Reviewer’s report

Title: Racial and ethnic differences in primary, unscheduled cesarean deliveries among low-risk primiparous women at an academic medical center: a descriptive, retrospective cohort study

Version: 2 Date: 13 July 2013

Reviewer: Ngaire H Anderson

Reviewer’s report:

This is a very well written manuscript that addresses an important issue in a cohort with good data (including BMI), well designed analysis and a thoughtful discussion. I would however like clarification on the omission of some available confounders in the analysis, that I feel should be included:

1.- Major Compulsory Revisions

1.1 Women were included in this study if they underwent spontaneous labour or induction of labour (IOL). IOL has repeatedly been shown to increase the risk of CD (the authors have also listed failed IOL is listed as one of the indications for CD in the first stage– Methods: end of paragraph 3). Can the authors please explain the rationale behind not including IOL as an a priori confounding variable in the first multinomial analysis?


Without including this confounder, some of the association between ethnicity and CD may be explained by higher rates of IOL in some races. This would be consistent with aspects of the discussion that suggest that variations in clinical decision making for Black and Asian women may contribute to their higher rates of CD for fetal distress.

1.2 The second multinomial analysis of indication for CD adjusts for neonate size alone. Again, can the authors please indicate why IOL is not included as a confounding variable? IOL is associated with both an increase in risk of ‘failure to progress’ and fetal distress (through hyperstimulation as well as non-reassuring fetal heart rate changes – evidenced also by increased neonatal complications). This comment also applies to the final binary logistic regression model represented in Table 4.


1.3 It is well demonstrated in Table 1 that rates of obesity differ by ethnicity. Obesity is associated with an increased risk of failed IOL, as well as CD in the first, but not the second stage of labour. BMI was not included in the second multinomial analysis as a confounder of indication for CD by ethnicity – can the authors please explain this rationale? This comment also applies to the final binary logistic regression model represented in Table 4.


2.- Minor Essential Revisions

No Minor Revisions

3.- Discretionary Revisions

3.1 Do the authors wish to comment on the low overall rate of CS of 16.7% compared to public health targets in low risk primiparous women of 23.9% (Background: paragraph 1)?

3.2 Although there is moderate agreement between self-reported and measured weight, women have been shown to be more likely to underestimate weight.


Some reports have suggested that in pregnancy, self-reported prepregnancy weight is also underestimated. I suggest this be included as a minor limitation.


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