Reviewer's report

Title: HIV, Hepatitis B and C among People who Inject Drugs: High prevalence of HIV and Hepatitis C RNA positive infections observed in Delhi, India

Version: 2 Date: 9 April 2015

Reviewer: Jagadish Mahanta

Reviewer's report:

• Major and compulsory

• As only about 25% of the study participants were from Delhi, the title of the Ms should be appropriately modified.

• Authors may elaborate why they have taken HCV RNA positivity as the marker for prevalence of HCV in a cohort of IDU where many had history of injection for long time.

• In prevalence study involving long time IDU; HCV RNA detection at one point of time as marker for positivity will spuriously decrease the prevalence (L-128, 129). Author may elaborate how they have accounted for those who had infection in the past due to injecting behaviour but became HCV RNA negative.

• HBsAg estimation at one time is not a good marker for estimating the prevalence/exposure, when they get the infection in adult hood as a result of IDU behaviour. Hence the prevalence is gross under estimation. Author may add comment/explanation.

• HIV negative cases were retested for HIV again at FV1. Authors should add a statement of HIV conversion during this period.

• Authors have taken the behavioural information at FV1 stage. Since all the subjects were interviewed at FV1 stage, the data on behaviour study were influenced and elements of bias. Authors may elaborate how such bias was addressed.

• Authors could detect duplicate data in baseline and FV1 (L-160,161). Author should elaborate in material and methods about the identifiers used to avoid such duplicate sampling. Author should also indicate the interval between the baseline data collection, FV1 and FV2.

• Though the authors have shown follow up till FV1 but are silent about the drop out or loss to follow up after FV2 from initial 3740 subjects registered at baseline. They should also mention about the FV2 status of the subjects (behaviour and laboratory test)

• Since the samples were collected from rehabilitation and residential care centres passively, there is a possibility of gross under reporting for prevalence of HIV, HBV and HCV.

• Authors may elaborate, why they have chosen to test for HIV RNA or HCV RNA
only at FV1 stage, not at base line or FV2.
• Samples appear not to be representative of the IDU population. A detail note on sample recruitment should be added in the Ms
• Authors have not mentioned about period of follow up and the time interval between baseline sampling, FV1 and FV2 tests. Authors may add it in methodology.
• Table-1 Age-29 (what is 29?). Column 2 should have proper legend
• Table-2 Duration of injection >2 yrs will have recall bias

Minor Essential Revisions
• Recruitment through peer referrral, TORW and walk in clients may not yield the representative population for prevalence study. Less effort in recruitment might have resulted in lesser number of female IDU for the study. Author may add their comment.
• Author should elaborate the phrase “Majority are not sexually active” with how many of them were married, physically fit or separated due to rehabilitation and residential care in this group.
• Authors may elaborate about follow up 2 stage and the drop out at that level.
• It is not clear why authors have chosen only HIV at baseline, HIV, HBV, and HCV in FV1 and have not given any information about FV2 as planned earlier. Even there is no mention in the flow chart.
• As the study participants were from Delhi, adjoining states and other states (L-143,144), authors should show the result separately.
• Fig-2. Data shown as % and depicted as bar gives a false impression. Authors may appropriately modify it

Discretionary Revisions
• Statement like “High prevalence among Hindus” is misnomer in absence of representation in sample or in population. Hence this may be omitted.
• Access to detox, rehab services were only 5.89% or to OST 10.73%. What was the effort from investigator to increase attendance to such services after they were registered in rehabilitation and residential care centres?

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
None