Reviewer's report

Title: Evaluation of the impact of shigellosis exclusion policies in childcare settings upon detection of a shigellosis outbreak

Version: 0 Date: 17 May 2018

Reviewer: Varvara Kozyreva

Reviewer's report:

Dear colleagues,

The manuscript addresses an important public health topic and the conclusions provided by the authors would be extremely useful for healthcare officials in defining childcare exclusion policies. The manuscript is well written and the facts are logically stated. I believe it would benefit from adding more details in the description of the methods which were used for data analysis.

1. Table 2/Methods section: It would be nice if more information was provided on literature sources from which the data was taken to build the estimates. E.g., what was the age range for cases from the studies used for estimations? What was n in each of the studies? Based on data for what Shigella species the estimate was made. Would the predictions for infections caused by S. sonnei vs S. flexneri be the same? Also, in the Table 2 for Attack rates, was there no range available, just a single value, considering that 4 different sources were used?

2. Could you please summarize in the methods section (Lines 94-101) how the assumption was made on when to consider the patient infectious upon readmission in different scenarios, not only when the antimicrobial therapy is completed but also in cases when fixed time interval-policy is used? Were the positive lab test result used as an assumption that the patient remains infectious in the source studies; is it an outbreak data documenting a transmission after the children were readmitted, etc.

3. If data is available to you, could you please least the details of treatment options-particular antibiotics? (Appendix 3 or the Methods section). Also it would be great if you could add to discussion (lines 140-143) what are the current recommendations on using antimicrobial therapy for Shigella infections treatment, particularly in children?
4. Line 121: How do you define "Inappropriate treatment"- one where the pathogen was detected by lab test after the treatment was over or the treatment which wasn't finished, or didn't match recommendations for managing shigellosis?

5. Lines 143-147: Was the cause for ineffective therapy in the used source data known? Was it resistance of the pathogen (any known types of resistance to certain classes of antibiotics)? Or was it improper prescription?

6. It would be nice to have the point of initial diagnosis Shigellosis plotted on the Figure 1-a.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable
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