Author’s response to reviews

Title: Estimation of the adolescent pregnancy rate in Thailand 2008-2013: An application of capture-recapture method

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Author’s response to reviews:

Friday, September 27, 2019
Dear Editor,

The manuscript "Estimation of the adolescent pregnancy rate in Thailand 2008-2013: An application of capture-recapture method" (PRCH-D-18-00813) has been assessed by the reviewers. They have raised a number of points that would improve the manuscript. We would like to submit the revised manuscript with necessary correction according to reviewers’ comments. The point-by-point response has been provided as follows.

We declare that we have no conflict of interest in connection with this paper. We also declare that this submitted material has not been published and is not under consideration for publication elsewhere.

Yours sincerely,

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Editor Comments:
Please copyedit your manuscript to improve the standard of written English. I suggest that you ask a native English-speaking colleague to help you with this, or to consider using a professional service.

We have asked Stephen Pinder, a native English speaker who has experienced in manuscript editing for decades, to proofread and correct the whole manuscript.

Reviewer reports:

Reviewer 2 (Reviewer 2): PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses one or several testable research questions?
(Brief or other article types: is there a clear objective?)
No - there are minor issues

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?
No - there are minor issues

EXECUTION - Are the experiments and analyses performed with sufficient technical rigor to allow confidence in the results?
Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?
Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?
No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? If not, can further revisions be made to make the work technically sound?
REQUESTED REVISIONS:

Comment: This study should not be described as a cross-sectional study. It is an application of the CRC methodology that incorporates vital statistics, administrative and cross-sectional data sources. We have re-written this in the method in the abstract and the main method according to comment, see page 3 line 8 and page 6 line 1.

Comment: An important consequence of the application of this method is not described - do the group 1 results presented in Table 4 differ significantly from the Group 1+2 estimate provided in that same table? If the CRC enhanced estimates provide more accurate information on adolescent pregnancy trends.

We actually aimed to estimate pregnancy rate, which consisted of live births and non-live births, but we did not aim to compare whether the estimated rate in group 1 only is significantly different comparing with that estimated in group 1+2! We have mentioned differences of adolescence pregnancy rate estimated by CRC and actual observed data in the results, see page 13 line 10, where “Adolescent pregnancy rates estimated by CRC and actual observed data were then compared indicating higher estimated rates by CRC than Source1 only (adolescent birth rate), Source1 plus Source2, and Source1 plus Source2 plus Source3…..see Figure 2.” In addition, we have also added additional numbers estimated by Source 1+Source 2 comparing with group 1 only in the result part to emphasize this, see page 13 lines 7-8.

Comment: The article does not clearly articulate the potential impact of improved estimates of adolescent pregnancy. Obviously, accurate estimates are always preferred, but if the 'before' estimates are a consistent undercount, the need for more sophisticated corrections are not needed.

We have added a few sentences to emphasize about this in discussion, see page 17 lines 12-17.

Comment: The manuscript has improve discussion of non-live births, but does not adequately address early pregnancy losses that will not require hospitalization. Most early losses will not involve obgyn services.

We agree that early pregnancy loss which neither requires OB service nor hospitalization is not considered. We have added this in limitations, see page 17 lines 10-11.

Comment: The potential impact of limiting to OPS hospitals is not fully described.

We have added a sentence describe the potential impact of limiting to OPS hospitals in page 16 lines 13-14.

Comment: The manuscript recommends a repeat of the hospital-based survey every 2-3 years. The rationale for this recommendation is not clearly stated (especially the frequency).

We have re-written this as the hospital-based survey should be performed regularly depending on feasibility and available funding.

Comment: ADDITIONAL REQUESTS/SUGGESTIONS:
The authors have worked to improve the language and readability of the manuscript, but issues persist. Some examples include:
We have asked Stephen Pinder, a native English speaker to proofread and correct the whole manuscript.

Page 15, line 8-9: "definitely incomplete with uncertain degree of underreports" - this statement is vague.
   We have re-written this sentence. see page 15 lines 10-13.

Page 10, line 11: Does the number 772,036 refer to records of pregnancies or unique women?
   This number refers to records of pregnancies. We added “pregnancy records” in this sentence to make it clear.

Page 8, line 14: Does the word episodes mean pregnancies?
   Yes

Page 5, line 4-7: Awkward phrasing
   We have re-written this sentence.

Page 5, line 17: "considers only life birth" should be "counts only live births"
   We have revised this sentence as suggested.

Page 4, line 4-5: Awkward sentence
   We have re-written this sentence.

Page 3, line 6: The meaning of 'non-unified' is not clear
   We have revised this sentence, and removed the unclear 'non-unified' terminology.