Reviewer's report

Title: A systematic literature review of pediculosis due to head lice in Pacific Island Countries and Territories: What country specific research on head lice is needed?

Version: 3 Date: 16 May 2014

Reviewer: Ian Burgess

Reviewer's report:

1. As a first general comment there are some typographical errors that require correction, e.g.
   - in the list of authors Peter D Massey is given the superscript identifier “5” but his affiliation is listed as “6” further down the page;
   - in the Abstract, Background, you refer to “Pacific Countries and Territories (PICTs)” rather than “Pacific Islands Countries and Territories (PICTs)”
   - in the main text Methods, line 123, you list databases as “PubMed, CINAHL, Web of Science...” which should be corrected to “PubMed, CINAHL, Web of Science...”

No doubt there are other typographical errors in the text that are less obvious, and I have not checked your bibliography for correct citations. Please check through carefully to eliminate any errors.

Abstract

2. In both the Abstract and the Methods you have listed all the 22 PICTs. In both places you have listed some in parentheses and others not but have not explained why you have done this. An explanation for this would be appropriate in the Methods section. Also I do not think it necessary to actually list all the PICTs in the Abstract as this information is available in the text and only serves to “pad” the Abstract unnecessarily.

3. The Conclusions section of the Abstract is essentially a cut and paste of the Conclusions at the end of the main text. This level of wording is also unnecessary and could be cut down to 2 or 3 brief and concise sentences that would convey the essence of the conclusions drawn.

Introduction

4. I do not think that your second paragraph, lines 51-62, is self justifying. Reference 1 is not really a substantiation of the first sentence as it is a relatively superficial and somewhat resource poor scan of a small number of studies, unlike the comprehensive document on epidemiology of head lice produced for WHO by N Gratz (Human Lice – Their Prevalence, Control and Resistance to Insecticides). The other diseases and conditions listed in the paragraph are all of a much more significant public health importance, with a genuine threat to human
health and survival. Are you really comparing the importance of head louse control with those diseases? In addition, if the single head louse study you have cited from African experience was actually as formative an element for policy in South Africa as implied in the text, using relatively minimal data for developing policy, it could have been as “dangerous” as the flawed conclusions made by Slonka and colleagues following their 1976 study in Georgia, USA, where misunderstanding of social segregation of students of different ethnic origins influenced conclusions about the relative risk of infestation for children of African origin more than any other factor. Other studies from Africa have shown different outcomes from those of the Govere study, although in mixed race schools there have been similar, but not identical, trends. However, other authors have shown that the relative emphases placed on various aspects of hair care in Africa are principally involved in determining risk of continued (rather than incidence of) infestation.

Results
5. In the first paragraph you refer to the 19 rejected papers. It would be helpful for anyone else interested in this area of research to know what they were. You could probably submit those as a supplementary file listing.

Discussion
6. Line 168-9. You say the study demonstrated that lice in French Polynesia were ivermectin sensitive but that is not how I read the paper, with only 6 subjects cleared of lice on day 14 it didn’t seem to work very well at all. This comment should be modified accordingly.

7. The paragraph lines 187-203 is potentially very useful but I think you have slightly lost the important punch line related to availability and efficacy of treatments by including in the same paragraph all the earlier stuff about what is not necessary. The throw-away line about combing with conditioner being the most efficient method of diagnosis is rather pointless a) without a citation to back it up and b) because many rural people in the PICTs have possibly never seen or certainly could not afford conditioner. The other important point you have missed is the relative cost of insecticide to average income, e.g. you could have given the price per unit compared with income for the Solomon Island Rx product.

8. The sentence line 200-201 stating with “Since insecticide…” needs better punctuation otherwise it potentially becomes meaningless to many readers – I had to read it 2-3 times to be completely sure what you meant.

9. The two sentences lines 201-203 should be in the following paragraph.

10. The sentiments expressed in 205-210 are quite laudable but I wonder how practical or practicable they are. Maybe people in schools in the USA take that much notice of policies, and perhaps in Australia, but in much of Europe policies appear to be something that most give the nod to and then ignore. That is not to say that no policy should exist but it should be one that can be put to use, or to state the limitations of what can and should be done.
11. I am afraid that lines 211-213 read like a socio-political pamphlet and are also tautological. I can see the overall sense in what you are saying but I suspect that most people in the resource poor communities possibly have greater health priorities than head lice.

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

**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 interests