Reviewer's report

Title: Risk of HCV/HIV co-infection and HCV mono-infection among injecting drug users in a methadone maintenance treatment program in Taipei, Taiwan

Version: 2 Date: 15 October 2012

Reviewer: ELENI KALAMARA

Reviewer's report:

Major Compulsory Revisions
(The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation)

1. Background: It is not supported by the way that you interpret bibliography why HIV/HCV co-infection is important (it is, but going through your justification, it is not obvious. Maybe you can add more details in the treatment of the co-infection)

2. Discussion: Some of the comparisons with the bibliographic references are not satisfactory interpreted (i.e page 14, at the end: A literature review showed that the prevalence of HCV/HIV co-infection was higher among TCH IDUs (13.1%) than among IDUs in China in 2007 (12.7%). Is a 0.4% difference so much higher? Were the settings of the study the same?)

3. HCV and HIV incidence: Despite the small number of sero-conversions, at least a descriptive analysis of the sero-converted individuals is needed, especially in terms of risk factors such as sharing syringes.

Minor Essential Revisions
(The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes)

1. Statistical analysis section: In the 2nd paragraph you state: Logistic regression... HIV mono-infection. However, in your analysis, HIV mono infected individuals are excluded, so this method described here does not apply to that group.

2. Results: Lines 6-9: You should report either mean ±SD or median with range or IQR, depending on the distribution of the data (i.e if they meet the normality assumption) and not both.

3. Results: Table 1 should be removed since all information in the Table is given explicitly in the first 3 lines of the results (it is duplicated information)

4. Methods, study population: What was the re-enrolment rate? Do sero-negatives at baseline that re-enrolled differ statistically significant to those sero-negatives at baseline that drop off or finish the treatment? Were these sero-negatives at baseline that finish the treatment also tested for HIV/HCV and if no; why?
5. Discussion: You don’t need to report numerical results again in the discussion, since they were already mentioned in the results session.

6. Results - Covariates of infections: In backward-stepwise multinomial regression, after controlling for other variables...: which variables? State, in specific, which are the other variables that you are controlling for (either here or in Table 3)?

Discretionary Revisions

(These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential)

1. Title: To my understanding is ‘prevalence and associated risk factors’ of HCV/HIV co-infection and HCV mono-infection among injecting drug users in a methadone maintenance treatment program in Taipei, Taiwan instead of ‘Risk’

2. Results- Covariate of infections:... (Table 2 and 3): Please remove ‘(Table 2 and 3)’ from the subtitle and put in the correct place in the text.

3. Methods: Can you please describe what method did you use to locate re-enrolled individuals since the enrollees were anonymous?

4. Methods: Was it not possible for the 125 sero-negative individuals to undergo HIV/HCV test also so that to have a better estimate of the incidence (instead of the re-enrollers only)?

5. Results - Covariates of infections: Line 1: you are mentioning chi-square test here, but it is not mentioned in the ‘statistical analysis’ section. Is this Table a result of univariate logistic regression? Then it should be better stated as such.

6. Methods- Data collection: Why ‘sexual work’ was not included as principal source of income and homeless as a living situation since they are both possible risk factors for HIV/HCV infection?

7. Results: Table 2 is too large. You can consider either splitting it in two (Table 2i for the demographics and 2ii for the substance use) or alternative change the way you are reporting the data for the dichotomous variables i.e shared syringes: you can report n(%) yes only (% of no would be the reference category for the ORs). This would make your tables much smaller and easier to follow.

8. Results, HCV and HIV incidence: Add ‘among re-enrollers’, since it does not apply to the whole sample.

9. Results- Covariates of infections: When describing Table 2, you are just stating which variables are significant or not and in which direction, while it would be more interesting to state also the magnitude of the association, i.e sharing syringes increases the risk of co-infection by 27 times etc. In Table 3, all numerical information is included in both text and Table, so the text should be again rephrased to give some additional information regarding interpretation of the results.

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