Reviewer's report

Title: Improving chlamydia knowledge should lead to increased chlamydia testing among Australian general practitioners: a cross-sectional study of chlamydia testing uptake in general practice

Version: 1
Date: 6 July 2014

Reviewer: Ingrid Viola Francine van den Broek

Reviewer's report:

The manuscript submitted by Anna Yeung and co-workers is addressing an interesting subject on GPs chlamydia testing behaviour. The set-up of their study is profound with a large number of practices included and a good participation rate. They combine questionnaire data at the level of GP with patient-based data on testing rates extracted from the medical records. The findings on the significance of the GPs gender, age and knowledge level are in line with what is expected. When reading through, these findings seem to be repeated and discussed in the text several times, which makes especially the discussion a bit too lengthy, in my opinion, while at the same time there are other issues which could have been explored a bit further. My suggestions for revision per chapter are:

1. Introduction.
   - The research question is clear, as described at the end of the introduction.
   - The paper focuses on GP-testing, but I think they could have mentioned whether there are any other options to get tested for STIs in Australia (STI clinics, family planning clinic?), so that it is clear whether the GPs are the single or main provider of STI care or if other facilities exist (for high-risk groups?).

   - The methods are well-described.
   - The data extraction method by the Grhanite tool raises questions/curiosity, how does that work, is it linked to the patient medical records and is there some kind of quality check for completion of data (e.g. do GPs always record tests and results?)?
   - The chlamydia test results were also available in the data extraction: Could the authors include this as a variable in their analysis? GPs with relatively higher numbers of chlamydia diagnoses are expected to test more, but is that the case? If so, it could explain higher testing rates eg in metropolitan areas, where one would expect a higher STI prevalence.
   - I would have liked to get some information on the options for a patient to choose for a specific GP in his/her general practice. Do patients normally consult the same GP for any issue (personal relation), or does it depend on the day/time they visit the clinic? Or can they choose for the GP to see when they make an
appointment. This could have quite a big influence on the outcomes of the study, which would then mean that the patient’s opinion may more influential and GP-related factors less than is presented here. Also, GPs who work less days or were relatively new in that particular practice may be less likely to have built a special ‘bond’ (personal relation) with a patient and therefore may then not be the first choice of the patient for a personal issue.

- What was the way of asking whether the GP was interested in Sexual health? I find it rather worrying that only a quarter of the GPs indicated to be interested in this. What does that mean?

3. Results
- The results are well-described and the Tables have a good level of detail.
- As stated in the methodology comments, it would be interesting to describe the test positivity rates as well, linked to the testing rates.
- I assume there is no other information available on the patient? Overall testing rates are an indication, especially within the age range of young people who should be tested according to the guidelines. But it would put things into perspective to know whether testing rates were higher among higher-risk groups, patients presenting with symptoms, and whether that is linked to knowledge of groups to target. Likewise, if data on actual prescriptions for positive cases were available, or on re-testing, these could be linked to the treatment/retesting questions in the questionnaire.
- The findings on the relation between the GP’s gender, age, metropolitan/rural area of practice are repeated under ‘Testing’, and in ‘Factors associated with chlamydia testing’ (twice. I understand these findings result from different analyses, but maybe they could be written down in a more condense way.

4. Discussion
- In the paragraph on testing rates per GP versus rates per practice, I think the issue on patients’ choice for a certain GP (comment 4 under methods) should be addressed.
- The last paragraph of the discussion raises the topic of ‘equity’. Certainly, STI care via GPs may be more easily accessible in urban areas, and lead to higher testing rates. It is not mentioned here whether the needs for STI care (based on prevalence in urban/rural population) are higher in urban areas than in rural areas of Australia.
- The discussion section is rather long, the authors could avoid repetition and stay closer to their findings.

As a last remark, I suggest to take out of the acknowledgements the names of persons who are co-authors on the manuscript. The acknowledgements are rather long.

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