Reviewer's report

Title: Structural factors associated with an increased risk of HIV and sexually transmitted infection transmission among street-involved youth.

Version: 1 Date: 26 November 2008

Reviewer: Lloyd Goldsamt

Reviewer's report:

This paper focuses on an area of keen interest in the study of HIV and other risks: the role that structural factors may play in the facilitation of behavioral risk among vulnerable populations. The authors do a good job describing these risks, but do not do an adequate job justifying how their data from a cross-sectional study helps to understand in a meaningful way how these structural factors impact risk. The major limitation here is the use of cross-sectional data, which the reviewers acknowledge as a limitation. However, more attention needs to be given to suggesting hypotheses for their correlational findings that describe a causal relationship between structural factors and behavioral risk, so that these hypotheses can be tested in future research.

For example, the authors report that homelessness, having an “area restriction” (a form of legal sanction that prohibits geographic movement, making it impossible to access needle exchange programs), barriers to health services (which include medical services and access to syringe exchange, which may be better approached as separate categories of services) and contact with the police are associated with greater numbers of sex partners and inconsistent condom use. However, in the absence of a demonstration of causality, the most parsimonious explanation for these relationships may be that other unmeasured factors are responsible for both the structural factors and the risk behaviors. Thus it may be that the structural factors, as assessed, are a consequence of the same underlying variable that leads to risk, rather than a cause of risk.

This is not to rule out the possibility that the structural factors impact behavior, but because the present study cannot determine this, the authors should suggest the ways that they believe that this causality may be operative, and suggest ways that their ideas could be tested in future studies. Even though the present study is not able to prove the impact of structural factors on risk behaviors, this area is important enough that the paper can make a valuable contribution if it is reworked to use the data from the present study to suggest a direction that future studies could take to help address this issue.

Major Compulsory Revisions

1. The discussion section must have a stronger acknowledgement that the data are purely correlational, and could easily be interpreted as simply describing a constellation of risks that cluster together in street youth, rather than solely focus
on the relationship between structural factors and risk behaviors.

2. The discussion section should include suggestions, based on the correlational findings, for how structural factors might cause an increase in risk behaviors. These suggestions should be framed as hypotheses that can be tested in future studies.

Minor Essential Revisions

3. Barriers to health services should be amended to treat needle exchange as a separate service from medical care.

4. Significant findings related to the relationship between risk behaviors and sexual orientation, relationship status, anal intercourse, self-efficacy and cocaine use, among others, should be explained.

Discretionary Revisions

5. The second line on page two is unclear (“The vast majority are sexually active, of whom…”)

6. The second paragraph, fourth line on page four, has a typo (“reported being homelessness”).

Level of interest: An article of outstanding merit and interest in its field

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