Reviewer’s report

**Title:** Cost of dengue and other febrile illnesses to households in rural Cambodia: A prospective community-based case-control study

**Version:** 1  **Date:** 10 January 2009

**Reviewer:** Pankaj Garg

**Reviewer’s report:**

Reviewer comments

The authors need to be complemented for carrying out this work on cost of dengue and other febrile illness. The findings reiterate the fact that dengue viral and other febrile illnesses continue to ravage resource poor settings and households compared to the average daily incomes. The findings are relevant not only for Cambodia but for much of South East Asia as well as South Asia; regions complexed with poverty, unique social and cultural circumstances on one hand and grossly inadequate public health infrastructure on the other.

I have following Minor discretionary comments to offer:

• The most striking part of the findings is that non severe dengue does not add to an additional burden as compared to other febrile illness; it is the severe dengue requiring hospitalization with its anticipated complications which is a cause substantial burden. However, this needs to be interpreted with caution considering the small study sample size which could easily result in significant small difference between dengue and other febrile illness to go unnoticed. It would have been worth gold to attempt to involve the entire 89 laboratory confirmed dengue cases for interview.

• Secondly the reasons of substantial costs incurred by the outpatients in many of these settings could be due to inappropriate prescriptions of antibiotics, etc; in the absence of appropriate training of health care providers at primary and secondary care providers especially in the private health sector. Thus appropriate training of health care providers is a method for reducing financial burden due to dengue to poor.

• The authors conclusions of that higher social economic class results in greater hospitalization is valid, as is a also noted by us during our management of major dengue epidemic of September to November 2006 in northern India.

• The implications of the authors findings are not only for the development of the vaccines but also for the national vector control programs such as cost–effectiveness of the fumigation(aedes control) programs etc.

• The most challenging issue for any cost analysis related to dengue is to find out the exact proportions of children requiring hospitalization, platelet transfusions,
need of intensive care, etc. Because these are the variables which pose substantial burden not only to the households but also to the health systems of the nation.

• The study has been well conducted, methods well described, language use and statistical analysis are accurate. Discussion contains the relevant limitations of the study. My only minor concern is that the interviews were conducted one to two months after the illness which has the potential to lead to recall bias. However, I realize it might be a feasibility issue and authors have accepted this in the limitations of the study.

• It would be extremely useful for other researchers to include the questionnaire developed and used by the authors in their study as an additional file in the manuscript.

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

**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'