Reviewer's report

Title: Socioeconomic Inequities and Hepatitis A Virus Infection in Western Brazilian Amazonian Children: Spatial Distribution and Associated Factors.

Version: 1 Date: 25 May 2015

Reviewer: Marcelo Pinto

Reviewer's report:

Minor Essential Revisions: Presented manuscript described here is a well conducted cross sectional study about hepatitis A seroprevalence in 1 to 5 age Amazonian children. The reduced percentage of IgG anti-HAV detected (16%) was associated to geographic localization (hotspots in Assis Brasil city). These results represents a very important information for Brazilian ministry of healthy and South America. The frequency of outbreaks of hepatitis A is elevated in Brazil, as well as, the risk of HAV-induced severe acute hepatitis and liver failure. The association of poverty factors with hepatitis A infection is not new information, it has already been well described in literature. However, is very important to confirm that poor socioeconomic condition are risk factor to HAV infection among Amazonian children (non indigenous and indigenous ethnicity). Additionally, the geographic localization of past HAV infected subject (IgG anti-HAV positive subjects) and epidemiological characteristics of studied population grouped in hotspots areas of HAV infection (maps) introduced an important approach, that may be useful to vaccination strategy to hepatitis A, recently approved to be included in Brazilian National Plan of Immunization (PNI). However, the figures showing the hotspots of HAV infection and the association risk should be more clear.

Discretionary revisions: The prevalence of HEV infection should be included in this study. A poor sanitary conditions is a common risk factor for these enteric transmitted viral hepatitis.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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