Reviewer’s report

Title: Improved pregnancy outcome despite low literacy on the Thai-Burmese border: results of three cross-sectional surveys

Version: 1 Date: 8 December 2010

Reviewer: Farid Midhet

Reviewer’s report:

Major Compulsory Revisions:

1. The Methods section needs to be completely re-written: start with the objectives of your study, a description of the study population (ethnic groups, residence inside or outside camps, age range, eligibility criteria for participation in study, etc.), the dates and duration of each phase of study, how were data collected, how was consent for participation taken, what was done when a woman refused to participate, how data were entered in a database; with regard to data analysis, be more specific on which variable were subjected to what analysis (e.g., the mean value, the SD and the 95% confidence intervals were computed for age) etc. Some information needs to be moved from Results section into Methods section, e.g., describe your study groups in the Methods section (women living in camps and those living outside camps).

2. The Results section needs to be reorganized to present information in an orderly fashion and with reference to the tables. Please synthesize or summarize your results and do not just repeat what is in the table. Readers should be able to look at the tables first and then read the text to get further explanation of the findings. Figures should have titles that describe what is being presented. Table 2 needs better presentation (e.g., put smokers and non-smokers percentages in a panel one above other, rather than in columns; columns should read as 'percent able to read' etc.). The table title should also describe what the 'relative risk' means, but please note that the estimates shown are actually odds ratio and not relative risk. Same suggestions apply to Table 4.

Minor Essential Revisions:

1. Intro/Background should highlight the importance of the study objective: Why is it important to study the effect of literacy on pregnancy outcomes and how it relates with the work done before. The rather unconventional method to determine 'literacy' used in this study should also be explained and supported with data from previous studies.

2. Justification of comparing data from different time periods should be provided. How was the study population different in these groups (esp. in 1995 and 2003). Were participants selected only from those visiting the clinics? Was any effort made to include those who did not visit the clinics? Provide at the end of Discussion section a list of constraints and possible weaknesses in the study.
design and how these might have affected the results.

3. If possible, compare results with studies that have used schooling (above primary or secondary) as a determinant of pregnancy outcomes.

Discretionary Revisions:

1. Selection of independent variables for logistic regression was based upon a significant association at p<0.05 in preliminary analysis. Conventionally, those having an association at p<0.10 are included in the regression model. Suggest redoing the analysis to see if there are any major changes in results.

2. I suggest removing the 1995 data if that does not affect fulfilling the study objective.

3. A comparison between camp population and migrant population might be interesting.

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

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.