Title: Sero-prevalence of rubella and associated factors among pregnant women attending antenatal care in Mwanza, Tanzania

Version: 3 Date: 30 December 2013

Reviewer: Ching-Chiang Lin

Reviewer’s report:

Major Compulsory Revisions
1. The presentation and statistics in table 2 need to be checked by an expert in statistics. The seroprevalence will be shown as “seronegativity” and the risk factors (character) can include screening age, residence, occupation, education, gravidity, and trimester etc. The lowest subgroup in any factor will be the reference group, so the OR will be greater than “1” in other subgroups. For example, the seronegativity of rural resident is 5.5%, the urban resident is 9.3%. The crude OR will be 1.7. The description about this part need to be revised in all your manuscript. The authors also need to describe factors adjustment under the table 2. If they adjust other confounding factors, you can use the term—“Mutually adjusted for ......”.

2. According the Figure and its legend, the seropositive rate of Rubella Ab increases from over 80% at age 16 to about 100% at 30 years old. The increase rate is about 1.6% per year. The older women have higher positive rate and the younger ones have lower positive rate, therefore, older women not will be infected with rubella due to seropositive of rubella IgG Ab. The author described that the risk of contracting rubella increases by 12% each year. The statistics may not be correct.

Minor Essential Revisions
1. The percentage value of the negative rate at 25-34 group will be 10.6% in table 1, please check it
2. Second paragraph of RESULTS, there are 342 pregnant women in this study. The women who are positive are 317 (92.6%) and those negative are 32 (9.3%), so a total number is 349, which is not equal to 342.
3. I suggest using the seronegativity to describe the risk in your manuscript. Therefore the seronegativity will not be confused with the seroprevalence by readers.
4. Second paragraph of METHODS. The title “Data collection” need to be revised.
5. The “trimester” is a significant factor (OR = 6.1 at third trimester) at regression analysis. The author needs to add some words to explain or discuss this finding at the discussion.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests