Reviewer’s report

Title: Low Birthweight and Socioeconomic Factors in Mexico.

Version: 2 Date: 3 August 2004

Reviewer: AA Silva

Reviewer’s report:

General

The question posed by the authors (the relation between socioeconomic factors and LBW) is not new. They pose other questions in the manuscript that they did not answer and at some point the reader gets lost. They propose to evaluate the role of socioeconomic factors on LBW. However their socioeconomic classification is too simple and crude (based on having/not having jobs and/or goods). The discussion needs extensive revision. There are many conclusions not supported by the data.

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

Abstract:
“158 LBW cases were identified within the cohort”. Which cohort are you talking about?
“There are no significant differences between cases and controls”. Please review this statement because you reported higher risks of LBW in relation to maternal weight, calcium supplementation…

“Probability of higher risk”. Please review the style.
“We conclude that socioeconomic position and health are related in ways and directions within the structure of society”. Although this affirmative might be true it is too generic and not supported by your data. Please avoid confusion between socioeconomic factors and socioeconomic position.

The background (introduction) section is too generic and bigger than needed. The authors need to focus the introduction on the question they propose in the title of the article (socioeconomic factors and LBW). An useful guide to write the introduction is: what is already known about this topic, what is unknown, what is the question posed by the authors, what is the contribution of the paper to help answer this specific question?
The first paragraph is too generic. In the second paragraph they need to stress where (in the whole world?) infections are one to the main causes of neonatal mortality (I do not know what is the importance of describing causes of neonatal mortality in a paper dealing with LBW).
The first four paragraphs of the third page are too big and too generic. They are not closed linked to the authors’ question. The authors say that the role that socioeconomic factors might have on pregnancy results and the newborn conditions are still controversial. This is not their question: their question is about the influence of socioeconomic factors on LBW only. And in my opinion this question is not controversial. Please see Kramer’s review about the role of socioeconomic factors on pregnancy outcomes (Kramer et al. Socioeconomic disparities in pregnancy outcome: why do the poor fare so poorly? Paediatric and Perinatal Epidemiology 2000; 14:194-210). Please see Kramer’s review about determinants of LBW (Kramer MS. Determinants of low birth weight: methodological assessment and meta-analysis. Bulletin of the World Health Organization 1987; 65:663-737).
In the fourth page the authors describe other processes not directly related to their question: for example, the role of psychological variables, the results of nutritional interventions, the
intergenerational transmission process and so forth.

Methods:
The authors need to answer some questions to help the revision process:
1) Were the controls selected at the same hospitals that the cases have been selected?
2) Was a matching employed?
3) How was sample size calculated?
4) The adjusted OR was obtained by what statistical method? Logistic regression I suppose?
5) Was the socioeconomic classification proposed by the authors themselves? Has it been used before? Was it tested before? Is this classification able to discriminate between the socioeconomic groups of the Mexican society? The labels “good, regular and bad” may not be appropriate.
6) The authors did not explain their rationale in using three different models? How these three different adjustments helped them answer the question?

Discussion:
The discussion needs extensive revision. The authors need to focus the discussion on the question they propose. First of all, they must make clear that their socioeconomic classification is able to help answer the question.

Page 7, first paragraph. They cite three works that have previously dealt with their question. These are not the most relevant papers published on the theme, and they are sometimes analyzed out of context. There are two papers from Scandinavia and one from Mexico. Results of the studies may differ according to the level of development. Therefore the discussion should differentiate between studies performed in developed and underdeveloped countries.
The socioeconomic literature abounds in examples that occupation does not necessarily reflect income. I think this assumption may not hold anymore. I would be very careful with that point.
In the fourth paragraph the authors compare the results of their work with results of papers dealing with relations between socioeconomic factors and “effects on health”. Again they should focus the discussion on the relation between socioeconomic factors and LBW only.
In the fifth paragraph the authors discuss the results regarding education. I could not understand what other deleterious factors women of high education are more exposed than their counterparts that could justify their results. Please be clearer and stress what factors are you talking about. A possible explanation for the lack of effect of education on LBW is the small sample size, especially in the < 7 group. Again in the last sentence their explanation is too generic and not supported by the data.
In the last paragraph the authors cannot draw a conclusion valid for Mexico (“in the case of Mexico”) because their data is based only on three hospitals, which are not representative of the country.
In the first paragraph of the eighth page the argument is fragile. They say their study represents a closer approach to know the role of socioeconomic position in LBW. First of all socioeconomic position and socioeconomic factors are not the same thing. Secondly, they need to justify convincingly that their socioeconomic classification is able to answer the question or they can use maternal education or occupation instead. Is it really the closer approach? In the last paragraph they acknowledge that building a socioeconomic index that reflects the real situation in which pregnant women are living is a challenge.

Conclusions
Should be revised because they are not based on their data.

References:
There are too many. Some of them are outdated. Some of them are not related to their question. Some important papers written on their question are not included (Please see references in Kramer’s review about the role of socioeconomic factors on pregnancy outcomes (Kramer et al. Socioeconomic disparities in pregnancy outcome: why do the poor fare so poorly? Paediatric and
Perinatal Epidemiology 2000; 14:194-210). For example the papers of Parker, Wilcox, Kogan and others.

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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)

Title: I suggest that the title could be: socioeconomic factors and LBW in Mexico.

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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: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

None