**Use of Antidepressants in Pregnancy May Pose Risk for Newborns**

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Major depression affects approximately 8% of pregnant women in the United States, and 7-13% of pregnant women use antidepressants during pregnancy. Because untreated depression in pregnancy is associated with poorer outcomes for both mom and baby, medication and/or non-medication treatment is encouraged. However, more information is needed about whether and how antidepressant medications could impact a pregnancy and the baby. The study we just published in *Pediatrics* sought to evaluate the risk for certain pregnancy and newborn complications, namely pre-term birth, heart defects in the newborn, and respiratory distress in the newborn.

*What did we do?* We obtained data for nearly 227,000 singleton births between 2012-2016 from the OptumLabs Data Warehouse, a database that contains de-identified medical and pharmacy claims, lab results, and enrollment records for over 200 million privately insured or Medicare enrollees across a mix of ages, ethnicities and geographical regions in the US. We then looked at whether and when the women filled a prescription for an antidepressant during their pregnancy and the dosage that was prescribed. We then categorized the women based on their patterns of antidepressant use, resulting in 5 groups: (1) women with low dosages who reduced or stopped taking their antidepressant during their first trimester of pregnancy; (2) women with low dosages who continued taking their antidepressant throughout pregnancy; (3) women with moderate dosages who reduced or stopped taking their antidepressant during their first trimester of pregnancy; (4) women with moderate dosages who continued taking their antidepressant throughout pregnancy; and (5) women with high dosages who continued taking their antidepressant throughout pregnancy. We then compared the groups to see if there were differences in the rates of pre-term birth, newborn heart defects, and newborn respiratory distress. Funding for the study was partly provided by the National Institutes of Health (NIH), and we received access to the OptumLabs data from a University of California–OptumLabs research credit.

*What did we find?* We found that 15,041 (6.6%) of the pregnancies were exposed to an antidepressant. In comparing our 5 groups, we found that continued use of moderate (~40 mg/day of fluoxetine) or high dosages (~80 or more milligrams per day) of antidepressants increased the chance of preterm birth. We also found that compared to Group 1 (the women on low doses who reduced or stopped take their antidepressant during their 1st trimester), the other four groups had an increased chance of newborn respiratory distress, with those taking the highest dosages at the highest risk. Finally, we found that taking moderate dosages of antidepressants throughout pregnancy increased the chance of infant heart defects, but this finding was no longer significant when we compared them to women with depression or anxiety who did not take antidepressants, suggesting that the underlying depression or anxiety may play a role in risk for heart defects.

*So what’s the take-away?*Our study largely confirmed the findings of previous research suggesting there may be some increased infant risks when taking antidepressants during pregnancy, particularly if the mother is taking moderate-to-high dosages over the course of her pregnancy. The lead investigator on this study and our Center faculty member Dr. Gretchen Bandoli, PhD, MPH, stressed that “We cannot emphasize enough the importance of treating underlying depression or anxiety during pregnancy, as both conditions are linked to poorer outcomes for both mom and baby. What our findings suggest is that when the method of treatment is an antidepressant, health providers should consider treating the mom with the lowest effective dose that will benefit both mom and baby and they should also monitor mom and baby for these outcomes.”

*Read the Article* (link to: <https://pediatrics.aappublications.org/content/early/2020/06/04/peds.2019-2493.long>)