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Title	Postpartum self-inflicted injury, suicide, assault and homicide in relation to immigrant status: a population-based cohort study
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Reviewer 1	Lyren Chiu
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General comments (author response in bold)	<p>1. Comments. This cohort study investigated 1,269,781 women who lived in Ontario and had a live birth between April 1, 2002 and March 31, 2012. The purpose of the study was to compare the risk of self-inflicted injury and injury inflicted by other between immigrant and non-immigrant women in Ontario. The findings suggested that immigrant mother were at overall lower risk of intentional injury than Canadian-born women. This study expands the knowledge about postpartum risk factors for self-harm, and harm inflicted by others, among immigrant women and provides important information for cultural competency in maternal care. However, the manuscript was poor written and requires a major revision to bring clarity for publication. We have re-written the manuscript for clarity, with a new interpretation section as per editorial comments #13 and #14.</p> <p>2. Abstract. The following sentence need be reworked. "Whether immigrant women have a different risk, warranting intervention, is unknown." The sentence has been re-worked as follows (also as per Editor Comment #6): "We aimed to determine whether immigrant and non-immigrant women differ in their 1-year risk of intentional injury after birth."</p> <p>3. Background 3.1. The literature listed is current and relevant. The gap and research purpose were identified. Thank you for this comment.</p> <p>3.2. The authors need clearly define terms and concepts. Some confusion was noticed. As per editorial comment, we have added an "aim" statement to the introductory section to clearly defined the terms used and the measures.</p> <p>4. Methods 4.1. The authors used retrospective cohort design to compare women who gave birth in the defined period but never mentioned retrospective design in the study. The word "retrospective" has been added to the description of the study design on Pg 4.</p> <p>4.2. The authors used a few datasets but did not mention how they obtained participants. Sentence like "Immigrants to Canada prior to 1985 are not classified as such, nor are those who immigrated to another Province before moving to Ontario," need to be clarified. On page 4, we have clarified (addition in bold): "We considered all Ontario women aged 10-50 with a liveborn infant with a valid health card number." We re-worked the description of the Immigration, Refugees and Citizenship Canada (IRCC) dataset to explain more clearly how it is linked to the ICES health administrative datasets, and then how we used it to classify the participants as immigrants/not (additions in bold): Pg 4. "The Ontario segment of the Immigration, Refugees and Citizenship Canada (IRCC) database contains detailed information for immigrants to the province from 1985 onward, including their refugee status, date of immigration and country of origin. About 86% of IRCC records are successfully linked to ICES data by probabilistic matching". Pg. 5. "Women were classified as immigrant or non-immigrant, based on their inclusion in the Ontario segment of the IRCC dataset."</p> <p>5. Interpretation. The authors only discussed pre-existing psychiatric morbidity and the influence of "a healthy immigrant effect" in this section. The mechanism section may be inserted in this section. Thank you for this comment. As per the editorial comments as well (#13), the interpretation section has been re-written. We have combined the "Explanations" and "Comparison with other studies" sections into 1 section; and we believe that by focusing in on some of the other reviewer comments around possible explanations for the results (i.e. especially around the possibility of selective under-reporting, that the results are better interpreted).</p> <p>6. Context. The authors compared the findings with existing literature. Some of the sentences required of rewording. As per Reviewer #1, comment #7 above, and as per the editorial comments (#13), the interpretation section has been re-written. We have combined the "Explanations" and "Comparison with other studies" sections into 1 section</p> <p>7. References. A few references, such as 1, 3, 7, 10, 33, 37, 49, were not accurately listed. We have checked all references, and we believe that all are now accurately listed.</p> <p>8. Wording and Writing. The authors need to conduct spelling and grammar checks. A professional proof read is highly recommended. We have conducted spelling and grammar checks, and the senior author (SV) has proofed the manuscript. The interpretation section has been substantially re-worked, and we hope that it is more clear now. We would be happy to obtain an official proof-reading if any concerns remain.</p>
Reviewer 2	Trine Munk-Olsen
Institution	Aarhus University, Aarhus, Denmark
General comments (author response in bold)	<p>This is a cohort study using population-based data from Ontario, Canada studying the risk of self-inflicted injury and injury inflicted by others, focused on comparing risks between immigrant vs non-immigrant postpartum mothers. The results indicate lower risk of self-inflicted injury among immigrants, which attenuated after adjustment. Risk of injury inflicted by others was lower among immigrants. It is a well written, well designed, and well conducted study by a group of authors with extensive experience with handling register data and analyzing them appropriately. The topic of the paper is interesting, highly relevant and of interest to researchers in the field of perinatal (mental) health. I have few comments, listed below in random order:</p> <p>1. I wondered if there was any information on the fathers? I missed this information as a possible confounder/mediator, but I guess it is not available?</p>

