Reviewer's report

Title: Seasonal variation in the incidence of preeclampsia and eclampsia in tropical climatic conditions.

Version: 1 Date: 30 March 2007

Reviewer: Ira M Bernstein

Reviewer's report:

General
1) I would be interested in more information on those women who became preeclamptic and eclamptic. What was the segregation between term and preterm disease? Are those who develop eclampsia more likely to live further from the hospital?

2) It would seem plausible to me that the increase in eclampsia with no change in preeclampsia might be the result of transportation problems during the monsoon season that delay, arrival at, and care in, the hospital setting resulting in a greater progression of preeclampsia to eclampsia. Is this a possible alternative explanation?

3) Related to this, how often did the eclampsia occur outside the hospital as opposed to within the hospital?

4) It would be of interest to know whether seizure prophylaxis in those diagnosed with preeclampsia is employed routinely in the hospital setting. If so, what seizure prophylaxis agents are used?

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

1) A recent paper not cited by the authors suggests no associated with precipitation and seasonal risk of preeclampsia (1). This is probably worthy of discussion.

2) Do the authors not think that the small change in temperature (a decrease during the monsoon season) might contribute to the risk of eclampsia as multiple other sources suggests that the risk of preeclampsia appears to be highest during winter into early spring.

3) In their discussion the authors suggest that the risk of seizure might be lower with a general state favoring dehydration. Seasonal data on plasma volume suggest increases during the summer months (2-4), (which might explain the higher activity adjusted water loss), when the risk for eclampsia seems lowest (5). How do the authors reconcile this with their interpretation?


5) Davis Eight hundred and seventy-nine cases with convulsions at the New York lying in hospital JAMA 1926;87:233-6

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 methods section has a typo: March 1993 rather than 1996

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.