Reviewer's report

Title: A large-scale assessment of hand hygiene quality and the effectiveness of the "WHO 6-steps"

Version: 3 Date: 15 February 2013

Reviewer: Dominik Mertz

Reviewer's report:

Overview:
1. Is the question posed by the authors well defined?  
   Acceptable
2. Are the methods appropriate and well described?  
   Acceptable
3. Are the data sound?  
   No concerns
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?  
   Same concern as previously.
5. Are the discussion and conclusions well balanced and adequately supported by the data?  
   The discussion is still basic. (see detailed comments)
6. Are limitations of the work clearly stated?  
   Acceptable.
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 Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?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?  
   Writing style needs improvement.

Detailed review.

Discussion section:
Better, but still pretty basic and does not read well. (Minor essential revision)  
The first paragraph should summarize the most important findings and the authors should highlight what is unique to the author's approach.
In general, the authors should be more careful in drawing conclusion from their findings. The authors should not hypothesize too much, e.g. 'may open a new chapter in the abilities to further decrease health care associated infections'. Given the lack of validation of this approach, this is pure hypothesis.

Although the authors now do a reasonable job in justifying why their approach to assess hand hygiene technique is valid, there is still a huge gap to conclude that passing this test would mean less transmission in the clinical setting. Also, stating that this technique is more valid than culture techniques is a highly questionable statement and should be removed.

**Level of interest:** An article of limited interest

**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:**

No competing interests to declare.