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OPEN PEER REVIEW

Seroprevalence and Associated Risk Factors of *Toxoplasma gondii* Among Pregnant Women in Southwest Iran

Shahrzad Soltani, Ali Dalir Ghaffari, Mehdi Sagha Kahvaz, Mohamad Sabaghan, Marziye Pashmforosh, Masoud Foroutan

SUBMITTED	REVISED	ACCEPTED	DOI
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About this report

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

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1 Original submission

5 comments · 13 Jun 2021 – 31 Jul 2021

Referee 1 Reviewer

MINOR REVISION 13 Jun 2021

Dear AE
In this manuscript, the authors aimed to show the seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran. The results are interesting, but some points should be addressed:

General comments:
The manuscript is suitable for publication as a short communication, but some revisions need to be considered. The authors should proofread the manuscript and revise some typos. Also, the authors should add new references from other parts of Iran, including southeastern Iran, and these results should be compared with the results obtained from southeastern studies. I recommend some of the new related references.
Best regards.

Referee 2 Reviewer

MINOR REVISION 26 Jul 2021

Dear AE

I read this study and gave some suggestions.

sincerely

Referee 3 Reviewer

MINOR REVISION 29 Jul 2021

Dear AE

This cross-sectional study was performed on eighty-eight pregnant women from Khorramshahr county, Khuzestan province (Southwest Iran), to evaluate the Seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran.
Some points are better to be considered:
1- The introduction section is too small; it is better to illustrate the importance of doing this study in pregnant women despite previous similar studies, and brief about the scientific data that is available now.
2- The sample size is too small. What study was the reference for estimating this sample size? Describe analytical methods taking account of the sampling strategy.
3- If there wasn`t any missing data? It is better to add the flowchart of the participation in the study.
4- Is the pregnant woman healthy or not? The authors have to explain more about the inclusion and exclusion criteria.
5- More explanation about the analytic methods is needed. Describe all statistical methods used to analyze the data.
6- The authors have to clarify the funding resources.
Best regards.

Associate Editor

MINOR REVISION 31 Jul 2021

Dear EIC
Please ask the author to correct the following comments.
Reviewer1:
In this manuscript, the authors aimed to show the seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran. The results are interesting, but some points should be addressed:
General comments:
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reviewer2:
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6- The authors have to clarify the funding resources.

reviewer3:

pdf file attach
Best regards

Editor-in-Chief

MINOR REVISION 31 Jul 2021

Dear Author
Please consider all comments in the manuscript.
Reviewer1:
In this manuscript, the authors aimed to show the seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran. The results are interesting, but some points should be addressed:
General comments:
The manuscript is suitable for publication as a short communication, but some revisions need to be considered. The authors should proofread the manuscript and revise some typos. Also, the authors should add

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6- The authors have to clarify the funding resources.

reviewer3:

pdf file attach

Best regards
EIC

2

Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Dear Editor in chief

We would like to thank the reviewers for their detailed feedback to improve our submission. We are submitting a revised version of our manuscript entitled "**Seroprevalence and associated risk factors of *Toxoplasma gondii* among pregnant women in southwest Iran**". As a result, the manuscript has undergone a revision with some details indicated below in our response to individual comments.

All comments applied to the paper with descriptions for some of them as following:

EIC Decision:

Reviewer 1:

In this manuscript, the authors were aimed to show seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran. The results are interesting, but some points should be addressed:

General comments:

The manuscript is suitable to publication as a short communication, but some revisions need to be considered. The authors should proofread the manuscript and revise some typos. Also, the authors should add new references from other parts of Iran, including southeastern Iran and this results should be compared with the results obtained from southeastern studies. I recommend some of the new related references.

Response: We completed the Introduction, Methods (including 2.1. Study population; 2.2. Serology; 2.3. Questionnaire; and 2.4. Statistical analysis), Results (including 3.1. Participants; 3.2. Seroprevalence of anti-T. gondii antibodies; and 3.3. Risk factors) and Discussion sections in the manuscript to be published as an original article.

The manuscript was re-edited in terms of grammatical mistakes.

We added several new references from different parts of Iran, including Golestan, Mazandaran, Isfahan, Qom, Hamadan, Zanjan, Khuzestan and Sistan and Baluchistan Provinces.

Reviewer 2:

This cross-sectional study was performed on eighty-eight pregnant women from Khorramshahr County, Khuzestan province (Southwest Iran), to evaluate Seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran. Some points are better to be considered:

1- The introduction section is too small; it is better to illustrate the importance of doing this study in pregnant women despite previous similar studies, and briefly about the scientific data which is available now.

Response: We completed the Introduction as requested.

2- The sample size is too small. What study was the reference for estimating this sample size? Describe analytical methods taking account of sampling strategy.

Response: The sample size was calculated through Tabatabaie et al. (2015) article.

Based on the following formula, total sample size was estimated 82.

Tabatabaie F, Mafi M, Mafi H, Golestani M, Sadeghi M, Jalalizadegan B, Shahmohammad N, Ayazi M, Saberi Nasab M, Kermanjani A. Seroprevalence of and risk factors for Toxoplasma gondii among pregnant women in Abyek township of Qazvin Province, Iran (2013). Asian Journal of Pharmaceutical and Clinical Research. 2015;8(1):1-3.

$$\frac{n = (z_a/2)^2 * P(1-P)}{d^2}$$

$Z_{a/2} = 1.96$

P= 31%

d= 10%

3- If there wasn`t any missing data? It is better to add the flowchart of the participation in the study.

Response: There was no missing data in this study. The participants (88 pregnant women) were selected from who referred to Valiasr hospital (Khorramshar County, Khuzestan Province) from October to December 2019 based on inclusion criteria (refer to Methods part 2.1.).

4- If the pregnant women were healthy or not? The authors have to explain more about the including and excluding criteria.

Response: All pregnant women were apparently healthy subjects, however 18 out of 88 participants have experienced abortion previously (Refer to table 1). In this study, only those participants with both clinical (by an expert physician) and laboratory (positive pregnancy tests) confirmations were included.

5- More explanation about the analytic methods is needed. Describe all statistical methods used to analyze the data.

Response: Was added.

6- The authors have to clarify the funding resources.

Response: The funding details have filled out during submission process (based on online submission system).

Funding: This study was financially supported by **Grant No: 98113** from the Behbahan Faculty of Medical Sciences, Behbahan, Iran.

Ethics approval and consent to participate: All subjects voluntarily agreed to be participated. A written informed consent was obtained from all subject. This study received the approval from the Behbahan Faculty of Medical Sciences Ethical Committee (**IR.BHN.REC.1399.007**). Ethical issues (including plagiarism, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

Reviewer 3:

Pdf file attach.

Please write based on MESH database

Response: Was done.

Please complete inclusion and exclusion criteria

Response: Was added (refer to methods; 2.1. Study population)

Please arrange references in order

Response: Was done.

Did you assess congenital toxoplasmosis rate between newbornes or not? if it is yes please explain and compare with other studies ?

Response: No. We only evaluated the seroprevalence rate of *T. gondii* infection in pregnant women and its associated risk factors in Khorramshahr Couny (Khuzestan Province).

***Corresponding Authors**

2 Revision 1

5 comments · 9 Sep 2021 – 10 Oct 2021

Referee 3 Reviewer

ACCEPT 9 Sep 2021

Dear AE
This manuscript has been changed by the authors and is acceptable for publication.
Best regards.

Referee 2 Reviewer

ACCEPT 8 Oct 2021

Dear AE
This article is acceptable.
Best regards.

Referee 1 Reviewer

MINOR REVISION 10 Oct 2021

Dear AE
In this manuscript, the authors aimed to show the seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran. The results are interesting, but unfortunately, despite our offer as a referee , Southeast Iranian studies were not used in the article

In the discussion section, please use the following references:

- Diagnosis of acute toxoplasmosis by the IgG avidity method in pregnant women referred to health centers in south-eastern Iran. Journal of parasitic diseases 43(3):517–521

- Evaluation of Toxoplasma gondii Antibodies in Addicted and Non-Addicted Women in Zahedan, Southeast of Iran.Journal, VOL, NO: Int J High Risk Behav Addict. 2020 September; 9(3):e106458

- Loop-Mediated Isothermal Amplification (LAMP) Assay to Detect Toxoplasmosis in Schizophrenia Patients. Iran J Parasitol: Vol. 15, No. 3, Jul-Sep 2020, pp.299-306

- Seroprevalence and molecular evaluation of Toxoplasma gondii in Schizophrenic patients hospitalized in Sistan and Baluchestan province, Southeast of Iran. Tropical Biomedicine 35(3): 1–8

- Serological and molecular evaluation of toxoplasmosis in patients undergoing chemotherapy for malignancies in the southeast of Iran. Gene Reports- Volume 23, June 2021, 101163

- Frequency and parasite load of Toxoplasma gondii in hemodialysis patients based on the RE gene by real-time PCR. Gene Reports -Volume 23, June 2021, 101145
Best regards

Associate Editor

MINOR REVISION 10 Oct 2021

Dear EIC
Please ask the author to correct the following comments.
Reviewer:

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Editor-in-Chief

MINOR REVISION 10 Oct 2021

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3

Revision 2

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reviewers' Comments:

Reviewer 1:
Dear Editor
This manuscript has been changed by the authors and is acceptable to be published.

Thank you for your positive feedback.

Reviewer 2:
In this manuscript, the authors were aimed to show seroprevalence and associated risk factors of Toxoplasma gondii among pregnant women in southwest Iran. The results are interesting, But unfortunately, despite our offer as a referee ، Southeast Iranian studies were not used in the article

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Dear reviewer; Thank you for your comment. We corrected all comments were applicable in the previous version of manuscript. In this MS, we cited two relevant references from southeast Iran among pregnant women (Refs 22 and 23). It is worth to mention that the current suggested references are not relevant to *T. gondii* infection during pregnancy (except one). Such comments by reviewers with the

aim of H-index enhancement (H. M) are unfair. So, we cannot add these references.

Thank you again for your spending time for this manuscript.

Reviewer 3:
accepted

Thank you for your positive feedback.

3 Revision 2

3 comments · 17 Oct 2021 – 2 Nov 2021

Referee 1 Reviewer

REJECT 17 Oct 2021

Dear AE
Since the changes requested by the authors have not been made

My opinion on the publication of this manuscript as an original article is negative.

Best regards.

Associate Editor

ACCEPT 2 Nov 2021

Dear EIC
According to the review of the arbitration comments description, this article has been accepted into the International Journal of Infection and will be published in future issues.
Best regards.

Editor-in-Chief

ACCEPT 2 Nov 2021

Dear author
According to the review of arbitration comments and your description, your article has been accepted into the International Journal of Infection and will be published in future issues.
kIND REGARDS
EIC