Reviewer's report

Title: Non-adherence to WHO recommended inter-birth intervals in Rufiji, Tanzania

Version: 2 Date: 18 October 2012

Reviewer: Sohinee S Bhattacharya

Reviewer's report:

Many thanks for asking me to review this interesting manuscript that makes clever use of DSS data in Tanzania to answer an important fertility related question. The paper is readable, mostly adheres to reporting guidelines for observational studies. The analysis is more or less appropriate (see below) and the discussion is adequate.

Major Compulsory Revisions

1. Clustering of deliveries around women and non-independence of data - My major concern with this analysis is that it has not accounted for more than two pregnancies clustered within some, but not all women. The authors should consider either stratifying on first two pregnancies only or use more sophisticated statistical methods like multivel modelling.

2. I would imagine that the outcome of the previous delivery would have the greatest influence on the desire to have more pregnancies and sooner. If adverse outcomes were excluded from the cohort, this should be clarified.

Minor Essential Revisions

1. "Data analysis was conducted using STATA at 5% significance level?" Please clarify

2. Please define what is meant by "immigrant resident"

3. Page 11: Please change "begging" to "beginning"

Discretionary Revisions

1. Would the authors like to comment on using the 33 month cut off interbirth interval? For instance, if a woman had a preterm delivery that ended the interval, it is possible that she might have spaced her pregnancy adequately?

2. Some of the risk/protective factors identified are fairly obvious - age, divorced/widowed but are likely to be highly correlated amongst themselves. What did this do to the stability of the model?

3. Why was sex of child included in the model? What was the hypothesis?

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

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.