

Determination of the oral health status and behaviours,

# treatment needs and guardians' perception of oral health among preschool

# children attending ICDS Anganwadi centres of Belgavi, South India: A

### cross-sectional study

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Handling editor: Michal Heger Department of Pharmaceutics, Utrecht University, the Netherlands Department of Pharmaceutics, Jiaxing University Medical College, Zhejiang, China

Review timeline:

Received: 28 February, 2021 Editorial decision: 27 April, 2021 Revision received: 12 May, 2021 Editorial decision: 16 June, 2021 Published online: 16 July, 2021

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Ref.: Ms. No. JCTRes-D-21-00030

Resurfacing towards the remote: A principle-practice targeted intervention for determining the oral health status among pre-school children attending Anganwadi centres in south India Journal of Clinical and Translational Research

Dear DR Kumar,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Also, please ensure that the track changes function is switched on when implementing the revisions. This enables the reviewers to rapidly verify all changes made.



Your revision is due by May 27, 2021.

To submit a revision, go to https://www.editorialmanager.com/jctres/ and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Michal Heger Editor-in-Chief Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #3: 1. There are repetitive words (Page 2, Line 17) and (Page 5, Line 9) 2. The diagnosis of caries is only by visual and clinical examination or with facilitation of radiographs?

Reviewer #4: I have read your manuscript with great interest. Change in title Introduction looks informative Methods clear and eloborative Results are ecplinatory. Authors are recommended to remove unnecessary classes and fancy lanaguge. Repetitions in discussion was need to avoided. I would be interested to see data sheet Figures are recomended to single format of barcharts. References firmat is not consistant. Langauge check required from a native speaker.

Reviewer #5: Title : Authors should consider to revise the titile Resurfacing towards the remote: A principle-practice targeted intervention : what interventions target with principle-practice involved in this study ? Suggestion : "Determination of the oral health status, treatment needs, oral health behaviors, and parents' perception among pre-school children attending Anganwadi centers in Belgavi district, south India"- A cross sectional study Study conducted in Belgavi district - is it representative sample of south India ? Conclusion : should be stem of the study, should not be recommendations Recommendations should be stated in discussion

Introduction:

Need to be revised

Too much information about Aganawadi centers and little information about existing literature on the characteristics of study variables especially for pre schooler aged children. These information will provide insight in to the oral disease burden in young children Results ; over using of p values Materials and Methods



There is no statement on informed consent Inclusion and exclusion criterial is not properly defined Discussion : repetition of results Need to be revised, too long Need to discuss the significance of the study with other studies

Reviewer #6: The authors have presented a cross-sectional study utilising the Anganwadi centres for their study setting. Anganwadi centres are a valuable as settings for early childhood primary care and preventive strategies. however, the manuscript needs an improvement based on the following comments.

1. There are many typo errors throughout the manuscript. e.g. Page 5, Line 10: ExpertsExperts; sentences beginning with numbers in many places; punctuation errors in many places in the manuscript

2. Using the term "subjects" for "children" or "participants" at many places in the article as well as tables.

3. Page 7, line 8: The sentence ending with ...lower socioeconomic status is incomplete without including the word "children" or "families" to complete the sentence.

4. Page 8, lines 51 to 58: to rewrite the sentences Modifying the terms "when compared to" in both the places.

5. The term "deciduous" on page 9, line 36 has to be changed to "primary".

6. Page 11, lines 23 to 25: The sentence, "This study was cross-sectional in nature measures the cause and effect at a given point in time." is more of a statement but not convey the intended message in the context, hence, it has to be reframed; line 55/56....'Train the Trainer' like programs. In this term the word "like" is not proper and the same has to be rephrased.
7. The strengths and weaknesses of the study have to be properly stressed upon towards the end of the discussion and proper conclusions have to be drawn and the end.

8. Some of the references have to be corrected. References 1, 4, 5 and 22 needs be presented as per the guidelines. proper title of the topic, URL and last accessed information has to be provided.; Some spacing errors in the references have to be corrected.; Information of "Month date" in some references have to be deleted; Reference 11 has to be provided with the "title" of the paper/ article.; References 14 and 15 have to be provided with page numbers.;

Reference 16 has to be corrected for error at the beginning of the reference.; Reference 31 has to be replaced with the latest reference from AAPD Pediatric Dentistry reference manual 2019 or 2020.

9. The overall manuscript has to be checked for language before submitting the revision after addressing the remarks.

Reviewer #7: 1. There are many grammatical mistakes, sentence formation isn't complete.

2. editing and formatting is required throughout the manuscript. Poor compilation.

- 3. author has mentioned the name of the institute, which is not acceptable.
- 4. referencing in text are missing.
- 5. In tables no explanation of symbols or abbreviations is made as foot notes.
- 6. the title isn't justified as the study was done in an area and not the complete south India.



