Reviewer's report

Title: Acceptability, sustainability, reach, dose and fidelity of implementation of an educational intervention to improve hand washing in primary schools: process evaluation within a randomised controlled trial

Version: 1 Date: 25 March 2013

Reviewer: Patricia P Struthers

Reviewer's report:

I found this an interesting article to review. Thank you.

1. Is the question posed by the authors well defined?
   The authors state clearly that the purpose of the research was to determine the fidelity, dose and reach of this intervention and views on the acceptability and sustainability of the intervention.

2. Are the methods appropriate and well described?
   The study used a process evaluation that is clearly described. It included direct observation, pupil focus groups, teacher and HPA staff interviews and log sheet review. This was appropriate to meet the aim of the research.

3. Are the data sound?
   The analysis of quantitative and qualitative data is clearly described. A section specifically on rigor would strengthen this. The data are well presented and linked to the questions of reach, dose, fidelity, acceptability and sustainability.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   The discussion and conclusion are acceptable. The section includes suggestions for improvements of the resource. This section is supported by the data and makes reference to the published literature. It discusses the strengths of the study.
6. Are limitations of the work clearly stated?
The small size of the sample is presented as a limitation.

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 Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?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?
Yes

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

Section FG with pupils: What is the reason the pupils were randomly selected as opposed to purposive selection as is common in qualitative research?

Section Interviews with teachers: How were the teachers sampled?

Section Analysis (l. 14) “A conceptual framework” what framework was used and why?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Section FG with pupils: age range here (7-11 years) is different to abstract (6-11 years)

Reference 10: Capitalise Medicine

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

None

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.