Reviewer's report

Title: Beneficial Newborn Care Practices in Rural Eastern Uganda: a Cross-sectional Study.

Version: 6 Date: 19 August 2015

Reviewer: Emma Williams

Reviewer's report:

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

1. Not sure references #40-41 really supports their assertion that mother’s retrospective self-report is valid for newborn care practices, since they’re focused on childbirth pain. They should refer to Stanton et al’s Plos One article from May 2013.

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. This line in the abstract needs to be clarified: “Uptake of any beneficial newborn care practices was 11.7% overall”. What they mean is ALL beneficial practices.

2. Be sure to correct the use of the word “chord” for cord – referring to umbilical cord.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

1. I’m a bit skeptical of the idea of having an outcome measure that’s a composite of several composite variables and would like the authors to provide evidence to justify that decision. Specifically, I would like more information about how the individual behaviors contributed to the coverage of each of the five individual categories of behavior. Two practices – optimal thermal care and good feeding practices – seem to be dragging down the average, but even so it’s surprising that the total coverage is so low. It would be helpful to understand more about why that’s the case. For the multivariate analysis, did the authors look at the predictors of each of the five behaviors separately? It’s plausible that different behaviors would have different predictors. Although there is not room to present all these findings, they could mention that this was done as a sensitivity analysis; this would make readers more willing to accept an outcome that’s a composite of composite variables.

2. The authors conclude, “The independent factors associated with use of beneficial newborn care practices were skilled delivery attendance, middle-level socio-economic status and attending ANC for 3-4 visits. These findings suggest a
need for increased promotion of ANC and skilled delivery attendance as well as the need to improve targeting for women of low socio-economic status.” In fact, a majority of women already receive ANC skilled delivery, yet coverage of all practices was low; just improving coverage is insufficient – improving quality is also necessary.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**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.