Reviewer #8: title: doesn't portray study design. needs to be changed as there was no target based intervention introduction: line 12 showing a dramatic representation line 17 repeat in sentence noticed line 56 check grammar materials and methods:

line 10 word repetition, content validity reviewed by expert, needs to check statistically inclusion and exclusion criteria not explained? discuss the potential source of bias references please check according to journal guidelines eg; ref no5

12 May 2021

То

Michal Heger Editor-in-Chief Journal of Clinical and Translational Research

Re: revision JCTRes-D-21-00030

Dear Editor

Thank you for giving us an opportunity to resubmit a revised version of our manuscript entitled "Determination of the Oral Health Status and Behaviours, Treatment Needs and Guardians' Perception of Oral Health among Pre-school children attending ICDS Anganwadi Centres of Belgavi, South India: A Cross-Sectional Study" the Journal of Clinical and Translational Research.

Kindly find our responses to the reviewer's comments considered for the manuscript's betterment and highlighted in **RED** color.

Many thanks to the editor and reviewers for their input to make the manuscript better in shape.

I hope we have satisfactorily addressed the reviewer's concerns and are anticipating a final confirmation. Please let us know if you have any further comments.

Thank you once again for your kind consideration.

Yours sincerely,

Dr. Vaibhav Kumar



### **REVIEWER COMMENTS**

Reviewer #3:

1. There are repetitive words (Page 2, Line 17) and (Page 5, Line 9) Author Response:

We are grateful for your comments. We thank you for pointing out the repetition of words. We have modified the mentioned lines.

2. The diagnosis of caries is only by visual and clinical examination or with facilitation of radiographs?

#### Author Response:

We thank you for your suggestion and do agree that radiographs facilitate dental caries diagnosis. However, the diagnosis of dental caries in this study has been done according to Type III examination as per the WHO 2013 Oral health form, which indicates the use of just visual and clinical examination for caries diagnosis. Hence, we have not undertaken a radiographical diagnosis.



Reviewer #4: 1. Change in title

Author Response:

Thank you for your comment. We have modified the title according to the suggestion made by another reviewer.

2. Authors are recommended to remove unnecessary classes and fancy language.

Author Response:

Thank you for your comments, and the title was changed according to the suggestions

3. Repetitions in discussion need to be avoided.

Author Response:

Thank you for your comments all repetitions were removed

4. Language check required from a native speaker.

Author Response:

We are grateful for your commentary and suggestions, which we have addressed to the fullest extent for every one of your comments. In addition, the language and terminology has been further polished in accordance with your suggestions.

5. I would be interested to see the datasheet

Author Response:

This research has received the Research Grant awarded by Colgate-Palmolive India Ltd.



We followed the standard Worl Health rganisation datasheet. Which is available on WHO website.

6. Figures are recommended to a single format of bar charts.

Author Response:

All the figures were made into a single format of bracharts.

7. Reference format is not consistent.

Author Response:

All the references were formatted to a single format.

Reviewer #5:

Title : Authors should consider to revise the titile
 Resurfacing towards the remote: A principle-practice targeted intervention : what
 interventions target with principle-practice involved in this study ?
 Suggestion: "Determination of the oral health status, treatment needs, oral health
 behaviors, and parents' perception among pre-school children attending Anganwadi
 centers in Belgavi district, south India"- A cross sectional study

Study conducted in Belgavi district - is it representative sample of south India?

Author Response:

We are grateful for your commentary and suggestions, which we have addressed to the fullest extent as indicated below for every one of your comments. The title has been modified following your suggestions as follows:

"Resurfacing Towards the Remote: Determination of the Oral Health Status and Behaviours, Treatment Needs and Guardians' Perception of Oral Health among Pre-school children attending ICDS Anganwadi Centres of Belgavi, South India: A Cross-Sectional Study"

2. Conclusion : should be stem of the study, should not be recommendations Recommendations should be stated in discussion

Author Response:



Thank you for your comment. We have the conclusion in the end as follows as well as stated the recommendations in the discussion.

"The oral health assessment of 3-5year old children attending Anganwadi centres in Belgavi district revealed high prevalence of dental caries, gingival bleeding and compromised periodontal status. A treatment needs analysis indicated the necessity of prompt treatment in majority of these children. Furthermore, poor oral hygiene habits, lack of awareness among parents about oral health and failure to seek timely help from dental professional have been found to exacerbate their oral health problems. Therefore, prompt action with age-specific targeted interventions for the curtailment of the prevalent oral maladies, preventive strategies to maintain good oral health status and motivation meted out to utilize the abundant dental services available in Belgavi is the need of the hour."

3. Introduction:

Need to be revised

Too much information about Aganawadi centers and little information about existing literature on the characteristics of study variables especially for pre schooler aged children. These information will provide insight in to the oral disease burden in young children

As suggested by the reviewer, we have revised and added new information to the Introduction to highlight the oral disease burden in these children.

Author Response:

"Previous studies conducted among pre-school children attending Anganwadis show the prevalence of dental caries as high as 63.58%.

*In Belagavi, the prevalence rate of early childhood caries among pre-school children was 63.17 %.*"

4.Results ; over using of p values

Author Response:

We have attempted to reduce the use of p-values wherever it was possible.

