Reviewer’s report

Title: Seroepidemiology of viral hepatitis, HIV and herpes simplex type 2 in the household population aged 21-64 years in Puerto Rico

Version: 2 Date: 3 December 2009

Reviewer: Geraldine McQuillan

Reviewer’s report:

Seroepidemiology of viral hepatitis, HIV and herpes simples type 2 in the household population aged 21-64 years in Puerto Rico.

This well written paper provides much needed population based prevalence estimates for viral hepatitis, HIV and HSV-2 for Puerto Rico.

The sampling design was based on four strata based on AIDS incidence rates among injecting drug users. My main question is how representative are these four strata to the general household based population of Puerto Rico? This sampling scheme could increase risk behaviors reported in the population. Over on-third reported lifetime non-infection drug use which seems high for the general population.

Participants were given educational materials on prevention of blood bourn infections. Why were they not given materials on STI and enteric infections to cover HSV-2 and HAV?

Consent rates were good and the distribution by age was similar to the Census 2000 population which gives me more comfort in the sampling.

Hepatitis C. Prevalence estimates are a little high and might reflect the risk stratums. Population estimates should be rounded. With small sample sizes and sampling error exact population estimates are not appropriate. Age distribution is expected with lower prevalence in older age groups. The association with risk factors seem reasonable.

Hepatitis B. Prevalence of infection is lower than U.S. national prevalence. Population estimates should be rounded. The statement that prevalence was increased with the number of lifetime sexual partners and those with a history of tattooing, body piercing and STIs should not be mentioned since it was not a statistically significant increase.

Hepatitis A. Prevalence is a little higher when compared to the U.S. which is adequately explained by sociodemographic factors. Population estimates should be rounded. Once again associations that are higher but not statistically higher should not be noted.

HIV prevalence were higher then the U.S. population thought this is expected. Population estimates should be rounded. Once again associations that are not
significant should not be mentioned.

Discretionary Revisions:
HSV2 estimates are similar to U.S. population based estimated. Population estimates should be rounded.

Interpretation of the data seems adequate and the limitations are well described.

**Level of interest:** An exceptional article

**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.