Reviewer's report

Title: Estimating and validating disability-adjusted life years at the global level: a framework for cancer

Version: 1 Date: 4 November 2011

Reviewer: Kaliannagounder Krishnamoorthy

Reviewer's report:

1. Is the question posed by the authors well defined?
Yes. The authors attempted to identify and quantify the variables, proposed a frame work for more realistic estimates of cancer. The questions including the validation of variables and estimates based on various sources are well defined and justified.

2. Are the methods appropriate and well described?
Person trade off method was used to derive DW. The groups based on health outcomes of cancer following diagnosis and with or without treatment were well described. However, the authors need to mention whether any assumption was considered for the morbidity among cured.

Sensitivity analysis on different assumptions (proportion treated vs observed treatment, two stage vs three stage natural history, advanced cancer as a proxy for untreated and impact of discount and age weight) is appropriate to test the behavior of the model.

3. Are the data sound?
Data (primary) on the derived DW are sound. For the estimates of DALY, only secondary data (epidemiological) were used, with its own limitations on the quality and under reporting. The assumptions related to the data source are addressed through sensitivity analysis.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?
Yes. The discussions and conclusions are well supported by the data and the outcome of model exercises.

6. Are limitations of the work clearly stated?
The limitation of the estimate by using DW for different sequale of treated cases
of cancer is to be mentioned as it does not reflect the natural history of disease progression. The treatment (quality) varies with health facilities in different countries.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   Yes

8. Do the title and abstract accurately convey what has been found?
   Yes.

9. Is the writing acceptable?
   Yes

   The legend for the figure 2 should be self-explainatory

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests