Reviewer's report

Title: Mobile phones improve antenatal care attendance and quality of care in Zanzibar: A cluster randomized controlled trial

Version: 1 Date: 4 July 2013

Reviewer: Dejan Zurovac

Reviewer's report:

The authors report results of cluster RCT from Zanzibar testing effects of mobile phone intervention on antenatal care attendance and related quality of care. The results show improvements in ANC attendance. Several comments to improve upon the manuscript:

Major comments:
1. The results of the same trial but on a different outcome have already been reported – this should come out clearly in the background/methods section; the authors should also state primary and secondary outcomes of the whole trial
2. Methods should state how sample size of 44 clusters and 2550 individual observations was calculated?
3. An example of SMS intervention (frequency and content) should be provided in Panel (in Kiswahili and English), eg. for women enrolled before 16 weeks
4. Intervention involves not only texting and airtime but also distribution of mobile phones to intervention group health workers – why, presumably health workers have their phones? This aspect should be addressed in the paper, potential effects on the outcomes and implications of the same for scale up
5. Since you registered not only mothers with personal phones (38%) but also those with having access to someone else phone (?) these data should be reported.
6. Do you know SMS intervention exposure status of mothers? Were mothers calling providers? Could they call providers in control group? If you have these data please report
7. Since routine health workers and research assistance collecting data seems to be the same individuals this inevitably affected the quality of practices – this should be addressed in limitations/discussion
8. The mHealth reviews in discussion section are already outdated – it is more appropriate to use the latest from Free et al (2013) in Plos Med and review appropriate studies in the discussion
9. Differences on antepartum referrals of 10% vs 5% without knowing if these were complicated pregnancies are hard to interpret thus more caution in the discussion on this
10. Abstract: please state that this was open label trial and state number of study
facilities (clusters); in results section provide data on quality to support your conclusions on “trends”

11. The title should be toned down and limited to attendance without quality aspect

Minor comments:
1. Background section should better address “study hypothesis” or potential link between mobile phone intervention and poor ANC attendance and quality
2. Provide dates for the trial (pg 4)
3. Pg 5 subtitle should be “Randomisation and masking”
4. Table 2, referral aspect in control group cannot be 57/1311 (5%)

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