Reviewer’s report

Title: Identifying High- or Low-risk Areas of HIV-, HCV- and Co-infections among Drug Users in a National Methadone Maintenance Treatment Program in Southwest China

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Reviewer: Peter Vickerman

Reviewer’s report:

This is an interesting analysis that looks at geographical variations in HIV and HCV prevalence in particular area of China. However, I feel the paper could be improved if more details are added. My main comments are:

- The co-infection prevalence of HCV amongst HIV infected is very low compared to what has been found in other settings (Vickerman DAD 2013) – it would be useful if they included some discussion on why they think it is so low.
- It was unexpected that HIV and HCV prevalence decreased with age – Why does this occur? Could they extend the analyses undertaken in Table 1 to include multivariate analyses on the determinants of HIV and HCV infection.
- It would be useful to know if the prevalence of HIV, HCV and co-infection are correlated across districts – this could be shown through a couple of scatter plots. This is something that has been looked at by myself and other authors recently (Vickerman addiction 2009 and DAD 2012, De Vos epidemics 2012) and so it would be interesting to know if your data agrees with these previous analyses.
- Could the authors undertake some additional analyses looking into what factors predict the clustering of HIV and HCV cases. I know you don’t have perfect data but there is some data that can be used in a model to give some insights. You discuss possible reasons in the discussion, but it would be good if this could be done more formally.
- You suggest that the Yi ethnic group have higher sexual risk and so have higher HIV prevalence. I was wondering if there was a lower HCV prevalence in the HIV infecteds from the Yi cluster communities, so suggesting less transmission of HIV through injecting risks.

Minor:
- What does high-high and high-low and low-low mean in the results?

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

Quality of written English: Needs some language corrections before being published
Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests: None