

Reality check: Taking antidepressants while pregnant unlikely to double autism risk in kids



Emily is a staff writer at *Science*.

[Email Emily](#)

By

Emily Underwood

14 December 2015 3:00 pm

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No one really knows why rates of autism, or autism spectrum disorder (ASD), have roughly doubled over the past 10 years. Many researchers say the jump in numbers comes from greater public awareness of the condition, a neurodevelopmental syndrome characterized by altered social interaction, and from [changing diagnostic criteria that are](#)

catching previously undetected cases. Others look to environmental influences, such as exposure to toxins.

Now, a new study is raising eyebrows in the psychiatry and neuroscience communities. It suggests that women who use antidepressants while pregnant are nearly twice as likely to bear children with ASD. Many epidemiologists and psychiatrists say the study, published today in *JAMA Pediatrics*, is flawed and will cause unnecessary panic.

The controversy isn't new. Research in animals has hinted that antidepressants such as Prozac and Lexapro, from a class of drugs called serotonin reuptake inhibitors (SSRIs), may alter certain aspects of fetal neurodevelopment. A few epidemiological studies have even found a small correlation between SSRI use during pregnancy and ASD, but that can largely be explained by other factors, such as the severity of a mother's depression, says Lars Henning Pedersen, at Aarhus University in Denmark, who has no affiliations with any antidepressant manufacturers. Several other epidemiological studies have found no association between SSRIs and ASD.

In the new study, perinatal epidemiologist Anick Bérard, at the University of Montreal in Canada, and colleagues used data collected on 145,456 infants born in Quebec between January 1998 and December 2009 to calculate the risk of autism among babies whose mothers had used one or more antidepressants while pregnant. Among children whose mothers used one SSRI during the second or third trimester, there was a seemingly dramatic 87% increase in diagnosis with ASD compared with those whose mothers did not receive the drugs. For those mothers who had used more than two classes of antidepressants during late pregnancy, their child's risk of developing ASD increased four-fold.

The authors say that the findings suggest that pregnant women with mild to moderate—though not severe—depression should avoid antidepressants if possible. For mild-to-moderate depression, “exercise and psychotherapy work very well,” says Bérard, who also serves as a consultant for plaintiffs in litigations involving antidepressants and birth defects.

Some say that's a misleading and potentially dangerous conclusion, given two factors: the relatively low incidence of ASD in the general population and the fact that maternal depression—which can lead to poor sleep and eating patterns—can lead to greater health risks for unborn children. Incidence in the general population is about 1%, for example, so an 87% increase in ASD risk due to SSRI use would raise a child's absolute risk of developing autism to roughly 2%. That increase—if indeed caused by antidepressants—could be offset by benefits to the mother, which include a reduced use of harmful substances and a reduced risk of suicide.

But the “critical flaw” in the new research is that it doesn't fully account for the fact that women suffering from psychiatric illnesses already have a greater risk of having children with ASD, says Roy Perlis, a psychiatric geneticist at Harvard University who consults for several biotechnology startups. Although the authors controlled for maternal

depression, “they don’t really have reliable measures of severity,” he says. As a result, there’s no way to tell whether the children were at higher risk because their mothers were taking more drugs or because the women had more severe depression. Several papers, including two from Perlis’s group, have looked at large numbers of women and children and found no increased risk for ASD after adjusting for the severity of maternal depression, he says. “The risk travels with the disease, not the treatment,” he says.

Indeed, given the lack of evidence as to whether SSRIs and other antidepressants have any causal effect on fetal neurodevelopment, it’s possible that SSRIs could actually help a developing fetus whose mother is depressed, says Jay Gingrich, a psychiatrist at Columbia University who has no affiliations with any pharmaceutical companies. “Suffice it to say that there is a urgent need for more research into this area.”

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