Reviewer’s report

Title: Cervical cancer screening in Dar es Salaam, Tanzania - A situational analysis

Version: 1 Date: 8 June 2012

Reviewer: Dorota Gertig

Reviewers report:

This study has the potential to provide useful information on screening characteristics of women in a setting where there is a high burden of disease due to HPV and HIV. Women with HIV have a higher risk of HPV related disease and it is important that these issues are considered together.

Major compulsory revisions

It would be useful to provide some data on cervical cancer, HPV and HIV specific to Tanzania in the introduction.

VIA is not usually recommended for postmenopausal women. What is the rationale for screening women through age 59 years?

The study methods and selection of participants should be described in more detail. I found it hard to follow the selection of participants and also Figure 1. Figure 1 does not include the numbers for the screened population (n=14,107) and I don't understand why only 83 of 396 women accepted screening at OCRI?

It is also unclear how HIV testing and HR_HPV testing was performed on the reference group sample as these women did not undergo screening? How were the cervical samples obtained from unscreened women? I note that the recruitment of the reference group is being published elsewhere but more detail is required in this manuscript.

Statistical methods—although it is stated that multiple logistic regression was used to adjust the risk estimates, it appears that only age was adjusted for in the model, thus there is potential confounding by other factors of interest. A full model should be constructed and all variables which are associated with the outcome of interest should remain in the model. At present, all of the variables in the tables could potentially be confounded by each other (eg association between educational level could be confounded by parity, first sexual intercourse and age at marriage etc).

Minor essential revisions:

Table 3: The table heading appears to repeat n=890 twice and ** is missing in the table.
P8 para 2 states that "most likely excess risk among lower Socioeconomic groups is related to sexual behaviour" however I think it more likely this is related to lack of access to services or lack of health knowledge.

p8 par 3 The analysis between HR-HPV and HIV is cross sectional thus it is not possible to state temporality. I would suggest rewording to state they are significantly "associated" in this study.

p8 par 4 states that HIV positive women were more likely to participate in the screening program. however, this reflects the lack of detail in methods and recruitment as I'm not sure how HIV stats was determined in the non-screened women and whether there could be a selection bias in this group.

Table 3 Would be interesting to stratify this table by age

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I have no competing interests.