Reviewer's report

Title: Seroprevalence of hepatitis C and associated risk factors in urban areas of Antananarivo, Madagascar.

Version: 1 Date: 30 October 2007

Reviewer: Flor Pujol

Reviewer's report:

General
This well conducted study reports the prevalence of HCV infection in Antananarivo, Madagascar, with correlation with risk factors associated with HCV transmission and infection.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. Introduction describes a somehow randomly selected reference of HCV prevalence around the world. It should focus more on describing the prevalence in the African continent with selected comparisons with other continents. The following review: "Madhava V, Burgess C, Drucker E. Epidemiology of chronic hepatitis C virus infection in sub-Saharan Africa. Lancet Infect Dis. 2002; 2:293-302" is suggested as guideline.

2. By univariate analysis, several risk factors were significantly associated with the presence of HCV antibodies. However, by multilogistic regression analysis, only age and transaminases were significantly associated. Nevertheless, discussion is focused on the practice of unsafe injections. This part should be revised and shortened.

3. For some of the risk factors, a significant lower number of individual information was available. This might have affected the relevance of the risk factor and should be discussed.

4. Previous scarification is reported as significantly associated with HCV seroprevalence (page 8, line 7). However, p value in Table 1 does not support this statement.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. The genotyping of HCV positive samples is not mentioned in Methods.

2. Were the serum samples negative or indeterminate by Deciscan tested individually by PCR?

3. ALT and AST should be used instead of ALAT and ASAT throughout the text.
4. Blood transfusion was not found significantly associated with the presence of HCV antibodies, although previously reported by another group as a significant risk factor in the country. This discrepancy should be discussed.

5. Reference to HCV genotype distribution in the world is again randomly selected. This information should be described briefly but more comprehensively.

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

**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