Reviewer's report

**Title:** Health-seeking behavior in Lubumbashi, Democratic Republic of the Congo: Results from a cross-sectional household survey

**Version:** 1  
**Date:** 15 November 2013

**Reviewer:** Juanita Hatcher

**Reviewer's report:**

The paper covers an interesting topic. It is in general well written, the literature well covered and acknowledged but has several weaknesses.

The research questions are well defined, and the abstract and title appropriate. The information collected during the interview and the way it was coded in the analysis was well chosen, and should be able to be collected accurately. The translation of the questionnaire is also well done. Conclusions, discussion and limitations are supported by the data presented and the limitations, except for sample size, are included.

**Major Compulsory Revisions**

1. The sample size calculation is adequate for estimation of the first objective, the percentage of the population who use formal services as a first line, but it is not clear whether it is adequate for the more complex analysis relating risk factors to the outcome. In relation to the logistic regression results, it may be that the sample size is not adequate to show significant results.

2. Although they had adjusted for sampling design in the sample size calculations, it is not clear whether they had also done so in the analysis.

3. In presenting the results on the cost analysis, there seems to be a contradiction on page 20, where they state that 'the cost does not differ statistically between sub-populations of different SES, and the poorest pay more than wealthier patients'

4. The conclusion that the poor pay more is not really supported by the results as all the CIs are overlapping, and there is no consistent dose response

**Minor Essential Revisions**

1. The sampling strategy is described as a probabilistic cluster sample, but it appears to be a two level stratified sampling strategy, and it is not clear whether population size was taken into account in the sampling.

2. The method for choosing the person in the household is also not described.

3. There is an error in reporting of Table 3. The statement ‘only 5.8% (2/34) of the diseases that respondents considered to be ACUTE problems’ (page 12) does not reflect the table as there 217 people with acute problems and 34 with chronic problems.
4. There is also a mis-reference to Figure 2 on page 13.

5. While the trajectory of care seeking is complex, I find Figure 2 difficult to read, and it may also be improved by using percentages rather than numbers. Also given the numbers are so small, and the main question relates to formal vs informal care, perhaps this could be simplified into these two main categories of care.

Discretionary Revisions
1. The one missing component was the measurement of accessibility, but this may be the ease of access to first line clinics.

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

'I declare that I have no competing interests'