Author's response to reviews

Title: Prevalence, impacts and medical managements of premenstrual syndrome among female students: cross-sectional study in college of health science, Mekelle university, Mekelle, northern Ethiopia

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Author's response to reviews:

Date: 14/02/2014
Subject: SUBMISSION OF EDITTED MANUSCRIPT AFTER PEER REVIEW

Dear editor, the following points are among the main areas where our manuscript entitled “Prevalence, impacts and medical managements of premenstrual syndrome among female students: cross-sectional study in college of health science, Mekelle university, Mekelle, northern Ethiopia” submitted and reviewed by “BMC Women’s Health” for possible publication is manipulated to cope with the standards of the journal and the concerns of the reviewers.

Reviewer’s report (#1)

Title: Prevalence, impacts and medical managements of premenstrual syndrome among female students: cross-sectional study in college of health science, Mekelle University, Mekelle, northern Ethiopia

Reviewer: Nusrat Nisar

1. In abstract Author had mentioned in the background (3rd line)” main aim of the study was to determine the prevalence, impacts and medical managements of PMS”. Aim or objective of any study may be primary and secondary there is no term main aim it needs to be corrected/ revised by authors.

   • The term “main” has been changed to “primary” as of the reviewer indicates (third line in the abstract)

2. Author use the term "determine" the prevalence of PMS. To Determine prevalence of any disease one needs to compare the two groups and to apply some statistical test in between those two groups as author did not use any second group in this research the term "Determine” needs to be revised.

   • The term “determine” has been changed to “assess” as of the reviewer indicates (fourth line in the abstract)

3. Methods need some more elaboration. to establish the diagnosis of PMS women should have maintained the menstrual calendar for at least 2 to 3 months so that cyclical pattern of PMS related symptoms can be established. Author did
not mention in the methods that how diagnosis of pms was established as they did not ask the participants to maintain the menstrual diary.

• Participants who do not menstruate every month for at least the past two months have been excluded as it is stated at no. 10 of the questionnaire as “10. Do you usually have a period/menstruation every month regularly? a) Yes b) No”

4. Methods did not explain that how the degree of PMS symptoms was rated and what tool was used for it as it is mentioned in the result table 3 that symptoms were of mild moderate and severe degree. author are suggested to describe the tool used for it.

• The participants’ degree of PMS symptoms was rated using their impact on the daily activities of the participants as it was stated on page 8 under “operational definitions” as “Mild PMS symptoms: Symptoms as minor as not interfering routine daily activities. Moderate PMS symptoms: Symptoms interfering routine daily activities. Severe PMS symptoms: Symptoms hindering participation in any activity.”

5. Inclusion criteria( 1. Had a menstrual period at least in the last three months) as i suggested earlier the diagnosis of PMS is done when woman had PMS related symptoms for at least two consecutive months if she had periods once in three months then this does not fulfill the diagnostic criteria for PMS.

(Inclusion criteria 2 Women of fertile age). As the author had mentioned the age of woman in range this inclusion criteria may be changed with the age in range author may write age group in spite of writing woman of fertile age it will clear the ambiguity if author agrees to modify 2nd inclusion criteria.

Exclusion criteria( 3 Currently using a hormonal method of contraception) This is very sensible criteria but in the result section page 15 para 2 line 1 author had mentioned that 14 participants were found to be a current contraceptive users and it was further mentioned in the table 2 the different hormonal methods used by the participants. Author is suggested to correct the exclusion criateria 3.

Exclusion criteria ( 5 Had undergone total abdominal hysterectomy operation) it is the ovarian harmones resposible for PMS related symptoms uterus had no relation with those symptoms author is suggested to correct this exclusion criteria as woman may have hysterectomy but ovaries may be preserved such woman may have PMS related symptoms. further more it is very rare that woman aged 18-27 had removal of uterus so this exclusion criteia can be deleted if auther agray to it.

