Reviewer’s report

**Title:** Application of ordinal logistic regression analysis in determining risk factors of child malnutrition in Bangladesh

**Version:** 1 **Date:** 14 July 2011

**Reviewer:** Xing Liu

**Reviewer’s report:**

The paper was well written. This paper applied the PO model and the PPO models to estimate risk factors related to child malnutrition. The analyses of ordinal logistic regression models were extensive and accurate. This is a solid statistical method paper.

Some suggestions might be helpful for strengthening the paper.

1. More literature of risk factors of child malnutrition would be helpful to readers in understanding previous research.

2. In Table 1, Stata uses a negative sign before the logit coefficients in the PO model equation (SAS uses a positive sign). In the expression of the two PPO models, Stata uses P>j vs. <= j for the probability comparison (see Williams, 2006). You may put a footnote below the table.

3. Descriptive statistics for the predictor variables would be helpful if provided.

4. The overall score test of the PO model was not significant (p=.144), so the PO assumption was valid. It was really not necessary to conduct the PPO model analysis (But you could do that). Considering you had 10 predictor variables, it was not surprising that you had one variable violated the assumption. But overall the omnibus test was fine.

5. The sample size for each analysis is needed for Tables 2-4.

6. You need to provide the version of Stata used in the analysis.

**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:**

None.

I declare that I have no competing interests