Reviewer’s report

Title: DOUCHING PRACTICES AMONG WOMEN IN THE BOLGATANGA MUNICIPALITY OF THE UPPER EAST REGION OF GHANA

Version: 1  Date: 07 Sep 2017

Reviewer: Margaret P. Kasaro

Reviewer's report:

Thank you for conducting this research and effort to contribute to literature on women's health.

I have some concerns on this draft as you move towards publication.

My main comment is what is the aim and justification of the study and based on that what would be the appropriate conclusions to make. If the gap is that there is no data on this issue in the specific locale then it is justifiable to conclude with a definition of the problem and a recommendation on what should be next step to improve data or to remedy the problem. That said just to say that health care providers must use proven interventions may not be the appropriate thing to do here. The compelling reason why the research was done is not evident by simply making that conclusion. Phrasing the conclusion to include that the identified factors may be important information to guide formulation of interventions specific to this region may strengthen your cause.

The next general concern is language and flow of information. The paper itself has information to discuss your topic of choice but will require further work to improve the language and flow of information. I will highlight a few illustrations - the definition of VD that has been provided may seem to be restricting VD to menstruation and post coital cleansing. In the paper there is information which actually indicates that you have the accurate information but have not just ensured everything needed is in the definition. The next two sentences in the introduction also speak to the need to improve the presentation of your work. The first is leaning towards a sweeping statement of this common practice globally and then in the next it is talking about incidence. Please note that prevalence and incidence are different.

Here are some specific comments on each section:

Background - your literature summary seems to be emphasizing the bad of VD and not summarizing current evidence and then to highlight the gap that your research wants to address. It may benefit from paragraphs addressing each point
line 37 VD is not only practiced for post menstruation or after ciotus it may be a daily hygiene practice. Most literature highlight hygiene, health/therapeutic and sexual enhancement. Contraception may be added to this list but may not be commonly cited.

line 45 pay attention to tense vary here must be varies and this sentence and the next are not well linked

line 54 highlights the deficiency in your definition of VD as here you have included more than fluids which is in your definition

Line 57 seems to be a conclusion

Methods - In the site and participants, please separate out the design description. The other comments are participants were from that area and not mainly from, this would imply you had participants from else where. Also, please do not mix information on participants and other procedures like the ethics. For data collection was the translation done as needed or the document was already translated? For the statical methods, is cross tabulation sufficient for use in and describe your analysis?

Results - The style of reporting results in your paper needs review to ensure clarity. Here is an example, instead of - Table 1 presents the demographic data of the participants. Majority (83%) of the participants were within the ages of 15 - 30 years, 13% aged 31 - 40 whiles less than 10% were above 40 years. Out of the total, 66% of the participants were single, 71.5% were Christians whiles over 90% had some level of formal education, - suggested format - Table 1 presents the baseline demographic data. In summary, majority (83%) were between 15 and 30 years, 66% were unmarried, 71.5% were christians and over 90% had formal education.

Similar concerns and comments apply for the other results reported. In table 2 what is the difference between reasons for and factors influencing VD?

For table 4 and 5 for associations you have selected presented p values, you have not include the statistic used for testing the associations which should indicate the directions of the association.

What is the statistical method used, I recommend review to show the statistic used and how the conclusion can be made.

Discussion section suggested flow - make a general statement on the findings of your study for para 1, para 2 could be limitations and strengths, para 3 and so on (broken down per points) can
discuss the findings in relation to current knowledge, is your data in agreement or not and maybe you can state some reasons for that.

Conclusion - although including health education at the end seems appropriate it may not be tying to what you have indicated as the aim of the study. It may be more appropriate to state that these identified factors may be useful in formulation of interventional packages specific to this locale.

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

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**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 recommend additional statistical review

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

Needs some language corrections before being published

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