Reviewer’s report

Title: Inadequate prenatal care and its association with adverse pregnancy outcomes: A comparison of indices

Version: 4 Date: 30 November 2007

Reviewer: Arden S Handler

Reviewer’s report:

The authors have responded to most of the requested changes of both reviewers. However, I still have concerns about the focus on and use of the term gestational age bias.

1) The authors only provide a definition of gestational age bias in the results section of their abstract. If they continue with this focus they will need to include this definition in the Methods section of the paper (this would be a Minor essential revision).

2) The authors state that the association between R-GINDEX and LBW was not significant (Table 6). However, the authors base this on a p-value of .06 even though the odds ratios show very similar trends as the APNCU. I would consider this p value as suggesting a trend towards significance or marginal significance, rather than non-significance. As such, I believe their statement of no association should be changed. (this would be a Discretionary revision.)

3) It is clear that there is heterogeneity (non-uniformity) across gestational age strata for the association between prenatal care adequacy and adverse pregnancy outcomes. While this is the definition provided by the authors of the term, gestational age bias, I am not completely convinced that this non-uniformity across strata represents the presence of gestational age bias. Rather, it suggests there is effect modification by gestational age which Kotelchuck has recognized previously. As such, I think the authors might be better served by focusing less on this issue and focusing more on the fact that the quantitative indices that are available for prenatal care provide somewhat different results and that using one or the other will provide the user with different information. I think the analysis of Canadian prenatal care utilization data is important in its own right. I am not convinced that this article needs to prove the presence of gestational age bias. (this would be a Discretionary revision.)

What next?: Accept after minor essential revisions

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.