Author's response to reviews

Title: Direct economic burden of hepatitis B virus related diseases: Evidences from Shandong, China

Authors:

Jingjing Lu (ljjingjing7257@163.com)
Aiqiang Xu (aqxuepi@163.com)
Jian Wang (wangjiannan@sdu.edu.cn)
Li Zhang (zl9127@163.com)
Lizhi Song (sdepigy@163.com)
Renpeng Li (rpleesd@163.com)
Shunxiang Zhang (zhangsx@szcdc.net)
Guihua Zhuang (zhuanggh@mail.xjtu.edu.cn)
Mingshan Lu (lu@ucalgary.ca)

Version: 5 Date: 24 November 2012

Author's response to reviews: see over
Dear Dr. Crow,

Thank you for your letter dated November 13, 2012.

We have carefully considered both reviewers’ comments and accordingly amended the manuscript. Please refer to the following response to the specific points raised by the reviewers for your consideration.

Reviewer # 1

1. I am not sure what the differences are between table 4 and table 10. They seem to have similar titles and structures, but different numbers. Are the numbers in table 10 medians? If so, the table’s title should be altered to reflect that.

We thank the reviewer for pointing out the mistake we made. The title of Table 10 has been changed to “Table 10 The median of direct medical cost for all HBV-related diseases (dollar/per average annual admission)”.

2. I was hoping to see "N's and standard deviations" or "confidence intervals" that would give me a sense if these differences were "real" or due to chance. The addition of Table 10 may answer my question (if table 10 is indeed median values, then it looks like the median compensated cirrhosis cost is lower than the median decompensated cirrhosis cost leading me to believe some outliers with high compensated cirrhosis costs elevated the mean costs above those for decompensated cirrhosis). I still think it would be nice to have some more information on the variation in observed costs, but it probably would be too difficult (and confusing for readers) to try to add standard deviations and confidence intervals to all the numbers in all the tables in this paper.

We agree with the reviewer that more information would help readers to interpret the results, while at the same time we have to keep the tables simplified enough to avoid confusion. As a tradeoff, we have chosen to follow the reviewer’s suggestion by describing N in Table 2 and standard deviations in all tables.
Reviewer 2

1. In the title or in the abstract, the authors should make it clear that the data were collected from “those who were admitted into a hospital for seven or more days”. For acute HBV infection, hospitalization for 7 or more days should be very rare and thus the economic data collected in this study are from ”rare and severe” cases, and thus are biased data toward the high end of costs.

We agree with the reviewer that this is an important clarification point to make, thus have followed the reviewer’s suggestion and added the following clarifications in the abstract (page 2):

From April 2010 to November 2010, we conducted a survey of inpatients with HBV-related diseases and who were hospitalized for seven or more days in one of the seven tertiary and six secondary hospitals in Shandong, China.

Our data based on inpatients with HBV-related diseases suggested that…”

Then in the discussion part of the paper, we have added the following discussions on direction of bias of our estimations as following (page 13):

“Third, our data only allowed us to assess the direct inpatient cost of HBV-related diseases. We did not have data to estimate the direct outpatient cost of HBV-related diseases, nor were we able to evaluate the indirect cost of HBV-related diseases such as loss of productivity and income as a result of illness days and hospitalization, or loss of income for family members who were caregivers. In other words, the actual total economic burden of HBV-related diseases could be either higher or lower than our estimates. On the other hand, however, our survey only included patients who were hospitalized for seven or more days. These are likely patients with higher severity of illness which would cause upward bias in our estimations. ”

2. The authors include too many data points in 10 tables. Please align your data with your objective and trim out the extraneous ones from text and the tables.

We appreciate the reviewer’s concerns on the amount of the information presented in the text and tables. The reviewer suggested that we keep only the evidences directly related with our conclusions. We have carefully reviewed the data presented. We feel that the detailed information included are all relevant with the issues we examined, and would be of interests particularly for readers who would like to look into details of our estimations of economic burdens of HBV as well as investigations into the interactions of income, health insurance, and health expenditures of HBV patients in China. After careful consideration, we have made some minor changes to simplify the tables yet chosen to keep the level of information as it.

We believe that our paper has improved through the review process, and would like to
resubmit our paper for publication at the BMC Health Services Research.

Sincerely yours,

Jian Wang
On behalf of all authors
Center for health management and policy
Shandong University
Jinan, Shandong 250012
China
Email: wangjiannan@sdu.edu.cn