Reviewer’s report

Title: Comparative efficacy of three pediculicides to treat head lice infestation in primary school girls: A randomised controlled assessor blind trial in rural Iran

Version: 1 Date: 24 Jul 2019

Reviewer: Research Square

Reviewer's report:

"STATISTICAL REVIEWER ASSESSMENT:

Is the study design appropriate for the research question (considering whether the analyzed population accurately reflects the design and whether you see any problems with control/comparison groups, e.g., likely confounders)?
Yes - overall design, population, and control groups are appropriate

Are methodologies adequate and well implemented (considering whether assumptions are addressed and whether analyses are robust)?
No - there are minor issues

Are the analyses adequately communicated (considering whether reporting details are adequate and whether figures and tables are well labeled and described)?
Yes - important reporting details are present, analyses are adequately communicated, figures and tables are well labeled and described

Does the interpretation accurately reflect the analyses without overstatement (considering whether limitations/bias are acknowledged and whether accurate descriptors, e.g., 'significant', are used)?
No - there are minor issues

Could an appropriately REVISED version of this work represent a statistically sound contribution?
Probably - with minor revisions

STATISTICAL REVIEWER COMMENTS:

The design as an RCT randomised at the patient level is a sensible one. The authors have ignored any potential clustering within schools. This assumes that the treatments were consistently applied between schools and that there were no relevant differences between the school populations. Given these assumptions, the analysis is suitable.

REQUESTED REVISIONS:
The statistical analysis is acceptable although it would have been good practice to investigate clustering with a multilevel model - with a random intercept for schools.
ADDITIONAL REQUESTS/SUGGESTIONS:
If the authors are not going to investigate clustering then they should try to justify their decision in the text and add as a limitation.

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

No

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.

No

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 am able to assess the statistics

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

Needs some language corrections before being published

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