Reviewer’s report

Title: Male commuters in North and South England: risk factors for the presence of faecal bacteria on hands

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Reviewer: Jeannie Cimiotti

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Male commuters in North and South England: risk factors for the presence of fecal bacteria on the hands

General comments: Nice study that reenforces the problem of hand carriage of microorganisms. It would have been nice if the authors collected data on a number of other risk factors for hand contamination. That being said, it appears that would have been an impossible task given the design of the study.

Minor Essential Revisions

1). Introduction: In this section there seems to be a disconnect. WHO should be spelled out; however, the first few sentences on diarrheal disease in children don’t fit. I suggest the authors rewrite the introduction with a focus on hand hygiene and the carriage on organisms.

2). No need for the figure from the previous study.

3). Methods: During what year were samples and/or data collected? Move the sentence on ethical approval from the analysis section and place it at the end of the paragraph that describes the sample.

4). The paragraph that begins to describe the culture mediums etc. begins as a few rambling sentences. Just explain the procedure used for this study. When describing the questions listed in Table 1 deleted the “3-8” as this leads the reader to believe that there were additional questions on personal hygiene that were not included. I suggest rewording the sentence that describes the scoring of the items. Instead of listing rarely = 0, occasionally = 1, etc. State that the items were scored on a 0-3 scale where 0 = rarely and 3= always, or items were scored on a 0-3 scale where higher scores indicated better hand hygiene practice.

5). Questionnaire. Briefly report on the reliability and validity of the Stevenson scale.

I’m not sure why a backward elimination procedure was used in the logistic modeling. There are so few variables available from this study that the elimination procedure is unwarranted.

6). Results: There is a typographical error in the first line. It should state that a total of 308 males agreed to participate. In the second paragraph of this section, I would suggest the second sentence include language such as 14 out of 31 (5%)
of the samples tested positive for E. coli. Also the first time an organism is used in text it should be spelled out, such as Escherichia coli and italicized. In the third paragraph of this section, students were at a significantly higher risk. If the differences are significantly different then please state the results as such.

7). Discussion: I would like to know what the authors mean by the statement, “Another possibility is that participants responded differently to the questions”. That sentence needs clarification.

8). Table 2 needs some reformatting. I would suggest the total n in parenthesis in the title of the table and n (%) below each city. The asterisks used in the table are confusing since the asterisk typically is used to indicate level of significance, which does not appear in any of the tables. Furthermore, there is no need to list the tests since they were mentioned in the methods section. Please apply these suggestions to the tables that follow.

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

**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 interest'.