Reviewer's report

Title: Variation of cataract surgery costs in four different graded providers of China

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Reviewer: Van Charles C Lansingh

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Background

1. A little more background on CSRs in the context of developing and developed countries would be helpful.

2. Introduce by way of discussion the range of costs for cataract surgery around the world, and how these costs relate to surgeries performed in the private and public sector, so readers get a sense of costs. Amongst others, a good recently developed source of cost data is the article by Lansingh & Carter (Lansingh VC, Carter MJ. Arch Ophthalmol 2009;127:1183-93.).

Methods

3. The word “graded” as in “graded eye clinics” needs to be changed as it does not make sense.

4. Is the JCH located in a small city or a very rural area? It would be useful to categorize the catchment area as “rural” “urban” or “mixed” and insert this data in Table 1 under number of patients from rural region.

5. There needs to be some detail on how costs were obtained.

6. I would suggest breaking down costs as follows: cost of lens; cost of drugs; facility cost (facility charges, which include overheads, personnel costs, including nurses and physicians, cost of operating theater, etc.). In the case of JCH, the cost of physician and his or her equipment charges can go under facility costs. It is also really important to include the cost of 1 preoperative and 1 postoperative visit to be inclusive of total cataract surgery costs. An average of estimate for these items would be better than including no estimate at all.

7. The URL of the web site(s) of the National and Provincial Bureau of Statistics from which disposable annual incomes was obtained should be included as well as the date it was consulted.

8. State the date (year) in which costs were calculated.

Results
9. Define “seldom” in the context that ECCE is used. 1%? 5%? More?

10. “What’s more, ZOC conducted surgery alone.” This is not really relevant as only 6/1108 patients had outpatient surgery.

11. “Patients paid for equipment depreciation and service charges.” This needs much more explanation.

12. “vein infusion.” Do the authors mean intravenous infusion? Why were antibiotics given this way? Usual practice is to give them orally/topically.

13. Need to explain to the reader the concept of reimbursement ratio for patients. How many patients at each hospital were insured? If they were insured, did the insurance cover all costs? Did the cost of the surgery vary according to whether the patient had insurance? If the patient had insurance, did he or she have to pay first, and then was “reimbursed” by the insurance company? (Readers are not likely to be familiar with Chinese medical insurance systems.)

Discussion

The Discussion needs more structure.

14. Discuss the findings of the study in comparison with other studies or papers in which costs of cataract surgery in China are mentioned.

15. Can the use of multifocal lenses be justified? Why were domestically produced lenses not used?

16. Why were patients staying a week or more in some hospitals? What are the barriers to introducing outpatient surgery in these and other hospitals in China? If this practice were adopted, how would it affect costs?

17. Toward the end of the Discussion, discuss what could be done in China to bring improve infrastructure for cataract surgery and bring costs down.

18. At the end of the Discussion, summarize the strengths and weaknesses of the study.

19. Axes on all graphs need labels. For example, in Figure 2, X axis needs “Hospital” and explanation of the abbreviation of the hospitals (e.g., ZOC), and Y axis should state “Cost of cataract surgery ($U.S.).

**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'