• Participants who experience PMS always during their menses were included for diagnosis of PMS as it was stated at no. 14 of the questionnaire as “14. Do you
always experience premenstrual symptoms with your periods at least in the past two months? a) Yes b) No“

• Inclusion criteria 2: “Women of fertile age” has been changed to “Women within 15-49 years of age” (page 6, 2nd line from the bottom).

• As the reviewer indicates, participants who are current users of contraceptives have been excluded from the result and the table 2 which is merged with table 1 as of the other reviewer’s recommendation. (page 7, line 4; result section page 9 paragraph 1 line 3; page 22, table 1)

• Even though PMS is associated with ovarian hormones, the exclusion criterion “Had undergone total abdominal hysterectomy operation” might not be deleted as these patients cannot have menses and it is not possible to associate the symptoms whether they are of PMS or not because the symptoms can be of another disease states. But this exclusion criteria has been deleted as the age range of the participants is too young to undergo hysterectomy.

Results are satisfactory and discussion had provided good comparison with literature.

Few grammar and typographical mistake are present in whole article.

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

Quality of written English: Not suitable for publication unless extensively edited.

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Reviewer’s report (#2)

Title: Prevalence, impacts and medical managements of premenstrual syndrome among female students: cross-sectional study in college of health science, Mekelle university, Mekelle, northern Ethiopia.

Reviewer: Desalegn Zegeye

Reviewer’s report:

This is an interesting manuscript that needs further work before acceptance for publication.

1. There are a few typos and language-style problems that need to be reviewed carefully.

• Typo and language style problems has been reviewed and corrected

2. It would be better if introduction is reviewed again and shortened because of redundant information and inclusion of literature review in the introduction section.

• The redundancies in information has been reviewed and shortened from 4 ½ pages to 2 ½ pages without any compromise in its content.

3. The sampling strategy is not clear. If both systematic and cluster sampling technique was used, a design effect should be considered.
The reviewer is right with the concern but design effect could not be considered as the study has already been already conducted.

4. The introduction needs to provide information about ‘PMS is not a public health concern in Ethiopia’

   • This sentence has been reviewed and elaborated as “In Ethiopian context, there is few published data on PMS, as this disorder was not taken as public health problem; thus, prevalence of PMS is not known at national level” (page 4, paragraph 2, last line).

5. Some variables (e.g., Weight, height, ...) were shown in the tables but not reported in the result section. How such variables were also collected is not mentioned in the methods section.

   • Variables like weight and height are reported in the result section as the reviewer indicated (result section/page 8, paragraph 1, line 5)

6. The questions on menstrual pattern (duration and cycle length) are not good enough to detect variation. The authors use a cut of point of 28 days cycle length which is not true always.

   • The reviewer is right with this concern. But it was the “Average” menstrual cycle length when a given menstruating woman revolves around in majority of her menses and for majority of the world population is 28 days and that is why we used it to be.

7. The tables need to be redone. Table 6, 7, 8 are not clear.

   • All the tables have been redone and the ambiguities with table 6,7, and 8 were cleared (page 22-26)

8. Rather than presenting p values and chi-square values as measures of association would the authors provide odds ratios for example?

   • The chi-squares were presented to assess whether a given independent variable does have any association with the dependent variable. Then after, those variables which were found to be associated with the dependent were subjected to binary logistic regression and presented as odds ratio (In result section, last paragraph)

9. The discussion section is too long. The author is advised to select few variables and critically comment on that.

   • The discussion part has been reduced to around 4 pages from the prior 5 ½ pages (page 11-15) as of the reviewer’s indication.

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

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 declare that I have no competing interests

Reviewer’s report (#3)
Title: Prevalence, impacts and medical managements of premenstrual syndrome among female students: cross-sectional study in college of health science, Mekelle university, Mekelle, northern Ethiopia
Reviewer: Manee Rattanachaiyanont
Reviewer’s report:
Comments
1. Is the question posed by the authors well defined?
Yes, the authors would like to determine the prevalence, impacts and medical managements of PMS on female students of College of Health Science students, Mekelle University
2. Are the methods appropriate and well described?
No. Although the author clearly stated that they conducted a cross-sectional survey, there was inadequate information regarding the reliability and validity of the tool (questionnaire) used for the survey. This would affect the reliability of the main outcome (prevalence of PMS). Moreover, the exclusion criteria were not appropriate; as the authors should exclude the students who had irregular menstrual cycle (probably had anovulation) or were current users of hormonal contraception. The analysis to demonstrate the correlation between various symptoms and PMS was not appropriate, as the symptoms were components of PMS.

