Reviewer's report

Title: Seroepidemiology of Toxoplasma gondii infection in pregnant women in a public hospital in northern Mexico

Version: 1 Date: 8 June 2006

Reviewer: Jorg Heukelbach

Reviewer's report:

General

This is an interesting study on the seroprevalence of toxoplasmosis in pregnant women from northern Mexico, and the factors associated with soropositivity. The risk factors identified differ from those of other (industrialized) countries, and thus the study contributes to knowledge on transmission in a resource-poor environment.

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

Background:
I suggest to transfer the detailed description of other studies done in Mexico into the Discussion section.

Methods:
Study population - describe the target population: How many pregnant women were attended in the study period? If not all women were selected for this study, describe the selection criteria.

Statistical analysis: detail the description of the multivariate analysis.

Tables:
Table 1: there are too many variables in this table, describing socio-demographic and clinical characteristics of the study population. The variables "Number of deliveries", "Number of caesareans" and "Number of abortions" may be omitted.

Tables 2, 3 and 4 can be integrated into one table. Exclude the columns "Negative test for anti-T gondii antibodies", as it gives redundant information. Only use one decimal point for p values >0.2.

Results:
Restructure the presentation of results: 1. Sociodemographic description of study population, 2. Serology and prevalence, 3. Factors associated with soropositivity. Describe with two to three phrases the results of the bivariate analysis (such as "In the bivariate analysis, only........"). Include the results of the multivariate analysis in the results section (maybe as a table).

Discussion:
When citing other studies on the prevalence, detail the study populations: Are these studies done in pregnant women, or in the general population?
Poor housing (which is a sign of low socio-economic status) has been found to be associated with soropositivity, but the authors state that poor people do not have money to buy meat on a regular basis. Please comment on that possible contradiction.

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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)

- Change "OD" into "adjusted odds ratio" or "adjusted OR".
- Include the data presented in the discussion on the multivariate analysis in the results section.
- all characteristics are "epidemiological". I suggest using the terms "socio-demographic", "clinical" and
"behavioral" to classify the variables.
- Background: change "...we performed a descriptive and cross sectional study" into "we performed a cross-sectional study..."
- Statistical analysis: Delete the phrase "A p value of less than 0.05 was considered significant."

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of importance in its field

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

**Statistical review:** No