Reviewer's report

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

**Version:** 2  
**Date:** 23 October 2013

**Reviewer:** Ching-Chiang Lin

**Reviewer's report:**

This article described the sero-prevalence of rubella and its associated factors among pregnant women in Tanzania. The results show the prevalence of rubella IgG is about 92.6% and increases with age. However, the whole structure of manuscript is not well done.

**Major Compulsory revisions**

1. First paragraph in BACKGROUND, The authors' description “... more than 100,000 children are born with CRS each year”. The authors need to check it again, because most of the developed countries have launched 2 doses of MMR. The CRS should be low.

2. In data collection METHOD, the authors should provide the cut-off values of the IgG and IgM antibodies test.

3. First paragraph of RESULTS, the description about demographic characteristics of table 1 is not complete.

4. Second paragraph of RESULTS, the authors need to state all the statistical results in table 2, including Gravidity, Trimester, and Gestational age.

5. Second paragraph line 8 of RESULTS, the sentence “...as the age increases by one year, the risk of contracting rubella increases by 12%”. There is a ten-year interval between group 15-24 and 25-34. So the description is not correct.

6. The presentation and statistics in Table 2 need to be checked by an expert in statistics. Furthermore, the authors need to state which variables they adjusted for.

7. There was n't any description about figure 1 in your manuscript. The author can use this figure to know the infection rate of women in pregnant ages.

8. In DISCUSSION, authors should explain and discuss their significant finding (ex. trimester) and compare the results of sero-prevalence of rubella with other countries with or without vaccination campaign.

9. First paragraph of DISCUSSION, Children have two doses of vaccines at birth and preschool in most developed countries. So the authors’ description—
“in many developed countries, most children acquire the infection at the age 5-14 years” is not the fact.

10.In CONCLUSION. The authors stated that screening of rubella infection during antenatal care and postnatal immunization of women at risk should be considered in Tanzania as the main strategy to minimize CRS. Postnatal immunization can’t prevent primiparous women from CRS. The author needs to review the policies in other countries and make an appropriate suggestion of strategy. For example, some of the developing countries started their vaccine programs by giving one dose of rubella vaccine for junior high school students to prevent CRS.

Minor essential revisions

1. First paragraph in BACKGROUND, People get immunity from natural infection or vaccination. The situation is different. So, the author should describe the sero-positivity of rubella in a country with or without vaccination program separately.

2. The data of the 2nd and 3rd trimester is different in table 2 and 3.

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

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