Maj or depressive disorder is a common, recurring, serious, and potentially life-threatening condition. The period prevalence for major depression during pregnancy appears to be 12.7% and for any depressive disorder, 18.4%. Women who have had 1 depressive episode are at risk for recurrence, and those having more than 3 episodes are candidates for long-term antidepressant treatment. Numerous studies have reported many potential consequences of depression on both the mother and infant. Timely treatment is essential, and research suggests that it can enhance outcomes for both mother and child. Unfortunately, depression is undertreated. Moreover, conflicting reports on the potential adverse effects of antidepressant medications exist in the literature. Psychosocial interventions are effective but are often time consuming, not always easily accessible, and possibly insufficient for women with severe illness. As clinicians, we have to inform our patients of the evidence for treatment and weigh the risks and benefits of each option. In the perinatal period, the process of making treatment decisions is exceedingly complex, as the needs of the mother and infant must both be given consideration and weighed against potential adverse effects for both.

In an effort to understand the effects of depression and antidepressant medications during pregnancy to best inform our patients, our team synthesized the literature. We developed a quality assessment tool, the Systematic Appraisal of Quality in Observational Research, to evaluate each article and performed meta-analyses when possible. Three systematic reviews and meta-analyses resulting from this work appear in JCP’s Online Exclusives this month and include the following outcomes: congenital malformations, including cardiac, poor neonatal adaptation, and the impact of maternal depression on various outcomes including premature delivery, gestational age, birth weight, low birth weight, neonatal intensive care unit admissions, Apgar scores, preclampsia, and breastfeeding initiation.

The strength of our work rests on our attention to study quality, the use of adjusted data when possible, the evaluation of potential moderator variables, and the consideration of many outcomes.

The findings of our meta-analyses suggest that antidepressants do not seem to be associated with an increased risk for congenital malformations in general. The risk for major malformations was also not significant in our primary analysis. Although we identified a statistically significant association between cardiovascular malformations and exposure to any antidepressant during pregnancy, the small magnitude of this effect brings into question its clinical significance. In contrast, we identified a statistically and clinically significant increase in risk for poor neonatal adaptation syndrome associated with antenatal antidepressant exposure, as well as associations with the specific signs of respiratory distress and tremors. These findings suggest a potential role for neonatologists in monitoring and caring for infants exposed to antidepressants in utero. Finally, our analyses reveal that antenatal maternal depression is associated with increased risk for premature delivery and lower rates of breastfeeding initiation, although in both cases, the odds ratios are relatively small. Our work also highlights a striking need for additional research of adequate quality, with attention to appropriate measures of exposure, outcome, and relevant potential confounders.

This program of research is timely, considering that the prescription rate for antidepressant medication has increased dramatically and that these medications appear to be more commonly used by women regardless of depression severity. As such, more and more women will face decisions about the use of antidepressant medications during pregnancy. Our hope is that by providing a stronger evidence base, this work will help to facilitate the complex and often difficult decision-making process that women must engage in with their clinicians and, ultimately, result in optimal outcomes for both mother and baby.

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Potential conflicts of interest: In the last 5 years, Dr Grigoriadis has received honoraria as a consultant and a member of an advisory committee or for lectures from Wyeth, GlaxoSmithKline, Pfizer, Servier, Eli Lilly Canada and Lundbeck; and has received research grant support from the Canadian Institutes of Health Research (CIHR), Ontario Ministry of Health, Ontario Mental Health Foundation, and CR Younger Foundation. Dr Ross and Ms Mamisashvili report no financial or other conflicts of interest.

Funding/support: Funding for the research discussed in this commentary was provided by a Research Syntheses grant from the Canadian Institutes of Health Research (CIHR), KRS-83127, and the Ontario Ministry of Health and Long-Term Care through the Drug Innovation Foundation, grant #2008-005.
Dr. Grigoriadis holds a New Investigator Award in Women's Health Research from the CIHR in partnership with the Ontario Women's Health Council, award NOW-88207. Dr. Ross holds a New Investigator Award from CIHR and the Ontario Women's Health Council, award NOW-84656. In addition, support to the Center for Addiction and Mental Health for salary of scientists and infrastructure was provided by the Ontario Ministry of Health and Long-Term Care.

Disclaimer: The views expressed here do not necessarily reflect those of the Ministry of Health and Long-Term Care.

REFERENCES


Editor’s Note: We encourage authors to submit papers for consideration as a part of our Focus on Women’s Mental Health section. Please contact Marlene P. Freeman, MD, at mfreeman@psychiatrist.com.