Author’s response to reviews

Title: The Effect of Educational Intervention Program on Promoting Preventive Behaviors of Urinary Tract Infection in girls: A Randomized Controlled Trial

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Author’s response to reviews:

Dear Editorial,

BMC Pediatrics

We would like to appreciate you for giving us the opportunity to revise and resubmit our manuscript to the BMC Pediatrics. We have revised the manuscript according to the reviewers’ comments. We thank the reviewers for their informative comments, and our point-by-point responses to the reviewers’ comments are given below. In addition, we would like to inform you that we have used highlight (green color) to indicate where we made changes in response to the reviewers’ comments.

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Full title: The Effect of Educational Intervention Program on Promoting Preventive Behaviors of Urinary Tract Infection in girls: A Randomized Controlled Trial
Reviewer reports:
Fatemeh Darabi (Reviewer 1):

Reviewer comment
In title: The effect of educational intervention program on ...
Response:
Thanks to the dear reviewer. According to the dear reviewer the title was revised and edited.

Reviewer comment
In abstract section: What was the reason for doing it in one and three months?
Response:
According to the dear reviewer, the abstract section was revised and the following sentence was added to the methods section in manuscript (Methods section, line 15-16, page,2).

According to the panel of experts, three months of follow-up was considered sufficient time to establish consistency, stability, and sustainability in promoting preventive behaviors of Urinary Tract Infection in girls.

In the process of creating health behaviors in order to change people's attitudes and create stability and sustainability in health behaviors, group discussions with adequate time in educational sessions are needed. Therefore according to the TPB and based on the results of the needs analysis (pre-test), the training program was prepared for four educational sessions in one month targeted at the intervention group.

Reviewer comment
Other reviewer comment about abstract section
Response:
According to the dear reviewer abstract section revised and edited

In abstract section sampling method were mentioned.
In abstract section statistical methods are used for analysis were mentioned
In abstract section, in discussion section suggestion were mentioned. Keywords match the Mesh and revised and edited.

Reviewer comment

Bring the importance of the story to the story. What is your reason for doing this?

Response:

The end of an introduction necessary (reason for doing) and novelty of study were mentioned. (Introduction section, line 1-10, page, 5 )

Reviewer comment

First get the global statistics and other studies in this field then the Arak statistics Of course the information will be updated.

Response:

According to the dear reviewer, In introduction first global statistic in meta-analysis study were mentioned, then other studies in countries and finally Arak statistic based on current study. (Introduction section, line, 12-16 page, 3 )

Reviewer comment

Similar studies in this area are outlined and compared.

Response:

According to the dear reviewer, Similar study based on TPB in introduction and discussion were mentioned. (Introduction section, line, 20 page, 4 )

Moreover in discussion section with regard to the lack of similar studies on this subject, (TPB and UTI in children) the common structures of the TPB and other patterns of the behavior change, enable us to match these findings with those of other studies.

Reviewer comment

What is your reason for using this theory of planned behavior? Why this theory?
Response:

According to the dear reviewer, the following sentence was revised and edited in introduction section (introduction section, line, 7 page, 4).

In this study, the Theory of Planned Behavior (TPB) has been used. This theory, in addition to paying attention to the attitudes of individuals, examines their behavioral intention. Since most preventive behaviors of UTI in infants and children are carried out by the mother and in the home and in privacy, investigating the behavioral intention and its improvement has a significant impact on the improvement of the proper behaviors of mothers in child care, especially in childhood and infancy.

Moreover TPB is used to determine and understand the effect of environmental and individual factors on a behavior. Since the theory measures both direct behavior and intention of mothers (they are closely related to each other), it can be used to improve the preventive behavior of urinary tract infection for daughters and individuals’ behavior through measurement of the intention.

Reviewer comment

Bring other studies that have used this theory (TPB)

Response:

According to the dear reviewer, Similar study based on TPB in introduction and discussion were mentioned. The studies Darabi et al. and Lee et al. and Duncanson et al. was added and revised in Introduction section (Introduction section, line, 20 page, 4).

Reviewer comment

How was the intervention and control groups divided?

Response:

In this study to sample, the city first divided into four areas according to the geographical map, and then based on the list of health centers in that area, two health centers were randomly selected from each region and in total eight health centers were selected in the whole city. Half of the selected health centers in each region were randomly assigned to the intervention group and the other half to the control group, and the samples, available in each center, were included in the study. (Study design section, line 17, page, 6)
Reviewer comment
Check the validity and reliability of the questionnaire and its reliability. Was this questionnaire based on the theory of planned behavior? What is its validity and reliability? What is its qualitative and quantitative validity? Quantitative and qualitative content validity and ... detailed structure

Response:
According to the dear reviewer, corrections were made to the text. Subheading "Validity and reliability of the questionnaires" were mentioned to the method section line 1, page 9.

Reviewer comment
What is the minimum and maximum score that people get? In any structure

Response:
Minimum and maximum score were mentioned in any construct of TPB in sub-heading Theory of Planned Behavior Questionnaire (Method section, sub-heading Theory of Planned Behavior Questionnaire line, 21-27 page, 8)

Reviewer comment
How to take classes? How is your curriculum tailored to each structure

Response:
According to the dear reviewer in methods section, sub-heading “Educational intervention”, curriculum tailored and teaching methods for each of construct TPB were more explanation. (Methods section, educational intervention, line, 18-30, page, 9).

Reviewer comment
Why after 3 months follow up?

