Reviewer's report

Title: HPV and cervical cancer related knowledge, awareness and testing behaviors in a community sample of female sex workers in China

Version: 1 Date: 22 February 2013

Reviewer: Catherine Houlihan

Reviewer's report:

Major Compulsory Revisions

1. In the second paragraph of the introduction, the third sentence lists risk factors for HPV infection and gives 3 references. I've had a look at those references, and they don't agree with the list you've given. The list itself is mostly correct, however contraception is a little more controversial from what I've read, so I would be cautious and separate out condoms from hormonal contraceptives.

2. In the results, you mention that the mean age of FSWs was 25, range 12-36. The eligibility criteria include being 18 or over. Please clarify or correct.

3. Were there only two eligibility criteria? If the questionnaire was self-administered presumably the participants had to be literate? You don't mention getting informed consent from participants.

4. With the logistic regression presented in In Table 4, I am concerned that there is no indication of which was the baseline used. So for example you present that marital status has an uOR of 0.95 but it’s not clear if this is married compared to unmarried, or the opposite. It can be inferred from the previous table, but should probably be stated.

5. In Table 4 there is no explanation of what the apteryxes mean. Perhaps you are highlighting the statistically significant results? In that cast, is the unadjusted OR for length of working wrongly highlighted? It would be appropriate to mention these in the footnote.

6. The description of your statistical methods for the logistic regression should probably include more detail. For example, which variables are included in the adjusted model, is it all of the variables, or only the ones associated in the unadjusted analysis (the latter is more common). This information should also be included in the footer of the table. It is also not clear how age and the other continuous variables (monthly income, length of working) were included in the model (i.e. was age put into age-groups, or were they included as linear terms)

7. In Table 4, there is missing parenthesis explanation i.e. “unadjusted OR (95% confidence interval)”. This could be in a foot note or in the first row.

8. In the discussion, the sentence “first, given that HPV vaccine is most effective for young women aged 9 to 26, it might not be effective for all FSWs” misses an important point. You imply that it is age that prevents the vaccine from being effective in FSWs. Actually it is previous or current infection with an HPV
genotype included in the vaccine that prevents the vaccine from being effective. The reference you provide is also a patient information sheet. I would suggest referencing a scientific article or policy guideline such as a WHO guideline – the WHO recommend the vaccine be primarily targeted at girls age 9 or 10, through to 13 years, because they are pre-sexual debut and therefore assumed to be HPV negative. The high HPV prevalence in FSWs is the reason the vaccine will be less effective.

Minor Essential Revisions

Discretionary Revisions

9. In the second paragraph of the introduction, a better reference for the association between HPV and cancer would be any of


10. Similarly, in paragraph 3 of the introduction, reference 19 is a 16 year old reference, but you mention increase in the past three decades.

11. In the introduction, I would be inclined to mention HIV since this increases incidence of HPV, HPV persistence, and invasive cervical cancer: and is associated with CSW.

12. In the methods, and in Table 2 there is no indication of whether participants could answer “don’t know”. Having this option would be appropriate, and presenting all of the results might give an indication of whether there was no knowledge or incorrect knowledge, and rule out the possibility that some of this correct knowledge was guess-work.

13. Also in table 3, you assume that the correct answers are known by the readers. I would prefer to see this in a footnote, or as part of the text in the table including the answers.

14. I had a quick look at the STROBE guidelines for reporting observational studies. You are missing an explanation of how the study size was arrived at.

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