**Reviewer’s report**

**Title:** Diaper dermatitis: a survey of risk factors in Thai children aged under 24 months

**Version:** 0  **Date:** 31 Jan 2019

**Reviewer:** Stefanie Ziehfreund

**Reviewer's report:**

This paper aimed to assess the prevalence and risk factors of diaper dermatitis among 1 to 24 months old Thai children. The paper provides some interesting numbers about diaper dermatitis in Thailand. However, in my opinion, there are several areas that need extensive improvement.

Abstract:

1. The second sentence in your results makes no sense. Perhaps the word "highest" is missing in front of prevalence.

Introduction:

2. The facts stated in the beginning of the introduction (line 1 to 12) are not referred to references (excluding over-all prevalence percentages). Please make sure that you include appropriate references to all your given information.

3. In line 31 it seems that the given reference (4) appears in the wrong position. Perhaps the reference should be placed two sentences earlier after you mentioned the risk factors.

Material and methods:

4. Please give the method of selection of your parents/children.

5. You mentioned some risk factors for which you asked for in your structured questionnaire. However, what I miss is the reason for choosing these risk factors as the factors are partially different from those mentioned in your introduction. Maybe you have additional literature to verify your decision?

6. You did not mentioned all your measures you present later on in the results and discussion. Perhaps you can do this in combination with a more detailed description of your questionnaire as this is what I also miss within your manuscript.
7. You did not explain how quantitative variables were handled and why you have chosen the later on presented groupings (age, frequencies of diaper changes etc.).

8. Although, you mentioned that there were incomplete questionnaires, you did not explain how missing data were addressed.

Results:

9. You reported that 1153 children were recruited for the study. However, what was the number of potentially eligible children; how many parents were asked to participate? And what are the reasons for not participating?

10. As you report about total numbers/percentages of participants within the discussion (e.g. line 1 page 7), it would be an option to include those numbers and percentage in table 1.

11. "Participants were considered to have diaper dermatitis if they had experienced diaper rashes during the previous six weeks." line 24 -25 page 4 belongs to methods not to the results. There is no need to repeat it, make sure that it becomes clear in the method section. Only report the prevalence in the results, please.

12. Last paragraph (line 10-17 page 5) of the results. It didn't become clear to me why you mentioned this in the results. In my opinion it belongs to the methods as variables you asked for in your questionnaire. Moreover, how do you know that these factors had no association with increased incidence of diaper dermatitis? Any references? Since due to your study design an incidence cannot be one of your results. Or do you want to report about the prevalence?

Discussion:

13. Overall, the discussion has good and interesting points. However, it reads very long and some areas seem to repeat. Thus, the discussion should become summarized or shortened.

14. Line 42-51 page 5: You reported about a statistically significant higher prevalence of diaper dermatitis in the age group 1-6 months compared to the other examined age groups. Subsequently you justify this with a higher number of children in this age group due to your recruitment center. As the prevalence is described by the number of existing cases divided by the number of people in the population the size of the groups has no influence on the prevalence. Please try to clarify or rectify your statement in order to avoid misunderstanding.

15. I miss some references in your discussion; line 9 page 6, line 31 page 6, line 38 page 6, line 51 page 7, line 56 page 7, line 58 page 7. However, if one of those reported information and facts depends on your results or on an later on given reference make sure that the reader gets it.
16. Line 1, 2 and 45 page 7. You suddenly report your percentages with two decimal places. Make sure, that it is reported the same way throughout the whole manuscript.

References:

17. Your most recent reference is from 2015. You should screen and include current references (e.g. Burdall et al. 2018, Sikic Pogacar et al. 2018).

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.

Yes

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

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

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