Author's response to reviews

Title: Perinatal outcomes in a South Asian setting with high rates of low birth weight

Authors:

Kuryan George (kuryan@cmcvellore.ac.in)
Jasmin Prasad (jasminep@cmcvellore.ac.in)
Daisy Singh (pushp@cmcvellore.ac.in)
Shantidani Minz (shantidani@cmcvellore.ac.in)
David S Albert (david.selvapandian@gmail.com)
Jayaprakash Muliyil (jayaprakash@cmcvellore.ac.in)
K S Joseph (ksjoseph@dal.ca)
Jyothi Jayaraman (j.jayaraman@ns.sympatico.ca)
Michael S Kramer (michael.kramer@mcgill.ca)

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Author's response to reviews: see over
Response to Reviewers comments

Reviewer 1
Reviewer's report:
Comment: I believe the authors have provided reasonably robust and plausible responses to the two reviews and as a result the manuscript is much improved. I have no further substantive comments and would recommend acceptance.
Response: We agree that the revisions made in response to the 2 reviewers comments have considerably improved the manuscript and thank both reviewers for their comments. No further revision is required in response to this comment.

Reviewer 2
Reviewer's report:
Comment: I question the validity of using the Canadian growth standards to make concluding remarks on the very high/extremely high rates of fetal growth restrictions in KB. It is not surprising that the SGA rates were relatively low when the Indian Standard published in 1971 was used for classification. It would be important to use a more recent fetal growth standard from India and reclassify instead of concluding that "SGA rates are implausibly low under Indian Standard" Pg 12.
Response: Currently it is unclear which, if any, fetal growth standard is appropriate for categorizing Indian live births in SGA, appropriate for gestational age, etc. We have made the changes to the revised manuscript to indicate this i.e., by not implying that one fetal growth standard is more appropriate than another.
Page 13
"SGA rates were very high in Kaniyambadi under the Canadian fetal growth standard and low under the decades old Indian fetal growth standard."
Page 13-14
“Controversies surrounding the need for customized fetal growth standards notwithstanding [34-36], research needs to be directed at developing an appropriate fetal growth standard for Indian live births. Recent developments in this area, specifically methods that allow the creation of outcome-based fetal growth standards [37], may prove helpful in developing a consensus on an appropriate standard for Indian fetuses.”

Comment: SGA rates based on Canadian standards did not show significant decline, while those based on Indian standard showed a significant decline Pg 9. I don't believe it is the authors' intention to show that there was no change in the SGA rates inspite of all the interventions provided under the project.
Response: Crude SGA rates showed a significant secular trend irrespective of which fetal growth standard was used to classify live births as SGA. The magnitude of decline was dependent on the
standard used. The regression analysis, carried out to isolate the potential effects of program
intervention from the effects of changes in population characteristics (i.e., maternal age, parity,
height and infant sex) showed that changes in population characteristics were responsible for
some of the temporal improvements in SGA rates. We have added a line stating this
Page 13
“Regression adjustment for maternal age, parity, height and infant sex attenuated the temporal
decline in SGA rates suggesting that some of the improvement in fetal growth was due to
changes in these factors.”

Minor Comments

Comment 1- Accuracy of gestational age based on menstrual data:
I understand the limitation of the study, however it would be unfair to refer to the Pune, India
study (Ref 51), without clearly indicating in the text that the information is from a study on
women seeking early abortions.
Response: This change has been made. The sentence on page 17 now reads
“One study (on an albeit dissimilar population of women seeking early abortion) has shown that
the accuracy of women’s estimates of pregnancy duration (based on menstrual dates) were no
different in Pune, India compared with Atlanta, United States [51].”

Comment 2- Denominator for calculation of rates:
Please indicate in the text that the denominators used for the calculating LBW, SGA and preterm
birth rates are live-births.
Response: We have indicated this in the Methods section (page 6). This is also stated in the
column labels in Table 3 and in the Figure 1.