Reviewer's report

Title: Differences in relative risk of stillbirth among women of different regions of origin compared with women from Germany: an analysis of the German perinatal database, 2004-2007

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Reviewer: Marcelo L Urquia

Reviewer's report:

This study provides a detailed examination of the risk of stillbirth according to maternal region of origin. It represents a unique case study. Despite Germany receiving large flows of immigrants, German studies on perinatal outcomes by immigration status are scarce, and this study contributes to filling the gap. The use of recent data at the national level is a strength. However, the most serious limitation is that authors do not understand “how the variable (region of origin) is collected in hospitals” (page 12), and the study is build upon this exposure. The manuscript is unclear in some places and this makes it difficult to evaluate the validity of the results. More detailed comments below.

Methods

Page 4: If the dataset covers 90% of all births in Germany, does this mean that the remainder is composed entirely of home births? If not, how does the 10% break down? It would be good to discuss how stillbirths and immigrants are represented among the births not included in the study and the possibility of bias.

Does the definition of stillbirth also include a gestational age criterion, like in many countries (>= 22 or 28 weeks), or includes any gestational age?

Region of origin: It is important to define the exposure as precise as possible, since studies like this may be used in future systematic reviews or meta-analyses. What do “origin” and “migrant background” mean? Country/region of birth? Of last permanent residence? Of nationality? If it is nationality (or whatever), then refer to what is being actually measured rather than to what would be desirable to measure. Please try to provide more details regarding how this variable is recorded in the database, such as the instructions to complete the perinatal sheet. To allow readers to better interpret results I recommend to include an online appendix listing the countries/ethnic groups by region, including those that fell within the “others” that were excluded from analyses.

Page 5, paragraph 3: Where it says “maternal status”, did authors mean “marital status”?

Results
It would be informative to state the overall proportion of births to immigrant women.

Ultrasound examinations are reported in the results but I cannot find the definition in the variable list of the methods section.

Discussion

The implications of the poor measurement of “region of origin / migrant background” should be discussed in more detail. The inability to separate countries and form regions suitable for international comparisons (and its impact on the results) needs to be discussed, at least for some groups very heterogeneous such as “Asians”.

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

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

I declare that I have no competing interests