Reviewer’s report

Title: Health system strategies to increase HIV screening among pregnant women in Mesoamerica

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Reviewer: Kim Marsh

Reviewer’s report:

This article offers an innovative approach to describing the demographic, socioeconomic and systems predictors of HIV screening among pregnant women from the poorest areas in Guatemala, Honduras, Nicaragua, Panama, El Salvador and one state in Mexico. The manuscript is well-written and the methods are described in detail. Please see some overarching and two more specific comments.

Overarching comments:

- WHO calls for universal HIV testing as part of ANC care for all women. It might be useful to reference these guidelines to bring in the broader global context, because in practice, 88% of women screened among those accessing ANC is reasonably high (though obviously not the set out goal of universal access). Are there other pregnancy screening tests (e.g., anemia, syphilis) that were included in the questionnaire to identify to what extent this is a problem of HIV screening alone?

- There doesn’t seem to be much evidence presented from the literature about wealth and risk of acquiring HIV among women in these countries. One obvious question is are women living in these areas at higher risk for HIV transmission than those living in less poor areas?

- It seems like a missed opportunity in the study to have asked women who report testing what their HIV status, assuming that biomarkers were not part of the study protocol. Can the authors comment on why this wasn’t done?

- Although the most recent birth was used as the basis for data collection, the time period over which live births were included is 5 years. In many of these countries, evidence from the literature show that HIV screening and knowledge of status has improved considerably in many countries. Have you looked at the temporal trends in HIV testing among participants and possibly include this in the regression analysis or stratify by time since birth? This might be another way to understand the potential for recall bias of testing.

- One obvious recommendation that doesn't come out is that HIV screening should be moved to the first visit if it is not already part of the policy/practice. The recommendation that women should get 4 ANC visits makes obvious sense for health reasons but the conclusion that they are more likely to be tested as a result of having 4 visits implies that testing is being performed for
some women only at the last visit. To ensure the health of the mother and to minimise risk of transmission to the child, HIV infected pregnant women should be initiating ART early on during the pregnancy, which means early testing.

- Limited access to health care among women in more rural areas is identified in the discussion as a possible reason for not having access to ANC or testing. Was this factor (either distance from clinic or self-reported ability to access a clinic) not feasible to include in the regression?

Minor specific comments:

Background - Please clarify what is meant by "general" prevalence - is this among adult women of reproductive age?

Discussion - please add a citation for the statement about source of transmission: "However, in three of the studied countries..."

Level of interest
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An article of importance in its field

Quality of written English
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