Reviewer’s report

Title: Correlates of HIV testing among men who have sex with men in Cameroon: a cross-sectional analysis

Version: 1 Date: 11 August 2014

Reviewer: Amy J Drake

Reviewer’s report:

1. Participants provided written consent, so study results are confidential (not anonymous)?

2. The statistical analysis section is very confusing: suggest providing very clear description of 1. Calculation of variables, 2. Descriptive analysis methods, 2. Bivariate analysis methods, 3. Multivariate analysis methods. While these items appear to be in the description, it is very hard to tell what was done.
   a. It seems possible that weights could have been created in Stata OR that the transition matrix was used for dichotomous variables, but it is unlikely that both of these are true.
   b. Were weights based on ‘ever tested’ or ‘tested in past 12 months’? most results appear to be based on ‘ever tested’.
   c. Additionally, it could benefit from:
      i. Definition of terms/calculations:
         1. Age: what is “per increase in age”
         2. Current HIV status (is this self-reported or serostatus?)
         3. Social support for condom use (Tables 3 & 4)
         4. HIV knowledge composite score, per 20% increase (Tables 3 & 4)
      ii. Use consistent categories
         1. For example, in table 3, education is “higher than secondary”, in table 4, one category is “secondary” and one is “University or technical studies”.
         3. Not all statements in conclusion are mentioned in analysis.
         4. Table 3 and 4: These tables are confusing when all rows are omitted. Suggest displaying all rows.
         5. Table 1:
            a. Add the total number (n) in each unweighted column at the top of the column (consider taking it out of title.)
            b. It is odd that in Douala, the various sources of information on HIV testing adds to less than the population size (especially if people were allowed to provide more than one source). ‘Never’ having received information would be an important category. (Also, is this in last 12 months?)
c. Please check calculations and clarify numerators and denominators. For example, proportion who disclosed test result to someone is reported in Yaounde as 166 (87.4%). But 166/238=69.7% and 166/238=84.2%.

d. How were skipped values handled in the RDS analysis? It is possible to get values for the “advised to get tested by” indicator in the RDS analysis by using a placeholder for the skipped values. (I assume that this is why the values are missing.)

6. Table 2:
   a. Is the p-value of both rows a result of a chisq?
   b. Is this discussed in discussion?

7. Table 3 (and 4):
   a. Correct title to say “ever testing” (instead of “testing”)
   b. Add the n for ‘ever tested’ in column (and never tested if you decide to keep the column)
   c. This table is confusing because in some cases, all categories are listed (age, occupational status, etc.) but in others they are not (education).
   d. Should I assume that the referent category for religion is anything other than Christian?
   e. I suspect that there is some reversal going on in the ‘inconsistent condom use’ ORs (i.e., the data are incorrect)
   f. Education has similar values in OR and aOR: it seems that forcing age into this model should have lowered the aOR more.
   g. The ‘social support for condom use, composite score’ is not explained

8. Figure 1:
   a. I don’t think it is possible that the data in figure 1 AND in table 1 are both correct.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests