they also studied the effect of paternal antidepressant use during pregnancy and similarly, found that children of fathers who took antidepressants throughout pregnancy had a higher risk for affective disorders. Thus, the research team speculates that rather than being an intrauterine effect, the observed link is most likely due to the parental mental illness underlying the antidepressant use.

"Approximately half of women who use antidepressants before pregnancy decide to discontinue use either before or during pregnancy due to concerns about the negative consequences for their child," said Anna-Sophie Romel, Ph.D., an instructor in the Department of Psychiatry at Icahn Mount Sinai and first author of the paper. "Our study does not provide evidence for a causal relationship between in-utero

exposure to antidepressants and affective disorders in the child. So, while other long-term effects of intrauterine exposure to antidepressants remain to be investigated, our work supports antidepressant continuation for women with severe symptoms or a high risk of relapse because untreated psychiatric illness during pregnancy can have negative consequences on the health and development of the child. Women and their health care providers should carefully weigh all of the treatment options and jointly decide on the best course of action."

More information: Anna-Sophie Rommel et al, Long-term prenatal effects of antidepressant use on the risk of affective disorders in the offspring: a register-based cohort study, *Neuropsychopharmacology* (2021). DOI: 10.1038/s41386-021-01005-6

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