Reviewer's report

Title: Poor weight gain in low birth weight infants following hospital discharge in Kampala, Uganda

Version: 1 Date: 20 September 2011

Reviewer: R. Mauricio M Barria

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Major Compulsory Revisions

1. What elements exist to believe that this is a random sample to justify the use of statistical inference? What was the sample size? Other element not specified is the magnitude of desired precision for the calculation of sample.

2. There are no antecedents on how the authors managed the issue of independence of observations in cases of multiple births, considering that there are cases where children of a same mother showed different behavior with respect to regain birth weight.

3. It may happen that the hospitalization was prolonged due to poor weight gain in the hospital? Should be considered in a differential way those children who achieved or regained birth weight prior to discharge so as not to assign a condition in hospital in cases not justified. One possibility is to stratify the sample by this condition.

4. It is not clear why the OR estimate for various factors (gestational age, birth type, etc.) only considered the 113 infants who did not regain the weight. For estimating an association or risk must carry out considering the behavior of the variables in the entire group so as not to underestimate or overestimate associations or generate any relationship where there is not really.

Minor Essential Revisions

1. The title should be noted that the focus of study was the recovery of birth weight rather than weight gain following the discharge.

2. The abstract extends on general issues but does not detail some elements of the data analysis.

3. The introduction section shows enough evidence about the phenomenon of study. The specification of the meaning of extremely low birth weight should be made on the first occasion it appears in the text.

4. In the Methods section, there is no information about non-participation for non-attendance at the Kangaroo Clinic. Is it possible quantifying this issue based on records of hospital data?

5. In the figure 1, what does 23/7 mean?

6. Is not described if in the analysis of continuous variables previously was carried out test to ensure compliance of the normality assumption for using
parametric tests (e.g. Shapiro-Wilk; Kolmogorov Smirnov).

7. Remove the last line from the Methods section ("Results are summarized in tables 1 and 2.").

8. Table 1 can be eliminated by keeping only Table 2.

Discretionary Revisions

1. In Tables 3 and 4, I suggest to highlight the reference category (1.0) on which the estimate of risk (OR) was made.

2. The discussion is appropriate to the findings showed; however some methodological concerns must be solved to assess the validity of the results.

3. Is it possible that, according with the results, the authors outline specific recommendations?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.