Reviewer's report

Title: Birth outcomes among Native-born, China-born and Southeast Asia-born mothers in Taiwan: A population-based birth cohort study

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Reviewer: Lai-Chu See

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The submitted article “birth outcomes among native-born, China-born and southeast Asia-born mothers in Taiwan: A population-based birth cohort study” reported better birth outcomes (low birthweight (LBW), preterm birth) among children of China-born mothers, Southeast Asia-born mothers, than those of children of Taiwan-born mothers. Such epidemiological paradox is not new and has been reported in the US, Portugal, France, Belgium, and Taiwan. On the other hand, the strength of this article is that examining the difference in LBW and preterm birth among children across three groups of mothers included socioeconomic factors which is not available in birth registry data. I would recommend this article for publication, but had the following questions which need to be clarified:

Major Compulsory Revisions:

(1) Representative of the sample: please discuss or analyze the difference between the sample (Taiwan Birth Cohort Study) and the population.

(2) The rationale of having two foreign-born mothers (China-born mothers and southeast Asia-born mothers): I do not see any discussion about the maternal characteristics and birth outcomes between these two groups.

(3) Comparison of maternal characteristics and birth outcomes between this submitted article and literature: I found that LBW rate and preterm birth rate in this submitted article are similar to the literature but the maternal characteristics of this submitted article are very different from the literature. I would like to see some discussion on this issue.

(4) Syphilis, a predisposing maternal factors, is not available: some discussion of this aspect is needed.

(5) Strange result about insignificance in preterm birth of southeast Asia-born mothers in model 1 but became significance in model 2 (Table 4): I suggest the authors look at this problem comprehensively. Stratification, interaction, or restriction may be cues.

(6) Results of chi-square and t tests which compare the bivariate relationships between maternal nativity, risk factors and birth outcomes (p.9, para 2, line 4-6) is not seen.

(7) Title should be more specific: how about change birth outcomes to LBW and preterm birth?
Minor essential revisions:

(1) “very limited studies have shown the birth outcomes of foreign-born women in the Asia-Pacific region (p. 5, para 2, last sentence)” should be deleted as this statement is not true (see reference 14-17).

(2) Wrong number of education grouping: the correct number should be three (0-9, 10-12, 13+), not 4 (p. 9, para 1, line 1) and 5 (p.9, para 1, line 3).

(3) Incorrect text “when family socioeconomic factors such as family income and maternal education were adjusted, the difference in risk of LBW and preterm birth was reduced (p.14, para 3, last 3 sentences)” should be increased (e.g. odds ratio (OR) of preterm birth: 0.67 (model 1)#0.57 (model 2) for the China-born mothers, etc) because the magnitude of OR depends on how OR away from “1”.

Level of interest: An article of limited interest

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