OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://brieflands.com/briefland/knowledgebase/category/tree.html#opr.html

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Peer Review Report for "Profile of *Streptococcus pneumoniae* Serotypes of Children with Invasive Disease in Tehran, Iran. An Implication for Vaccine Coverage"

Author(s): Sedigeh Rafiei Tabatabaei, Abdollah Karimi, Lieila Azimi, Mehdi Shirdoost, Fatemeh Fallah, Mohammad Rahbar, Fariba Shirvani

Review Timeline:

Submit Date:	29 Jun 2020
Revised Date:	21 Oct 2020
Accepted Date:	5 Nov 2020

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

keyghobad - ghadiri: Reviewer | Revision (0) 13 Jul 2020

Dear AE,

1- What is the meaning of regional hospital?

2- One limitation in this article is low number of type able pneumococci .

3- The labels 2 and 3 are too long and are not necessary for the result part. It can be written in appendix.

4- 123-26 :

coverage of stereotypes is important but all stereotypes are not invasive the same, so it is important to point out this out for vaccine recommendation.

5- 123-26 :

The comparison of this study with study in Asian countries need to point the number of type able organisms in both studies.

6- There are many new studies during the last few years with high number than the Turkish study (133-36)with 33 organisms that you can use.

Thanks

REFEREE: Reviewer | **Revision** (0) 16 Jul 2020

Dear AE,
Abstract:
Background: At first these results are related to 2012 -2013. It is in contrast with necessity of change in vaccine at this time.
Method:
1. Sampling method must be explained.
2. Can you generalize results of two hospital to all children in order to changes in vaccination programs?
3. What was the ages of those children?
Conclusion: the conclusion must sum up the most important findings. Those findings especially frequencies need to be mentioned in results.
Introduction: in the last paragraph" compare their coverage with different pneumococcal vaccines" there is not any comparison in your analysis so that sentence cannot be consider as aim of the study.
Method:
- What was the definition of your study population?
- I recommend that bring a chart from number of all patients and the section who streptococcus pneumonia was etiology of sepsis or the other diagnosis.
- The type of study?
- Time of study?
- Ethical committee code?
Results:
- Must be re written based on journal standards.
Conclusion:
- In this sentence "so considering the cost benefit results of this study, this vaccine is recommended for use in Iranian children", the article had not anything about cost benefit analysis.
- Finally there were many mistakes in English grammar.
- Source of project?
Thanks a lot.

REFEREE: Reviewer | **Revision** (0) 17 Jul 2020

Dear AE,
This study aims to define the serotypes of S. pneumoniae in children hospitalized with an invasive pneumococcal disease from 20th March 2012 to 10th March 2013 by PCR Method. Although the study is well performed and presented, it is not worth publishing. Resistant serotypes of Streptococcus pneumoniae are changing over time. Since the results of the current study are used to confirm vaccine effectiveness, the data cannot be out of date (from 20th March 2012 to 10th March 2013). If the authors can use more up to date data, for example, from 2019 to 2020 or from 2012 to 2019 to describe the trend in changes in resistant serotypes of Streptococcus pneumonia, it would be more useful to both clinicians and patients.

Thanks

Jafar Soltani: Associate Editor | **Revision** (0) 17 Jul 2020

Dear EIC,
The manuscript is studied, and there are some comments which should be addressed by the author. According to the comments, the document needs major revision.
Kind regards,

REFEREE: EIC | **Revision** (0) 17 Jul 2020

Dear Authros,
Thank you for submitting your manuscript to Iran J Pediatr. Your manuscript has now been reviewed by three reviewers and an Associate Editor. I now have the reports of the Referees, which suggest that your manuscript might be suitable for publication following a number of revisions. I attach some reviewer comments and invite you to submit a revised version of your manuscript addressing the points made.
Thanks

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Dear editor thank you for valuable recommendation , I tried to correct all points:

