Reviewer's report

Title: Inequalities in health status, health care use and expenditures: a prospective follow up study of newborns among urban poor in Lucknow, northern India

Version: 1 Date: 24 December 2008

Reviewer: G Kang

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1. Is the question posed by the authors well defined?
Yes, the question is well defined. The authors seek to i) describe the major causes of morbidity in neonates born in government run facilities, which serve as a proxy for a lower socio-economic status, ii) to classify the illnesses into those which are part of the Integrated Management of Neonatal and Childhood Illness program and those which are not, iii) to estimate household out-of-pocket expenditure on different causes of morbidity at different facilities/with different health care providers and to estimate, within the general population under study, how health care expenditures are made at different socio-economic strata.

2. Are the methods appropriate and well described?
The methods are appropriate, but would have benefited from more detailed analysis of the available data. For example, the authors could have sought correlations between illness or care-seeking and maternal education, type of illness and health seeking behaviour. The latter is presented in Table 2, but there is no analysis of whether a specific type of illness was the reason for seeking care from a particular type of practitioner.

3. Are the data sound?
The data are sound, but as mentioned above, the analysis could have been more rigorous. For example, the children were followed up between 4 and 8 weeks, was there a difference between neonatal and the post-neonatal period? Could follow-up, or at least data collection, which is based on recall, have been limited to the same time period? (MINOR DISCRETIONARY REVISION)

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
It would be useful to have additional details regarding the type of population which the District Hospital serves. Was there a difference between outcomes in children born in the two facilities? (MINOR ESSENTIAL REVISION)

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion and conclusions are limited and reasonable. Again, a stronger
analytic plan may help with greater insight into the factors which determine how families from lower income strata make decisions regarding health care expenditure. The fact that hospitalizations were for IMNCI illnesses needs to be emphasized in the abstract as well as the discussion. Is there an explanation for the high proportion of children with low birth weight? (MINOR ESSENTIAL REVISION)

Although the discussion states the supposed reasons why non-governmental dispensers were sought, these are not supported by data. (MINOR DISCRETIONARY REVISION)

6. Are limitations of the work clearly stated?
Yes. Greater emphasis is required to make it clear that this is not a cost-of-illness study, since the costs incurred by the health care systems have not been calculated. (MINOR ESSENTIAL REVISION) Since the authors have a study population and cooperation from governmental authorities, they should consider doing more detailed costing studies which estimate the economic burden of neonatal morbidity on the family and on society.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
No. There are limited costing and out of pocket expenditure studies in India, but the discussion would benefit from setting this study in the context of other Indian and regional studies. (MINOR ESSENTIAL REVISION)

8. Do the title and abstract accurately convey what has been found?
‘Inequalities in health status’ is probably overstating the case. Over 80% of the families studied had an income of less than 2000 INR, and despite the stratification into quintiles for baseline data, the data presented for illness in two groups, where other risk factors for illness have not been considered. (MINOR ESSENTIAL REVISION)

9. Is the writing acceptable?
The text needs editing. The exchange rate for the US dollar is different in different places. (MINOR ESSENTIAL REVISION)

Is it essential that this manuscript be seen by an expert statistician? No. This manuscript could be improved with better analysis, but that is a discretionary revision.

**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, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests.