Reviewer’s report

Title: Trends in HIV infection surveillance among men who have sex with men in Norway, 1995-2009

Version: 2 Date: 9 November 2012

Reviewer: Alison E. Brown

Reviewer’s report:

Thank you for inviting me to review this paper that synthesises HIV surveillance data to extrapolate insights into HIV transmission among MSM in Norway. The aims of the paper, and most of the surveillance methods are clear and the authors describe well the challenges of interpreting new diagnoses in a context where HIV testing data are unavailable.

However, there are many assumptions in the data presented that require more rigorous exploration, too much are drawn from some data and there is little original data presented.

Major compulsory revisions:

1) The authors categorise whether patients were infected by a casual or a steady partner. How is this information ascertained? Many men will have both casual and steady partners. Patients’ assumptions about their potential source of infection may not be valid.

2) The attempt to explore trends in transmission is commendable, but too much is drawn from categorisation of patients in relation to length of time between diagnosis and infection. It is not clear how “uncertain” or “possible” time of infection was defined. The uncertainty of the method for allocating time since is infection is vast…there needs to be much more discussion of the caveats surrounding this in the discussion. Specifically, the translation of this method to conclude “there were many infections in 2003 is simultaneously vague (how many?) and too specific (how can you be certain this is 2003?). It would be useful to have a table to breakdown patients in each category which also quantifies the possible variation.

3) I would have liked to have seen more shown in terms of distribution of age at diagnosis over time. The fact the median age at diagnosis remains constant over time is indicative of steady transmission - more could be made of this

4) The thinking behind comparing trends before and after 2003 due to an outbreak in 2003 is not clear. It perhaps would have been better to group into three periods, with 2002-2003 as mid period. More needs to be described about this outbreak…outbreaks of HIV are notoriously difficult to define…was this based upon phylogenetics or just an increase in the number of new HIV diagnoses?

5) The authors suggest that the data show that half of MSM were diagnosed
“early” – I may argue otherwise given this definition is based upon seroconversion illness or asymptomatics infection…is the increase in asymptomatic reporting due to improved reporting

6) The table could be better thought out…a frequency table may reveal more than that showing linear regression for all available variables.

7) the figures place too much emphasis on time since infection which is subject to the uncertainty above

Minor compulsory revisions

1) The written English could be improved
2) The title reads as through it is trends in SURVEILLANCE that are being monitored, rather than trends in HIV infection
3) The discussion compares increases in new diagnoses across Europe, some papers cited are out of date (e.g. UK)

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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