Response:
According to the dear reviewer, the following sentence was revised and edited in sub-heading educational intervention section (Educational intervention section, line, 11 page, 11).
Regarding the nature of preventive behaviors in urinary tract infection in children and based on the opinion of Panel of expert, three months of follow-up was considered sufficient time to establish consistency, stability, and sustainability in promoting preventive behaviors of Urinary Tract Infection in girls.

Reviewer comment

Ethical Considerations Long?

Response:

According to the dear reviewer, the ethical consideration was revised and edited.

(Ethical Considerations section, line,23 page, 11)

Reviewer comment

References updated and one-handed.

Response:

According to the dear reviewer, the references updated, edited and one-handed.

Reviewer reports:

Hyunmi Kang (Reviewer 2)

This is a very interesting, well carried out study on the effect of intervention in promoting changes in behaviors of mothers that are related to a higher risk of UTI, in order to ultimately prevent urinary tract infections in their daughters. The primary endpoint of this randomized controlled trial was to see whether the impact of Theory Planned Behavior (TPB) based education was effective in changing the behaviors of mothers over the mothers who received routine education.

Thanks to the dear reviewer.
Reviewer comments

Minor Revisions needed:
1. Abstract line 12: change girl to daughter
   Response:
   Thanks to the dear reviewer. According to the dear reviewer the text was revised and edited.

Reviewer comments
2. Abstract line 18: "included50 participants" -&gt; "included 50 participants"
   Response:
   According to the dear reviewer the text was edited.

Reviewer comments
3. Abstract line 23: "posttest"-&gt;post-test (needs changes in the manuscript as well). Or, change pre-test to pretest.
   Response:
   According to the dear reviewer the all text was edited.

Reviewer comments
4. Abstract line 33: )p&lt;0.001) -&gt; p=0.001
   Response:
   According to the dear reviewer the text was edited.
Reviewer comments

5. Methods (Study Design): line 17 to 19: "The criteria for entering the study were mothers....child dose not have an UTI". This statement is not clear. I do not understand what this means.

Response:

According to the dear reviewer the text of inclusion criteria was edited and more explanation, (Methods section, line,7 page,6).

Reviewer comments

6. Methods (Statistical methods): line51: "SPSS 23" -&gt; SPSS version 23 (SPSS, Inc., Chilcogo IL) or in the format the journal requires.

Response:

According to the dear reviewer the text was edited. (Methods section, statistical sub heading, line,18 page,11).

Reviewer comments

7. Results line 4-9: The study design included children below 2 years old, but the average age is in years. Do the authors mean months? ie 13.6 +/- 6.5 months?

Response:

According to the dear reviewer the text was revised and edited.

Reviewer comments

Needs overall English proofreading before being published

Response:

Thanks to the dear reviewer. The text was reviewed again by a fluent English speaker and corrected for spelling and grammar.
Reviewer comments

Major Revisions:

1. Although this is a very interesting and well carried out study, I believe more evidence is needed in order to show that TPB will be effective in actually preventing UTI in this sub-population. Because, with the method used in this study and data results, all this study shows is that TPB can change behaviors of the mothers, but beyond that, it lacks direct correlation to TPB preventing UTI.

Response:

Thanks to the dear reviewer. According to the dear reviewer, in the discussion section provided explanation and the following sentence was added to the submitted text (Discussion section, line, 1 page, 16):

This study showed that educational intervention based on TPB was effective in changing the behaviors of the mothers, However, changing the behaviors of mothers will directly have clinical effect in preventing UTI needs further study and more evidence is needed in order to show that TPB will be effective in actually preventing UTI in this sub-population.

Therefore it is suggested that future studies be designed to use UTI laboratory tests in addition to questionnaires to assess the impact of health behaviors.

Reviewer comments

2. Although there was a control group in this study, I believe it would have been better to compare the behaviors before and after in the 1) TPB (intervention group), 2) routine education group (or control group as the authors have categorized), and 3) no intervention whatsoever group (this should actually be the control group).

Response:

We respectfully inform you that according to the research ethics rules, the University Ethics Committee does not allow us to have 50 mothers of daughters under age two not receiving routine health care training for three months. Therefore, it was not possible to include the third group (without any intervention, even routine training) in the present study.

Reviewer comments

3. Some of the conclusion drawn from the results of this study needs some changes or further explanation.
- In the Discussions line 52 and on, the authors conclude that the results of the study showed that educational intervention significantly increased the impact of prevention of UTI. However, this is not what this study showed. This study showed that educational intervention was effective in changing the behaviours associated with a higher risk for UTI. However, whether changing the behaviours of mothers will directly have clinical effect in preventing UTI needs further study.

Response:

According to the dear reviewer the text was edited and more explanation, therefore the following sentence was added to the discussion section (Discussion section, line, 5 page,15).

The results of the study showed that the educational intervention was effective in changing the behaviors of mothers after the intervention compared to ….

Reviewer comments

- A follow up study of the patients to see whether UTI will be prevented through TPB should be proven in another study. This needs to be clarified in the limitations section.

Response:

According to the dear reviewer, the following sentence was added to the methods section (Methods section, line, 12 page,11).

According to the panel of experts, three months of follow-up was considered sufficient time to establish consistency, stability, and sustainability in promoting preventive behaviors of Urinary Tract Infection in girls.

According to the dear reviewer, the following sentence was added in the limitations section (Discussion section, line, 1 page,16).

Also, we followed up the mothers for 3 months as the longer follow up may lead to more accurate outcomes.

Finally authors thank the reviewers for their informative comments.

With best wishes