It is not possible to link the fathers in the Canadian datasets. We added this as a limitation (pg 10).

2. An opinion: I struggled to understand why intentional injury (self-harm) was grouped with completed suicides, as a group of women with self-harm may have had little or no real plans of suicides (and hence grouping these two categories is questionable – or do the authors disagree?).

The above could be true, although self-harm of the severity that would present to an emergency department is likely to be closer along the spectrum of intended suicide. We have now been very careful throughout the manuscript to be precise with our language in calling this “self-inflicted injury” which would cover the spectrum of self-harm and suicidal behaviours. The number of suicides was so low that we could not make comparisons between groups for this outcome separately. We have added into the interpretation section that we could not distinguish between self-injury presentations where women had an explicit intention to suicide vs. not. We have added the following to the limitations section in this regard (page 10):

“For self-inflicted injury, there is no mechanism to distinguish between injuries where a women intended to die vs. self-harm, such as for self-regulation or a plea for help.”

3. I appreciate the discussion related to the “health immigrant effect” and wonder to which extent the results specifically reflect current and previous Canadian immigration policies? If so, I was hoping for a few lines discussion of the generalizability of the results to other countries.

This is a very helpful comment. While we had referenced some data on other countries, we had not really brought it to the forefront of the interpretation. This issue is important, and so we have re-worked it into the interpretation, on Page 10 (additions in bold):

“Interestingly, our finding that immigrant mothers were at lower risk for injury inflicted by others is not consistent with prior European data which showed a higher homicide rate among female migrants. These prior studies were not restricted to events arising postpartum, nor did they include data on non-fatal assaults. So, the extent to which our findings reflect a Canadian phenomenon or are generalizable to other countries, is unclear. In our study, higher rates of assault – approaching those of non-immigrant women – were observed in some immigrant groups, namely refugees and women from certain countries of origin. This is consistent with studies that observed a higher risk of sexual assault among mothers who are refugees and asylum seekers, compared to non-refugee immigrant mothers. World regions with high rates of perinatal intimate partner violence do include areas of Africa and the Caribbean where the higher rates of immigrant assault are observed. The extent to which our findings generalize to those of other countries or jurisdictions may depend to some extent on differences in immigrant characteristics in those regions.”

4. I believe the results related to risk of injury by others are due to underreporting of these events in immigrant women. This would be highly feasible, as records of harm from a partner potentially will have consequences for the immigrant families. I realize this is mentioned, but I missed that this topic was emphasized even clearer vs the healthy immigrant effect which is discussed considerably.

As per editorial comments, this issue has been moved to the forefront of the discussion and moved into the re-written interpretation proper (as opposed to simply in the limitations section). Please see pages 9/10 where we have added the following:

Pg 9: “Especially for those newest to the country, issues such as social stigma, language fluency, fear of deportation or reprisal, or the presence of a male relative at a health visit, might discourage a recent immigrant woman from disclosing that a specific injury was intentional”

Pg 10: Immigrant women, and particularly newer immigrant women, may be less comfortable presenting to an ED - especially when injuries are not life-threatening - for reasons similar to those discussed above that could lead to selective under-disclosure. This could result in selective under-counting of intentional injury in some immigrant groups.