Reviewer's report

Title: Economic burden of cholera in the WHO African Region

Version: 1 Date: 29 July 2008

Reviewer: James R Butler

Reviewer's report:

Major Compulsory Revisions

Background, last para: This para says that the study took a societal perspective, which means that all costs in any particular cost category are included regardless on whom they fall (government, individuals, etc). Yet under "Limitations" at the end of the paper, it is stated that user fee payments have not been included due to lack of data. This inconsistency needs to be rectified by revising the last para in "Background" to provide a more accurate statement of the perspective adopted.

Methods, Conceptual framework: Add a new para at the end of this section, explaining which parts of the six cost components in this framework are being included in the estimates being reported in this paper.

Analytical model: This section is too long and tedious. It needs to be considerably condensed and relegated to an Appendix. As it stands, it takes 7 pages of the paper to cover it - around half the length of the manuscript. The essential method is mostly that unit costs of various items are multiplied by corresponding per capita quantities consumed and the size of the population consuming them. The extensive use of symbols and equations to convey this is not really necessary. A 1-2 page Appendix needs to be constructed to summarise this detail, and the section currently in the paper should be replaced with a short statement of the method and a reference to the new Appendix. The section would be better headed "Cost estimation" rather than "Analytical model" as the "model" is simply a set of identities that say "total expenditure = price x quantity".

Results, Table 3: This Table is not well presented. Two "per person" results tables would be better, one showing average cost per person with cholera (i.e. using the total number of cholera cases as the denominator for all averages), and the other showing the average cost per case receiving the particular therapy. This second of these tables is, I think, what the current table shows, but of course since the denominators for the averages are different in each cell, the sum of the components does not equal the total. The "totals" in this table should be dispensed with and reported in the new table where the sum of the components, expressed as "per person with cholera" will equal the total.

Minor Essential Revisions

Abstract, Results, 2nd sentence: Change to read "About 12% ... and 88% ..."
Abstract, Conclusions, 1st sentence: Change to read "... economic burden of cholera, disaggregated by ..."

Background, 1st para, last sentence: Change to "An estimated 37.5% ... was lost"

Background, 3rd para, 2nd sentence: Insert "with" after "associated" so as to read "associated with conditions"

Background, 3rd para, last sentence: Change to read "The ever-increasing proportion ... is constantly at risk"

Results, Table 2: The proportions of TC accounted for by direct and indirect costs are not shown, but should be. Also, the Grand Total proportion (100%) is in the wrong place.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**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.