Reviewer's report

Title: Demographic, risk behaviour and social network variables associated with hepatitis C, hepatitis B, and HIV seroprevalence amongst injection drug users in Winnipeg, Canada.

Version: 1 Date: 26 June 2006
Reviewer: V. Anna Gyarmathy

Reviewer's report:

General

The question posed by the authors is new and well defined. Little is known about the association of social and risk network characteristics with HIV and Hepatitis infections. In addition, the authors also examine interactions between individual and network characteristics, which is also a relatively understudied approach to assessing associations.

The methods are appropriate and well described, and sufficient details are provided to replicate the work. The methods section of this paper is especially strong and well-written. The section on statistical analysis is very well thought-out and well-described.

The data are sound and well controlled. It seems the authors had a sound research protocol that they executed with strict adherence.

The manuscript is very well written and adheres to the relevant standards for reporting and data deposition.

The discussion and conclusions are very thorough, well balanced and adequately supported by the data.

The title and abstract accurately convey what has been found.

This is a very well-written and easy-to-read manuscript.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Results section, p12: It would be helpful to have a short description of the HIV and hepatitis risk of the transgender and non-Caucasian/non-Aboriginal groups that the authors excluded. While it is understandable that the authors excluded these groups due to their small size, they may have certain risk characteristics that are different from the major groups.

Discussion section, p16: Very nice paragraph about the interaction between syringe sharing and Ritalin use. However, in other cities or other countries IDUs may not have access to and/or do not inject Ritalin. It would be helpful to have an additional sentence about how Ritalin is injected. Is it dissolved from pills, or do IDUs get it in some other form? Do they use the drug cold or do some warm it up (but not heat it as the authors described), do they use filters or not, etc.

Discussion section, p18: I don’t understand the authors’ explanation of the inverse relationship of HBV and opposite sex casual partners. Do they mean that participants may engage in both safer injecting and safer sex activities with opposite sex casual partners than with opposite sex main partners or with same sex partners?

Discussion section, p18: The conclusion about the vaccination programs should be supported by a reference. If no reference exists, then this should be removed.

Discussion section, p18, limitations: The authors forgot to mention a major limitation of the analysis, namely that the network variables are all based on 30-day measures. In addition, it seems that the 30-day network variables were interacted with the 6-month or ever sharing variables, which is also a limitation.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

The authors may consider adding a little more detail into the results section of the abstract.

Discussion section, p 16: I liked the paragraph about the association between HBV and hotel networks. However, my first thought was that in this environment, HBV may be transmitted sexually. While in a shooting gallery there may not be the privacy for sex, and there is only injection risk involved, but hotel rooms may provide this privacy, which may explain the association with HBV but not with HCV.

Table 5 is confusing. Parts A and B give the ORs for parts C and D – could those be combined somehow: A with C and B with D?

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.