Reviewer’s report

Title: New Birth Weight Reference Standards for Indian Babies

Version: 4 Date: 11 August 2012

Reviewer: Matthews Mathai

Reviewer’s report:

Major Compulsory Revisions:

1. The current draft includes two sets of birthweight centiles based on sex of infant and birth order. Having two separate sets of tables (Tables 1 and 2) to classify an infant is unlikely to be useful in clinical practice. Instead, the four sets of birthweight centiles would be more useful - first born male, first born female, latter born male, latter born female, and the authors should reanalyse their data along these lines.

2. The birthweight of latter born infants is on average less than that of first born infants. This is contrary to other published reports on birthweight and needs clarification.

3. Have the authors studied the effect of other factors e.g. maternal height and weight on birthweight? Corrections for maternal size are usually required when using adjusted birthweight centiles.

4. Less than 3% of births were excluded because of maternal risk factors likely to affect birthweight. This seems small for a referral institution and should be clarified.

2. The authors suggest that birthweights are expected to increase because of the economic changes over the last two decades. The data for this report span a 15 year period. What have been the changes in birthweight and change in gestation at birth over this time period?

Minor essential revision:

1. Table 3 assesses the potential for misclassification of birthweights when unadjusted birthweight centiles are used. For purposes of clinical management, it would be more meaningful to look at misclassification at extremes of birthweight distribution, say below the 5th and/or 10th centile and above the 90th and/or 95th centiles.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests