Reviewer's report

Title: Cost of illness of the Stomach Cancer in Japan - a time trend and future projections -

Version: 2 Date: 20 March 2013

Reviewer: Joses Muthuri Kirigia

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It is a study on an important public health issue. The study makes an important contribution to the existing literature on economic burden of stomach cancer.

In various places, authors indicating that they are estimating social burden of stomach cancer. The Cost-of-Illness (COI) methodology cannot estimate social burden. COI is used to estimate only economic burden (productivity losses plus cost of treating a disease) of disease. It is only the willingness-to-pay approach that can be used to estimate the societal burden of any public health problem.

Major Compulsory Revisions

1. Abstract

Under Background, the statement of the purpose or objective of the study needs to be rewritten for clarity, e.g. “The objectives of this study were: to estimate and project the economic burden associated with stomach cancer in Japan; and to identify the key factors that drive the economic burden of stomach cancer.”

Under Methods, there should be mention of the direct and indirect costs of the COI methodology.

Under Results, the authors should provide the total direct cost, total indirect cost, the grand total cost, and grand total cost per case of stomach cancer.

2. Background

a) Authors should provide one or two paragraphs reviewing findings of published stomach cancer studies conducted in Japan and other countries.

b) In the last paragraph, the authors should restate the objectives of the study as suggested in the Abstract above.

3. Methods

a) The formulas used in estimating COI should be presented as equations to enable the readers to see how the calculations of costs of premature deaths, costs of morbidity (non-fatal disability) and direct costs of diagnosing and managing/treating stomach cancer. Although the authors are dealing with a different disease, we would encourage them to browse through a study using similar methodology reported available at the following link: http://www.biomedcentral.com/1472-698X/9/6
b) The authors should include a table containing the assumptions made in the course of estimating the costs mentioned above. They should also provide rationale for making those assumptions. For example, if the assumed discount rate is 3%, it would be important to justify the choice of that rate.

c) In the first paragraph, 2nd sentence, the authors state that “The COI method has been used widely to evaluate the burden of illness since 1960s, and has been used for policymaking”. COI studies cannot be used for policy making or decision-making. They can only be used for advocacy purposes to raise awareness of a specific public health problem. The authors should read the following: Shiell A, Gerard K, Donaldson C. Cost-of-illness studies: an aid to decision-making? Health Policy 1987;8:317–23.

4. Results
In addition to what the authors have already reported, they should conduct and report on sensitivity analysis, i.e. they should vary the key assumptions to see the impact on their findings. This is important to see how robust their estimates are. For example, what happens when you use a discount rate of 10% instead of 3%, etc.?

5. Discussion
• Authors should indicate how their estimates for Japan compare with the costs of stomach cancer obtained in other countries. A Google search will enable them to identify relevant studies conducted and published on other countries.

6. Conclusion
No comments.

7. References
The authors should look again at their references to ensure that they adhere to referencing style of the journal.