Reviewer's report

Title: The Lives Saved Tool (LiST) as a Model for Diarrhea Mortality Reduction

Version: 1
Date: 7 March 2014
Reviewer: Tor Strand

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The Lives Saved Tool (LiST) as a Model for Diarrhea Mortality Reduction

Walker and Walker have written a nice comment on the LiST for use on Childhood diarrhea. The paper gives a nice and clear overview of what List does and doesn’t and how the algorithms in the tool work. The report is well written and the authors demonstrate that they know the literature on childhood diarrhea and LiST well.

Most of my comments are related to lack of references in the text. In general the use of references is excellent, reflecting their profound knowledge of the topic.

Page 15: “It is important to note that in these two studies, the recommended dose of zinc was 14 days and the WHO/UNICEF recommendation is 10-14 days of zinc.”
I would not call this “dose of zinc” it is duration.

Page 15: Both studies also promoted ORS and observed increases in ORS use rates in the villages that received zinc thus it is difficult to isolate the effect of zinc alone in any of the treatment studies.
I would not use any treatment studies, rather “these studies”

Page 15: The 23% reduction in mortality that is used in LiST for the effectiveness of zinc treatment is consistent with the observed 25% reduction in prolonged diarrhea based on efficacy studies which were all individually randomized, unlike the cluster randomization in the effectiveness studies.
Please include a reference in this argument

Page 15: Some studies have shown a reduction in diarrhea incidence in the 2-3 mo following the treated episode
Please include a reference in this argument

Page 15: After efficacy was proved, researchers moved to community-based intervention studies introducing ORS also as a preventive tool for dehydration. These studies often compared more aggressive delivery strategies with routine delivery and measured differences in coverage to determine the added effect of ORS on mortality.
Please include a reference in this argument

Page 16: Sugar-salt-solution, the closest home-made solution to ORS, was tested in hospitals and found efficacious.

Please include a reference in this argument

Page 19: Fortunately these issues are not as important if held constant when modeling other diarrhea interventions.

I do not understand why this is not important, if handwashing substantially reduce the burden of diarrhea, this will also affect the absolute effect of another intervention that reduces the proportion of cases.

Page 20: For example with diarrhea, people have argued that as we have reduced the incidence of measles due to the high coverage of measles vaccine, children are in fact healthier, less likely to develop diarrhea and for those who have diarrhea less likely to die.

I would also like to see a reference to this argument (if existing)

**Quality of written English:** Acceptable

**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