Reviewer's report

Title: Socioeconomic disparities in prepregnancy BMI and impact on maternal and neonatal Outcomes and postpartum weight retention: the EFHL longitudinal birth cohort study

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Reviewer: Sohinee Bhattacharya

Reviewer's report:

Many thanks for asking me to review this well written article reporting adverse perinatal outcomes associated with maternal obesity and the socioeconomic gradient using data from an Australian birth cohort. The findings are not novel and only confirm what was already known about the relationship between socioeconomic factors, pre-pregnancy BMI and adverse perinatal outcomes. That said, I would recommend publication as it helps identify population groups who would benefit from complex public health interventions.

Minor essential revisions:
1. Introduction (line 7): The authors should qualify the association between maternal obesity and preterm delivery as only induced/iatrogenic preterm delivery is associated with maternal obesity.
2. The introduction should end with a justification of why this study was needed.
3. Methods: The authors should make clear that pre-pregnancy BMI was self reported while the postnatal weight was measured. I am a little concerned that at least some of the postnatal weight retention may be artificial due to a reporting bias. Is it possible to validate at least part of the data using case notes?
4. A flow diagram of loss to follow up of the cohort would be useful to assess attrition bias, although there was a good proportion of responses at the 1 year follow up.
5. The discussion addresses most limitations. It might be useful to discuss the effects of adjusting for variables that could essentially be path variables and the impact of residual confounding.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests