Reviewer’s report

Title: Cesarean and VBAC Rates among Immigrant vs. Native-Born Women - A Retrospective Observational Study from Taiwan

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Reviewer: Eugene R. Declercq

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Major Compulsory Revisions:

Clarify discussion to eliminate reference to maternal preferences as influencing the differences in cesarean rates. The authors present strong evidence for the clarity of the differences, but cannot speak to the cause of those differences.

Minro Essential

See below

'Cesarean and VBAC Rates among Immigrant vs. Native-Born Women - A Retrospective Observational Study from Taiwan'

1. Is the question posed by the authors well defined?
Yes. It is a somewhat narrow but clearly stated question

2. Are the methods appropriate and well described?
Yes, the authors describe their methods well. I would like to see some discussion either in the Methods or Discussion section of the implications of the limitations of the birth certificate (BC) dataset missing of both socio-demographic variables and a measure of parity. Parity in particular has been found to be helpful in understanding differences in cesarean rates and the large difference between Taiwanese and Vietnamese mothers on prior cesarean history may be related to that. The authors appropriately list the key variables that are missing but do not discuss what their loss might mean for their analysis.

3. Are the data sound?
Reasonably so. The authors do not cite validation studies on the Taiwanese birth certificate data and if there are some it would strengthen their case with variables such as diabetes, fetal distress and dystocia, the latter two of which are often problematic measures. The authors discuss in Methods the variables they chose to control for, but it looks as if they simply chose all the variables they had available in the BC dataset.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes. It is professionally written and presented.

5. Are the discussion and conclusions well balanced and adequately supported by the data?

While the analysis is straightforward enough, they begin their discussion with a leap far beyond their data to a conclusion that the differences they find are related to maternal preferences. They present no data to support that point – they only identify differences not the cause of those differences and the fact that immigrant mothers may be coming from countries with different rates does not mean they are less (or more) likely to request cesareans. Later in the discussion they appropriately identify other factors (e.g. physician preferences) but to open with that statement is inappropriate. If they are discussing maternal request cesareans, they need to distinguish between primary cesareans (where requests are usually uncommon) and repeat cesareans (where they are more common, in part because of the lack of VBAC options). For example the Irvine article cited was based on one hospital, medical records and involved only mothers with a prior cesarean. They also need to be careful in making reference to a national Italian rate since that too was based on a single hospital. Also, the studies on maternal request the authors’ reference are not based on actually interviewing mothers about their preferences but from provider reports of maternal preference. In the examples they cite from Norway (provider survey); Italy (one hospital based on medical records completed by staff); China (provider recorded in hospital discharge records) and Watford (medical records), there is no formal indication that mothers were asked about their preferences.

Minor points: (1) The authors cite an unreasonably high Taiwanese reported breech rate of 8-12% as perhaps a cover for maternal request, but that seems to contradict their own data in Table 1 which reports a total complication rate of 8.5%, with that rate including breech, dystocia and fetal distress among other complications; (2) the overall rates of complications cited seems unreasonably low, especially for Chinese (6.2%) and Vietnamese (5.3%) immigrants. If breech is 3% on average that leaves little for all other diagnoses; (3) while statistically significant the absolute differences in the VBAC rates are small

6. Are limitations of the work clearly stated?

Yes, with reservations noted above. They do overstate the strengths of their database in the discussion however. It is helpful that Taiwan has standardized payments for births with a global fee regardless of method of delivery, but to suggest there is no financial incentive for doing cesareans ignores the financial (and lifestyle) benefits for providers associated with the controlled timing of cesareans compared to the unpredictability of vaginal birth.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes, with reservations noted above.
8. Do the title and abstract accurately convey what has been found?
Yes

9. Is the writing acceptable?
Yes

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**
No competing interests.