Reviewer’s report

Title: Modified Social Ecological Model: A tool to guide the assessment of the risks and risk contexts of HIV epidemics

Version: 1 Date: 29 January 2013

Reviewer: Peter A Newman

Reviewer’s report:

This is a very clearly written manuscript which advances conceptual analysis of social-structural drivers of HIV epidemics. The two case examples are aptly illustrative of the proposed model.

Minor Essential Revisions

p. 3. "...we found no model designed to date that encapsulates individual HIV transmission risks in the context of social and structural drivers of the epidemic."

Unless the authors mean to be extremely specific about what such a model would entail (in which case the statement should be better specified), to my understanding there are several models that have at least been applied to advance conceptualization of the social-structural contexts of HIV transmission, some of which may merit referencing. It is at the authors’ discretion which of these references to address, but it seems at least some of the following are highly relevant:

Related models?

Additionally, several articles seem to be highly relevant to the arguments offered and may help to flesh out as well as support the proposed model and its description:

Makes the case for additional higher order structural factors that the authors might consider for inclusion.

Robert Hecht, et al. Health Aff November/December 2009 vol. 28 no. 6 1591-1605
Suggests that not only public policy but financing of implementation may be key.

p. 3. It seems that there is a higher order of evidence and confidence suggested as a requirement for individual factors than for the other levels. Why? Would one not wish to include what at a particular point in time may be tentative factors at the individual level and then assess them? Might this requirement (meta-analysis) to be included in the model limit its comprehensiveness and utility? Or perhaps, given the preponderance of individual factors studied in HIV research, there is a rationale for this level of evidence; if so, best to describe the rationale.

p. 8. "..well-designed programs aimed at higher order levels of risk will generally have a ripple-like effect...."
This makes it sound too easy. Surely these are of central importance and may have an enabling effect; but often laws/policies are changed with very slow evolution of practices that become vestiges of such laws and which remain tremendous obstacles to prevention.

Provide a key for the acronyms in figures 2 and 3.

Discretionary Revisions

p. 2. "These structural drivers do not directly cause...; rather they contextualize lower order risks...." Contextualize seems a rather weak descriptor.

In Figure 3 (but not Figure 2), several factors are repeated verbatim at different levels. Consider labeling them differently.

Level of interest: An article of importance 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'