



# Depression During Pregnancy and Its Association with Birth Outcomes: Authors' Reply

Kathleen Szegda<sup>1,2,3</sup>

Published online: 27 March 2018  
© Springer Science+Business Media, LLC, part of Springer Nature 2018

We appreciate the letter writers' interest in our study and concur with their point that the study population of "Proyecto Buena Salud" provides a valuable opportunity to evaluate the association between depression and adverse birth outcomes.

We agree that antidepressant use may confound the association between depression and adverse birth outcomes, and therefore conducted a sensitivity analysis excluding the 31 women (2.4% of participants) identified as having likely used antidepressants as discussed in our manuscript. Findings were unchanged compared to the main analysis. The prevalence of other psychotropic medication, such as antipsychotics, in this population is likely to be even lower as women with mental illnesses such as schizophrenia and bipolar disorder would not have met eligibility criteria. Therefore, the absence of such information is unlikely to have substantively impacted our results.

We chose to use the clinically relevant outcomes of preterm birth and small-for-gestational-age to facilitate comparisons between our study and the prior literature and to readily allow our findings to be translated into public health recommendations.

An important advantage of our study over the prior literature was the ability to evaluate the impact of depression during three pregnancy time periods. For early, mid, and late pregnancy, we identified women with at least probable minor depression and probable major depression using published recommended cutpoints for the Edinburgh Depression Scale (EPDS) (Matthey et al. 2006). These recommendations were made in response to the increasing use in the literature of unvalidated cut-off scores or approaches derived from individual datasets. In addition, only a minority of p-values were statistically significant. While we cannot rule out chance as explanation for the observed positive findings, we were careful to interpret the findings from each individual model conservatively and in light of a feasible biologic rationale.

## Reference

Matthey, S., Henshaw, C., Elliott, S., & Barnett, B. (2006). Variability in use of cut-off scores and formats on the Edinburgh Postnatal Depression Scale: Implications for clinical and research practice. *Archives of Women's Mental Health*, 9(6), 309–315.

---

✉ Kathleen Szegda  
kszegda@umass.edu

<sup>1</sup> Department of Biostatistics and Epidemiology, University of Massachusetts Amherst, 715 North Pleasant Street, 414 Arnold House, Amherst, MA 01003-9304, USA

<sup>2</sup> Baystate Health System, Springfield, MA, USA

<sup>3</sup> Public Health Institute of Western Massachusetts, Springfield, MA, USA