Reviewer’s report

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

Version: 1 Date: 27 Mar 2019

Reviewer: Reviewer 2

Reviewer's report:

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?

Maybe - with major revisions
PEER REVIEWER COMMENTS:

GENERAL COMMENTS: The manuscript is overall improved methodologically, but concerns with respect to language, impact and assumptions remain.

REQUESTED REVISIONS:

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.

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.

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.

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.

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

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).

ADDITIONAL REQUESTS/SUGGESTIONS:

The authors have worked to improve the language and readability of the manuscript, but issues persist. Some examples include:

Page 15, line 8-9: "definitely incomplete with uncertain degree of underreports" - this statement is vague.

Page 10, line 11: Does the number 772,036 refer to records of pregnancies or unique women?

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

Page 5, line 4-7: Awkward phrasing

Page 5, line 17: "considers only life birth" should be "counts only live births"

Page 4, line 4-5: Awkward sentence

Page 3, line 6: The meaning of 'non-unified' is not clear
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.
This reviewer has been recruited by a partner organization, Research Square. Reviewers with declared or apparent competing interests are not utilized for these reviews. This reviewer has agreed to publication of their comments online under a Creative Commons Attribution License attributed to Research Square and was paid a small honorarium for completing the review within a specified timeframe. Honoraria for reviews such as this are paid regardless of the reviewer recommendation.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.