• The contents of the questionnaire have been added in the method part as “A semi-structured and self-administered questionnaire was used for data collection. The questionnaire contained pertinent demographic characteristics of the study participants, their gynecologic and obstetrics profiles and possible symptoms of PMS assumed to be developed that were gathered from different literatures.” (page 7, paragraph 2, sentence 1 and 2)
• Contents of the questionnaire has been depicted by the attached supplementary file attached (File name: Questionnaire.pms)
• Students who had irregular menstrual cycle and were current users of hormonal contraception have been excluded from analysis as of reviewer’s indication (result section, paragraph 1, line 3 and 4; method section, exclusion criteria 3 and 5)
• The analysis to demonstrate the correlation between various symptoms and PMS have been corrected by correlating variables which are not symptoms of PMS with PMS (page 25, table 5)
3. Are the data sound?
The data are probably not sound because of the defect in the Materials and Methods as described in item no 2.
• The defects in materials and method section have been cleared as the reviewer indicates (item no 2.).
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes.
5. Are the discussion and conclusions well balanced and adequately supported by the data?
Yes. However, as the data were not reliable, the conclusions were questionable.
• The questionability of the data has been cleared by correcting the defects in the material and methods section especially the exclusion of current users of contraception and participants with irregular menses, some analytical problems associated with the correlation of PMS symptoms and the contents of the questionnaire.
6. Are limitations of the work clearly stated?
No. The authors did not mention the limitations.
• The limitations of the study have been mentioned as the reviewer indicates (page 8, paragraph 2)
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes. However, the authors need to cite more relevant references.
8. Do the title and abstract accurately convey what has been found?
Yes.
9. Is the writing acceptable?
No. The writing was somewhat redundant, had inconsistency in format (e.g. tense and use of capital letters) and needed correction of grammar. The Background was too long, reviewing some literatures that were not necessary for the study. The Discussion had many unnecessary repetitions of data in the Results. References were not written in standard format and had inconsistent pattern.
• Background has been modified and shortened as the reviewer indicates
• Redundancies of ideas in background and discussion parts have been cleared and shortened
• Grammar and spelling errors in the document have been corrected as the reviewer indicates
The unnecessary repetitions in the discussion part have been polished (page 11-15).

The references have been written in standard and consistent manner as the reviewer indicates. (page 18) “Journal of Thailand” has been changed to “Journal of Technology”. (reference 2). “R. Casper and Kimberly A Yonkers. Treatment of premenstrual syndrome and premenstrual dysphoric disorder, literature review version 19.3, September 30, 2011”, and “Manisha Patel. Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Syndrome (PMDD) February, 2006.” have been deleted as they are not a standard journals. “N. Ibrahim and Y. Godefa: Prevalence of Ovine Lung Worm Infection In Mekelle Town, North Ethiopia. The Internet Journal of Veterinary Medicine, 2012; 9(1):2.” has been deleted as it is not associated with the topic of the study. Page no. of reference 22 has been corrected.

Major compulsory revisions are needed for items 2, 3 and 9.

All the points have been reviewed as the reviewer indicates

Minor essential revisions and discretionary revisions are noted in the attached pdf file (comment in the manuscript)

All the points have been reviewed as the reviewer indicates

The manuscript is not suitable for publication at this form. However, after major revision by giving more information about the questionnaire, cleaning the data, and using the appropriate statistics, the manuscript might be acceptable for publication.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.

Note: The topics highlighted in the manuscript are to mean that majority their parts have been modified and polished considering all the three reviewers’ recommendations.

Best Regards,

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