Reviewer's report

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

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Reviewer: Gayle Olson

Reviewer's report:

The research article "Poor weight gain in low birth weight infants following hospital discharge in Kampala, Uganda" addresses the issue of an increased incidence of LBW in the population and the need for a comprehensive discharge plan to improve the outcome for these infants.

Major Compulsory Revisions:

Methods:

In the methods section pgs 5 and 6 the authors use LBW and SGA, could these be defined for purposes of the study?

Infants SGA were excluded (pg 5) and a figure is mentioned but not included with the submission.

Gestational age is assessed by the admitting Dr, (pg5) which are often residents. Did the authors have a chance to compare this estimate between residents (interobserver reliability)? How did this estimate compare with the EGA at the time of delivery? Was there an ultrasound estimate of the best EGA and was fetal growth assessed during the pregnancy?

Anthropometric measures were taken (pg 6) Could the authors be more specific which measures they used, did they differ between those of the same gestational age who did or did not gain weight by day 21?

Results:

235 infants were enrolled (pg7) however a sample size needed of 513 is mentioned on pg 6. It does not appear the sample size was reached, how would this affect the results?

Table 1, there were 64 multiples, which might be expected to feed and grow differently than singleton. Would the authors consider analyzing the data removing multiples?

In many tables gestational age is listed as > or < 32 weeks. Could the authors comment on the choice of this cut off? Would the results be different if 37 weeks were used? Were term infants included in the > 32 week group? It may be important to address the issue of prematurity and its affect on the growth of the neonate up to 21 days?

Most infants were breast fed, was the nutritional status of the mothers assessed, or could it be between the groups that gained and did not gain weight?
Did the group that did not gain weight, lose more weight in those few days after birth?

If the study is more specific to a preterm population, adding the word preterm in the title would clarify this.

A hospital stay greater than 7 days and initiation of feeding > 48 hours after birth were listed as contributing to failure to gain back weight at 21 days - were these pregnancies complicated by other factors? Was initial feeding held for a complication or were the infants unable to tolerate feeding? Could an analysis be performed at any given gestational age for those who did nor did not regain weight.

Minor Revisions - none
Discretionary Revisions - none

This is a very interesting article that may address the need for important interventions for a group of infants born with LBW. Additional information in this article could strengthen the authors position in identifying measures to improve care for these infants.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests