Reviewer's report

Title: Features of Human Scabies in resource-limited settings: the Cameroon case

Version: 2 Date: 5 January 2015

Reviewer: Claire Fuller

Reviewer's report:

Thanks for your hard work in collecting and preparing this manuscript. I attach rather a lot of comments which I hope will be useful to you in revising the manuscript to make it clearer.

Abstract
1. You entitle the manuscript “scabies in resource poor setting” but do not detail why this is different from resource rich setting. I would additionally recommend focusing on this if you are trying to demonstrate a difference.

2. I suggest shortening the abstract, as it does not need to repeat what is in the main body of the article.

3. Line 41 You mention the interval between onset of symptoms and seeing the dermatologist but do not detail if the patient had sort a diagnosis from elsewhere or spent money on treatment previously. It would be interesting to know this as makes the case for the need for diagnostic expertise.

Introduction
4. Line 59 the first part doesn’t make sense to me.

5. The 2nd part of line 59 represents a view but as there are no globally agreed diagnostic criteria for scabies and many studies include all patients who itch at night and have a family /close contact with scabies as diagnostic criteria it is another view that scabies should be considered in the right setting with the right history and so skill of the clinician is not an issue.

6. Line 64 the references you include here range from 1997 - 2012 so not showing "resurgence" I don’t think.

7. Line 69 you mention the dearth of literature on burden…. but your study doesn’t target the burden...

8. Line 72 – you mention the study is aiming to identify features tat determine risk of spreading. It is not clear to me how do you target determine spreading factors without a control group to compare this with.

Methodology
9. Line 83: so were these dermatological out patient consultations? What is the proportion of caseload that was scabies? Had they previously tried treatment? I
think it would be useful to include this information for clarity. Also I am not clear what you mean by “exhaustively” in line 84.

10. Line 89: what are you aiming to signify with the number of baths taken per day? Is there evidence that this reduces scabies transmission? I am not sure there is.

11. Line 93: please detail the “specific medication” you give in the Cameroon. It may differ from other countries.

12. Line 96: you mention patients being excluded from further analysis but I do not see how many were excluded in the results section. I think this needs stating.

Results

13. Line 115-116 It would be useful to put the patients into age groups e.g. infants, children under 5, 60-10 etc. it would make understanding your data easier and help to use it in comparison with other studies in a tropical setting.

14. Results table: It think it is this is only interesting/relevant if compared to the whole population and or compared to a control group. If you can’t do this I suggest omitting this table.

15. Line 118: I suspect this statistic may well be largely related to the age of the patients…. see my comment against table of results later on.

16. Line 120: suggest you include the current national level of HIV positivity if known

17. Line 123: knowing the mechanism of transmission for scabies why would you expect a difference between men and women? Not sure why you undertook to report this or what point you are trying to make. If there is a relevant point to make then it needs spelling out more clearly. It would have been interesting to look at differences between your patients with scabies and those in an unaffected control group.

18. 129: what is your explanation for the men being itchier? How many of the women were pregnant?

19. 132-135 I think it might be interesting to detail these findings in table format and also make more of the impetiginisation feature, as this is one of the key elements that are increasing the “importance” of scabies on the global health scale with the association with glomerulonephritis and renal impairment.

20. Line 140: this fact of atopy contributing to itch is a key one. Make more of it.

Discussion

21. Line 144: might be worth clarifying that this is an outpatient population if this is the case....

22. Line 145 as before I don’t think you can make this conclusion in the absence of a control group.

23. Line 150: I think you should spell these out. What are the preventative measures you would advocate and how would you go about strengthening clinicians knowledge and how much evidence did you have that scabies diagnosis had been previously missed by a clinician prior to the patients coming
to the dermatology outpatients? This is not clear. There is a nice paper from Mali showing how one day course teaching basic health care workers which I think include scabies lead to a measurable positive impact on increasing the diagnostic and more important therapeutic appropriateness of treatment.

24. Line 152: suggest this conclusion is only relevant if this is only relevant if you report the proportion of overall attendances at clinic...and as you say you cannot project any of this data to general epidemiological conclusions.

25. Line 159: I don’t think you mention how many “doubtful” cases you omitted/excluded.

26. 163-4 more likely to represent normal infectious disease behaviour requiring close physical contact.... peak in 7-year-old children being the norm.

27. Line 172 can’t conclude this without a control group.

28. Line 192: I can’t find this figure in the reference cited. Can you check you didn’t mean another one?

29. Line 202 onwards: Has this point been previously made? I don’t think so in which case this is an important part of your conclusion.

30. Line 216: you mention not doing lab work up. What tests do you wish you had done? Did you check the urine for example for protein especially in the impetiginised ones?

31. Tables

32. Educational Level in Table 1: this needs to be presented with reference to the age of the patient...an infant will of course not yet have gone to school. Otherwise I do not see what you are trying to show with this data. Do all students include all children for example?

33. Table 3: persistence of pruritus” I don’t think you mention how long it persists for. > 3-6 weeks?

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

**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:**

I have no competing interests.