Reviewer's report

Title: Evaluating progress towards triple elimination of mother-to-child transmission of HIV, syphilis and hepatitis B in the Netherlands

Version: 1 Date: 15 Feb 2019

Reviewer: Kathryn Lovero

Reviewer's report:

This is a well-written manuscript reporting the progress on EMTCT of HIV, syphilis, and HBV in the Netherlands by combining data from a variety of national databases. Certain aspects of the methods section require more detail (described below), but the results are clearly outlined and the conclusions appropriate. The overall impact of the manuscript would benefit enormously from a connection to its global significance. In its current form, it seems important for the Netherlands, but it is not clear why it is of interest to a global audience.

Detailed Comments

Lines 83-85: "To achieve official validation, additional data collection and analyses will have to be described in a full country report, such as extensive case studies, evaluation of additional criteria, and an assessment of data- and laboratory quality."

What are the additional criteria referred to here? What is lacking in the current analysis methods?

92-95: "Screening coverage is estimated by dividing the number of women screened by the number of children born in the Netherlands half a year later, while correcting the numerator for double registration of the same pregnancy and for screening of women living abroad, and correcting the denominator for loss of pregnancies and multiple births(5)."

This seems like a complex and, potentially, inaccurate method when considering such low prevalence diseases, and the reference for it is in Dutch. The authors should describe more fully how the corrections are calculated.

106-112: "To be able to compare annual numbers of HIV positive pregnant women between the ATHENA cohort and Praeventis data (which is based on screening date), we estimated the date of screening for the women in the ATHENA cohort. For women who were newly diagnosed with HIV during pregnancy, we used the date of diagnosis as the date of screening. For the other women, we used the date of their 12th week of pregnancy, derived from the estimated due date, as this is the average moment of screening. If the estimated due date was not known, which was mostly the case for pregnancies that did not result in delivery, we used the date of termination of the pregnancy."

How was this data combined and which numbers reported required the combination of these sources?
138-140: "To obtain information on HBV infections among children, we collected data on children aged <2 years old and born in the Netherlands from the Osiris database."
The authors need to state why this is a reliable method to measure congenital HBV infection. How do you estimate the portion that are not congenital?

The authors should discuss the rate of stillbirth associated with congenital syphilis. While they are not wrong to conclude that this is very unlikely to increase the number above WHO criterion (Lines 204-207), it important they indicate how high congenital syphilis cases may really be if stillbirths were included.

Do the authors have a hypothesis as to what happened between 2014 and 2015 that improved viral suppression so much?

**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.

Yes

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

Yes

**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.

Not relevant to this manuscript

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

Acceptable
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