The changes is shown in red colour

Reviewer 1:
*1-what is meaning of regional hospital?*regional hospitals are hospitals in regional part of city, it means they are hospitals in Tehran city not out of this region
2-one of limitation in this article is low number of type able pneumococci . this result was obtaind by pcr on pneumococcus organisms . So this is the nature of pneumococcus strains in this study
3-The labels 2 and 3 are too long and are not necessary in result part.It van be written in appendix. Table 1 and 2 moved to http://www.drshirvani.ir/node/add/article , Table 1 and 2 address based on the comment of associate editor
4-123-26 :
coverage of stereotype is important but all stereotype are not invasive the same,so it is important to point this for vaccine recommendation. This study aims to consider the coverage of invasive pneumococcal strains with vaccine, so the degree of invasiveness is not estimated in this study
5-123-26 :
The comparison of this study with study in Asian countries need to point the number of type able organisms in both studies. This is added
6- There are many new studies during last years with high number than Turkish study (133-36)with 33 organisms that you can used.thank you I changed it with a newer study with higher number of cases 2020
Reviewer 2:
This study aims to define the serotypes of S. pneumoniae in children hospitalized with an invasive pneumococcal disease from 20th March 2012 to 10th March 2013 by PCR Method. Although the study is well performed and presented, it is not worth publishing. Resistant serotypes of Streptococcus pneumoniae are changing over time. Since the results of the current study are used to confirm vaccine effectiveness, the data cannot be out of date (from 20th March 2012 to 10th March 2013). If the authors can use more up to date data, for example, from 2019 to 2020 or from 2012 to 2019 to describe the trend in changes in resistant serotypes of Streptococcus pneumonia, it would be more useful to both clinicians and patients.

Thank you very much for valuable comment, this study was performed in 2012- 2013. Although the results are not new, since pneumococcal vaccination program has not been establishes in our country, they are still worthy for estimation of serotypes distribution and their coverage by vaccine in Iran.
Reviewer 3:
Thank you for considering such an important subject for study.

Abstract:
Background: At first these results are related to 2012 -2013. It is in contrast with necessity of change in vaccine at this time. Thank you , since vaccination program is not established in our

country, the results may not change significantly during time
Method:
1. Sampling method must be explained. The sampling method was convenience sampling
2. Can you generalize results of two hospital to all children in order to changes in vaccination programs?Thank you, We tried not to generalize the results, we just commented based on the results obtained from our referral centers.

3. What was the ages of those children? It was from patients from 1 month – 18 years
Conclusion: the conclusion must sum up the most important findings. Those findings especially frequencies need to be mentioned in results. The frequencies were mentioned in results in conclusion
Introduction: in the last paragraph" compare their coverage with different pneumococcal vaccines" there is not any comparison in your analysis so that sentence cannot be consider as aim of the study.thank you compare changed to estimate
Method:
What was the definition of your study population?the study population was children with sepsis, pneumonia and meningitis, this is added
I recommend that bring a chart from number of all patients and the section who streptococcus pneumonia was etiology of sepsis or the other diagnosis. Thank you, we don't have the complete results.
The type of study? This is a crosssectional study, this is added
Time of study? from 20th March 2012 to 10th March 2013 -
Ethical committee code?this is added
Results:
Must be re written based on journal standards.thank you, we changed it to brief report format based on the comment of associate editor

Conclusion:
In this sentence "so considering the cost benefit results of this study, this vaccine is recommended for use in Iranian children", the article had not anything about cost benefit analysis.the sentence was omitted
Finally there were many mistakes in English grammar.these are corrected
Source of project?this is added
Thanks a lot.

Associate Editor 1:
Dear respected authors,
Thanks for considering the Iranian Journal of pediatrics for the submission of the paper. Let inform you that the article appraised completely by the esteemed peer reviewers. The following characteristics have denoted. Please highlight and number any change/response and added/deleted texts separately and with different colors and numbers. The changes in the accounting article's text also should be enumerated one by one and accordingly.

Similarity Index: 8%
Grammar and reasoning: need improvement this is done
The Novelty of the objectives and the necessity to perform the study should be added to the

article.this is added
The ethical approval number and the name and address of the responsible, ethical society should be added to the article.this is added

