Reviewer's report

Title: Peer-based behavioral health program for drug users in China: A pilot study

Version: 1 Date: 18 April 2011

Reviewer: JiangHong Li

Reviewer's report:

Major compulsory revision:

1. Under “sample size”, it was noted that additional 75 drug users were added to the control group of original cohort. But there is no information under “statistical analyses” how this part of the sample was handled. Did you try to “match” each individual in this additional sample with the original partial sample that was lost for follow-up? It was mention that paired t-test was used to compare over time change from baseline to the first follow-up surveys. Were these 75 individual in that analysis? Have you considered repeated measures to test both group difference and over time differences at the same time?

2. It is unclear where and when these 75 people were recruited? Were they in the same rehabilitation center with the other control group members? Were they recruited while they were in the center for the 2nd time? Or after discharged from the first detained center? In another word, were they actually the same group of people with the rest of the control group members? Without this information, it is hard to determine whether they should be added to the retained cohort for analyses. Or, how these cases should be handled?

3. The range of the 2nd follow-up time frame is very wide. More details about the distribution of the follow-up time are necessary to help assess its implication to analysis results. It is commendable that comparison of early follow-up and late follow-up individuals are compared but no rational was provided for the cutting point of 6.47 months. It seems the only possible implied rational is to get each number of n in two groups. But if most participants come in around 5-7 months, the comparison won’t show much difference even if there are significant differences at other time points. It will also be helpful to describe your follow-up strategies, barriers encountered, lessons learned and maybe suggestions for future studies of similar kind.

4. Although the HIV knowledge scale is previously developed and published, it is still helpful to summarize the factor analysis and reliability analysis results, if available.

Minor Essential Revisions:

1. The Ns of the second follow-up survey are different in Figure 1 and Table 5.

2. Please have the English speaking co-author proof read carefully before the next submission. Besides the language issue, some writing problems are related
to the logic of the presentation, flow of information, and conceptualization of concepts.

Discretionary Revisions:

1. What is the reason to exclude repeated offenders from this study? They often have much larger network size and are at higher risk, at least higher injection risk.

2. The description of sample size at each time point, follow-up rates, and time frame between each survey are all scattered. They are not only hard to find but also confusing and seems contradicting with each other at different sections of the text and in the Tables. These are important numbers and have implications to analyses results and conclusion, please carefully think about the flow of information to improve the clarity of the text presentation.

3. Did you ask why the 5 peer leader candidates refused to participate? It will helpful to present these reasons if you know. Otherwise what do you think could be the reasons based on your experience implementing this study and other contextual information? Similarly, please briefly (not necessarily with precise numbers and percentages) describe refusal reasons of the 122 (22.5%) baseline candidates, if you did ask.

**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, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests