Reviewer's report

Title: Repeat infections of genital Chlamydia trachomatis among visitors of a Sexually Transmitted Infections clinic: randomized intervention trial of home-versus clinic-based retesting

Version: 1 Date: 31 January 2013

Reviewer: Phillip Read

Reviewer's report:

Thanks for asking me to review this interesting paper.

There is no doubt that the issue of chlamydial reinfection is of importance, and innovative methods must be sought to address low retesting rates.

Major compulsory revisions:

1) Methods- “Routinely the risk of repeat infection is discussed”- important to mention if patients are told to retest, and if so when.

2) Methods- p6 I would like more details of what the clinic “testing package” was- how did it differ to standard of care for those presenting for testing outside of the study?

3) Methods- given the wide range of times at which the reminders emails were sent, how was this done? Automatically? By a research nurse using a diary? This is important if other clinics wish to implement this model.

4) Results- “in the 6 months before testing at T0 (23.8%) compared to those with less partners (37.5%-45.6% p=0.07)” I don’t understand these percentages, why is one a range and the other exact? Make them both the same please so the p-value can be interpreted.

5) Results- “Chlamydia positivity in women was 18.5% and in men 10.0%” please give p-value for this in text.

6) Results- “Among 141 CRI T1 non-responders 26 tested…” In which groups were they? Home or clinic?

7) Results- “Among those who refused participation in the CRI study at T0, 12% 8/58” Please clarify if the denominator is 58 or 66 as mentioned earlier in results.

8) Discussion- “and a further 16 infections among non-participants”- it is very hard to work out where this 16 comes from- it is a composite of excluded/non-responders/non-participants?

9) Discussion: Please make further discussion of the impact of the last wave of participants being contacted much before the 4 month aim, since the range was 13-24 weeks, are the authors able to analyse the data by time of reminder (e.g in tertiles, or 3-4, 4-5 and 5-6 months)? This may be interesting as the relationship between the timing of reminders for retesting and success is not known.

10) Discussion: the results are analysed by STI symptoms at T0- however NGU
and PID were excluded, so what were these symptoms? Please mention in method, and discuss the relative asymptomatic nature of the participants in the discussion.

11) Discussion: although the results are presented as if the excluded patients are a control group they are not really, as they may have been forgotten or excluded for unknown reasons, and not randomly. Therefore a limitation of this study is that it does not have a real standard of care arm as both arms are interventions, so it is possible to compare both interventions, but not to determine if they would have an impact versus not doing either. This should be expanded on in the discussion.

12) Table 1/2: Some of the variables in MV analysis have a p of “ns”. Why do some have ns and some have no value? Were the variables with “ns” included in the MV model? This does not seem to correlate with the methods section which says that only variables with p<0.2 were included in a backwards stepwise LG MV analysis (e.g age has a p of 0.37 in UV but has “ns” in the MV column). Were some variables such as ethnicity and age forced into the model?

13) Table 2: some denominators do not equal 75, is this because some questionaries were incompletely filled? Please explain.

Minor revisions
1) Methods- (15% versus met 43%) remove “met”.
2) Response often missing last “e”
3) Methods- sample size calculation: What is CSI retest- please define.

Level of interest: An article of importance in its field

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