The study is outdated. The sampling time is 2012-2013, so the results could not be generalized to the current time and might have not concordancy with current epidemiology. However, as the current Iranian vaccination program does not include pneumococcal coverage yet, even, the small data summated from this study might be used for Iranian healthcare policymakers in the future. Thank you
The article is more convenient for publication as a brief report. Please go to the following links and update the article according to the journal policy. The structure of article change to brief report based on instruction of journal
https://sites.kowsarpub.com/ijp/knowledgebase/category/tree.html#word_count_limits.html
https://sites.kowsarpub.com/ijp/knowledgebase/category/tree.html#brief_report.html
Tables 1 and 2 might be deleted. There might be enough to provide only a link or reference/s to the tables sources. The tables were deleted and referred to http://www.drshirvani.ir/node/add/article address
The sampling source of each bacteria/serotype is essential to include in the article. The source of isolation might provide insight into the risk of the disease and, therefore, the necessity of covering accountable serotype in the candidate vaccine. Some of the results are not available
The cost-benefit of vaccination could not deduce from the result of this study.Dear editor this study is not a cost benefit analysis one, so the sentence was deleted

Result part, line 113: please delete the following sentence: "which are included in 13 valent conjugated pneumococcal vaccine (PCV13)."this is done
References: more up-to-date valid references might be provided, especially from the current epidemiology in Iran and Asia.this is done

With best wishes

OPEN PEER REVIEW

Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (1) 30 Jul 2020

Dear AE,
In spite of subject importance in this article different parts have not been written based on standard structure.
1- Results in the graph and table are duplicated and repeated and one of them is enough.
2- The first paragraph in the discussion must discuss totally about the most important findings.
3- Analysis could be more expanded for example the frequency of different species in girls and boys, separately.
4- There is no conclusion in the final paragraph of the discussion.
5- The manner of writing is not proper for example in discussion “in this study “in every paragraph has been repeated. So, there is no cohesion in the text.
Finally, the article needs to be corrected again and it is not acceptable for publishing in this manner.
Thank you.

Jafar Soltani: Reviewer | **Revision** (1) 8 Aug 2020

Dear AE,
- The article is too long as a brief Report. Please shorten it.
- 1st sentence (S. pneumoniae, an invasive gram-positive bacterium, can be a …):
- Use simple present tense for facts. i.e., (S. pneumoniae, an invasive gram-positive bacterium, is a ……. in developing countries(. In constructing the main body of reasoning for conducting the study, “Facts should not be expressed with skepticism (i.e. “can be”). Change to “(S. pneumoniae, an invasive gram-positive bacterium, is a ……. in developing countries(.”
- I do not know what the purpose of the following sentence was in this part of the introduction. (In a study in Iran 50 strains were isolated from Tehran Hospitals laboratories from 2008-2012. Different isolated serotypes included 11, 6, 20, 8, 4, 19, 2 and 14.) Please delete it.
- The findings of the study should be transferred to the Result part.
- The method part should be defined according to the main idea and objectives of the study.
- A table might be added comparing the prevalence of various serotypes in various studies and percent of coverage by each vaccine.
- The discussion part is not written professionally and lacks cohesion. It looks like a report

than a deeply discussed scientific article. The discussion should present each find in a separate paragraph, comparing the result with other equivalent studies, and discuss the reasons for the similarities and differences.
- Grammar needs correction.
Thanks

Jafar Soltani: Associate Editor | **Revision (1)** 8 Aug 2020

Dear EIC,
The manuscript is studied, and there are some comments which should be addressed by the author. According to the comments, the document needs major revision.
Kind regards,

REFEREE: EIC | **Revision (1)** 8 Aug 2020

Dear Authors,
The authors have addressed the majority of my concerns. We have some comments which are in the attached file. you can find our reviewers' comments in the revised manuscript. Please consider these suggestions in revising your paper.
Thanks

OPEN PEER REVIEW

Revision (2)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Response to Reviewers

Dear reviewers,

Thank you for your constructive comments. The authors have made changes accordingly which are explained and highlighted below. In the corrected version of the manuscript, the added parts are marked by green and deleted parts are marked by red.

Response to Reviewer 1:

1. "In spite of subject importance in this article different parts have not been written based on standard structure"

Thanks for your comment. We re-organized the parts based on the author guidelines for Brief Reports.

2. "Results in the graph and table are duplicated and repeated and one of them is enough."

Thanks for your comment. The graph was deleted.

3. "The first paragraph in the discussion must discuss totally about the most important findings"

Thanks for your comment. We made thw changes accordingly.

4. "Analysis could be more expanded for example the frequency of different species in girls and boys, separately."

That's correct. Unfortunately, demographic and clinical data are unavailable. This issue has been addressed as the main limitation of the study at the end of discussion.

5. "There is no conclusion in the final paragraph of the discussion."

Conclusion was added to the end of discussion.

6. "The manner of writing is not proper for example in discussion “in this study “in every paragraph has been repeated. So, there is no cohesion in the text."

Thanks for your comment. The discussion has been thoroughly changed.

7. "Finally, the article needs to be corrected again and it is not acceptable for publishing in this manner."

Significant changes have been made to make the manuscript acceptable. We appreciate any more comments.

Response to Reviewer 2:

1. "The article is too long as a brief Report. Please shorten it."

The manuscript was shortened to meet the max word count for Brief Report Articles.

2. "1st sentence (S. pneumoniae, an invasive gram-positive bacterium, can be a …):
Use simple present tense for facts. i.e., (S. pneumoniae, an invasive gram-positive bacterium, is a ……. in developing countries(. In constructing the main body of reasoning for conducting the study, “Facts should not be expressed with skepticism (i.e. “can be”). Change to “(S. pneumoniae, an invasive gram-positive bacterium, is a ……. in developing countries).”

Thanks for your comment. The sentece was changed accordingly.

3. "I do not know what the purpose of the following sentence was in this part of the introduction. (In a study in Iran 50 strains were isolated from Tehran Hospitals laboratories from 2008-2012. Different isolated serotypes included 11, 6, 20, 8, 4, 19, 2 and 14.) Please delete it."

.Thanks for your comment.The sentece was deleteted

4. "The findings of the study should be transferred to the Result part."

Thanks for your comment.Done.

5. "The method part should be defined according to the main idea and objectives of the study."

Thanks for your comment.Done.

6. "A table might be added comparing the prevalence of various serotypes in various studies and percent of coverage by each vaccine."

That is a good suggestion. Unfortunately, there is a restriction since maximum word count for Brief Report Articles is 1500 words (including tables and references).

7. "The discussion part is not written professionally and lacks cohesion. It looks like a report than a deeply discussed scientific article. The discussion should present each find in a separate paragraph, comparing the result with other equivalent studies, and discuss the reasons for the similarities and differences."

The Discussion was thourughly revised.

8. "Grammar needs correction."

.Thanks for your comment.The manuscript was thourughly revised

Response to Associate Editor 1:

Dear associate editor,

Thanks for giving us the opportunity to revise the manuscript. Your comments were most constructive and the authors have accordingly made significant changes in the manuscript. We have highlighted the responses to the comments by you and the esteemed reviewers. In the corrected version of the manuscript, the added parts are marked by green and deleted parts are marked by red.

1. *Word Counts: 3166, body:1892, body and references: 2792*
   {max word count for Brief Report Articles: 1500 words
   (including tables and references)}
   Please shorten the article.

Thanks for your comment. The manuscript was shortened to meet the max word count for Brief Reports.

2. The keywords should be designed based on MESH. More specific words, according to the MESH and the study, should be applied.

Thanks for your comment. The keywords were changed.

Introduction:
3. Please revise according to reviewers' comments.

The Introducton was thourughly revised.

Methods
4. The methods are more look like result part. The findings of the study should be presented in the result part.

Thanks for your comment.Done.

5. The main objective of the study is to categorize pneumococci, according to serotypes. Moreover, the data of the source and site of infection is not available/presented, so there is no need for the case definition for sepsis, pneumonia, and meningitis. To shorten the article, please delete the case definitions.

Thanks for your comment. The definitions were deleted.

6. What you mean by "Sampling method was convenient .."?

The sentence was omitted.

Results & discussion

7. Graph 1 and Table 3 are the repetitions of each other. Please delete one of them.

Thanks for your comment. Graph 1 was deleted.

8. Line 104: sentence starting with "Serotyping was performed by PCR technique": Please shorten the sentence, recheck the Grammar.

Thanks for your comment. The sentence was revised.

9. The prevalence of studies from Iran is more relevant and should be presented first.

The studies from Iran were presented first.

10. *Relative differences and their importance should be discussed. In general, the discussion needs more professional editing to increase the cohesion of the text and to deduct uniform conclusions.*

The discussion was thoroughly revised. We would be grateful to be informed of any further comments.

11. *The limitation of the study should be separated from the conclusion part in two paragraphs. Difficulty with sample preparation and transfer are usually technical problems with all types of studies and could not be regarded as a limitation of the study. Please delete this part and re-write it reasonably.*

Study limitations anf conclusions were duely seperated and re-written.

OPEN PEER REVIEW

Revision (2)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Jafar Soltani: Associate Editor | **Revision** (2) 15 Oct 2020

Dear EIC
The reviewer(s) have recommended publication, but also suggest some minor revisions to the manuscript. Therefore, I invite the author to respond to the reviewer(s)' comments and revise his manuscript.
Kind regards,

REFEREE: EIC | **Revision** (2) 16 Oct 2020

Dear Authors,
As our associate editor comments, your manuscript needs some minor revisions that have to be made before it can reach a publishable value.
Thanks

OPEN PEER REVIEW

Revision (3)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Dear editor:

Thank you for your scientific revision, based on recommendations, the changes was done
Dear respected authors

The format of manuscript is brief review and we changed it exactly followed your recommendation,
*Let inform you that the esteemed peer reviewers appraise the article. Their suggestions for revision are made as in-text-review. If you agree with all suggestions, please accept all the track changes.*thank you . this is done
The following changes need emphasis.
Title:
Serotypes of Streptococcus pneumoniae from admitted children with an invasive disease by PCR Method in IRAN
Change to:
*Profile of Streptococcus pneumonia Serotypes of children with invasive disease in Tehran, Iran, An Implication for Vaccine coverage.*thank you the change is accepted in line number 1 and 2

Introduction:
Please revise according to reviewers' comments.
Correct the following sentences:
Streptococcus pneumoniae, an invasive Gram positive bacterium, is a major cause of mortality and morbidity worldwide, accounting for an estimated global mortality rate for S.pneumoniae in 2015 was 45 deaths (29–56) per 100000 children younger than 5 years (1). Pneumococcal nasopharyngeal colonization, reported in 27–65% of children, is both a potential cause of severe pneumococcal infections (e.g. pneumonia, meningitis and sepsis) and a source of transmission of the pathogen (2).
Change to:
*Streptococcus pneumoniae (S.pneumoniae) is a significant cause of mortality and morbidity worldwide; the estimated global mortality rate for S.pneumoniae in 2015 reported as 45 deaths (29–56) per 100000 children younger than five years (1). Pneumococcal nasopharyngeal colonization, reported in 27–65% of children, is a potential cause of severe pneumococcal infections (e.g., pneumonia, meningitis, and sepsis) and a source of transmission of the pathogen (2).*thank you the paragraph was changed in line 20-25
*The limitation of the study should be re-written. Difficulty with sample preparation and transfer are usually technical problems with all types of studies and could not be regarded as a limitation. Please delete this part and re-write it reasonably.*thank you this paragraph was changed line 96-98
Results and discussion
The following sentences are the same. Delete one of them.
Vaccine coverage by PCV7, PCV10, and PCV13 was 33.7%, 34.9% and 66.2%, respectively.
*Coverage with 13 valent vaccine was 66.23%, 10 valent vaccine 34.91%, and with 7 valent vaccine 33.71%).*thank you I deleted the second sentence line 68
The following sentence needs exlplanation.
*This is reflected by the lower PCV7, PCV10, and PCV13 coverage compared to some other countries (12-14).*thank you the sentence was changed line 86-87

The following sentence does not imply a conclusion. Please delete it.

Further studies on capsular serotyping, antimicrobial susceptibility testing, and molecular epidemiology should provide a better understanding of common pneumococcal types and allow choosing optimal therapeutic strategies in Iran.thank you the line was deleted line 102

Best regards

OPEN PEER REVIEW

Revision (3)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Jafar Soltani: Associate Editor | **Revision** (3) 5 Nov 2020

Dear EIC
Based on the authors' answers to the reviewers' comments, the reviewer(s) have recommended publication.
Kind regards.

REFEREE: EIC | **Revision** (3) 5 Nov 2020

Dear Authors,
I am pleased to inform you that your manuscript entitled "Profile of Streptococcus pneumonia Serotypes of children with invasive disease in Tehran, Iran, An Implication for Vaccine coverage" has been approved for production and accepted for publication in Iran J Pediatr.
Regards