5.Materials and Methods There is no statement on informed consent Inclusion and exclusion criteria is not properly defined

Author Response:

We have added the statement of informed consent and inclusion exclusion criteria as follows:

*"Written informed consent was obtained from the parents of all the participating pre-school children. The inclusion criteria consisted of: 1) Children 3-5 years of age attending* 



Anganwadi Centres of Belagavi; 2) Children whose parents were willing to give a written informed consent. The exclusion criteria entailed exclusion of physically or medically compromised children as well as children with debilitating diseases or suffering from uncontrolled systemic conditions."

6.Discussion : repetition of resultsNeed to be revised, too longNeed to discuss the significance of the study with other studies

Author Response:

Thank you for your suggestions. We have modified the discussion accordingly and have highlighted the changes in red.

Reviewer #6: The authors have presented a cross-sectional study utilising the Anganwadi centres for their study setting. Anganwadi centres are a valuable as settings for early childhood primary care and preventive strategies. however, the manuscript needs an improvement based on the following comments.

1. There are many typo errors throughout the manuscript. e.g. Page 5, Line 10: ExpertsExperts; sentences beginning with numbers in many places; punctuation errors in many places in the manuscript

Author Response:

### Changed accordingly, thank you.

2. Using the term "subjects" for "children" or "participants" at many places in the article as well as tables.

Author Response:

### Changed accordingly, thank you.

3. Page 7, line 8: The sentence ending with ...lower socioeconomic status is incomplete without including the word "children" or "families" to complete the sentence. Author Response:

## Changed accordingly, thank you.

4. Page 8, lines 51 to 58: to rewrite the sentences Modifying the terms "when compared to" in both the places.



Author Response:

### Changed accordingly, thank you.

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6. Page 11, lines 23 to 25: The sentence, "This study was cross-sectional in nature measures the cause and effect at a given point in time." is more of a statement but not convey the intended message in the context, hence, it has to be reframed; line 55/56....'Train the Trainer' like programs. In this term the word "like" is not proper and the same has to be rephrased.

### Author Response:

Changed accordingly, thank you.

Dental professionals participating in such interventions should identify the disease burden, address these pre-schoolers' treatment needs and engage, educate and train the Anganwadi workers by organizing programs such as 'Train the Trainer'.

7. The strengths and weaknesses of the study have to be properly stressed upon towards the end of the discussion and proper conclusions have to be drawn and the end.

To address this suggestion we have made the following additions:

### Author Response:

The study has some limitations. The study being cross-sectional in nature measures the cause and effect only at a given point in time. Thus, the inability to establish a causal relationship and the persistence of temporal ambiguity contribute to certain grey areas. In addition, there are potential sources of bias such as interviewer bias and social desirability response bias.

## Conclusion:

The oral health assessment of 3-5year old children attending Anganwadi centres in Belgavi district revealed high prevalence of dental caries, gingival bleeding and compromised periodontal status. A treatment needs analysis indicated the necessity of prompt treatment in the majority of these children. Furthermore, poor oral hygiene habits, lack of awareness among parents about oral health, and failure to seek timely help from dental professionals have been found to exacerbate their oral health problems. Therefore, prompt action with agespecific targeted interventions for the curtailment of the prevalent oral maladies, preventive strategies to maintain good oral health status and motivation meted out to utilize the abundant dental services available in Belgavi is the need of the hour.

8. Some of the references have to be corrected. References 1, 4, 5 and 22 needs be presented as per the guidelines. proper title of the topic, URL and last accessed information has to be



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have to be provided with page numbers.; Reference 16 has to be corrected for error at the beginning of the reference.; Reference 31 has to be replaced with the latest reference from AAPD Pediatric Dentistry reference manual 2019 or 2020.

Author Response:

Changed accordingly, thank you.

9. The overall manuscript has to be checked for language before submitting the revision after addressing the remarks.

Author Response:

We are grateful for your commentary and suggestions, which we have addressed to the fullest extent for every one of your comments. The language and terminology have been further polished in accordance with your suggestion.

Reviewer #7:

1. There are many grammatical mistakes, sentence formation isn't complete.

Author Response:

We are grateful for your commentary and suggestions, which we have addressed to the fullest extent for every one of your comments. In addition, the language and terminology has been further polished in accordance with your suggestion.

2. editing and formatting is required throughout the manuscript. Poor compilation.

Author Response:

We are grateful for your commentary and suggestions, which we have addressed to the fullest extent for every one of your comments. The language and terminology has been further polished in accordance with your suggestion.

3. Author has mentioned the name of the institute, which is not acceptable.

Author Response:



*Thank you for pointing out. We have removed all names from the main manuscript.* 

4. referencing in text are missing.

Author Response:

As suggested, We have added references wherever relevant.5. In tables no explanation of symbols or abbreviations is made as foot notes.

Author Response:

Added accordingly, thank you.

6. The title isn't justified as the study was done in an area and not the complete south India.

Author Response:

Thank you for your comment. We have modified the title according to the suggestion made by another reviewer.

Reviewer #8:

1. title: doesn't portray study design. needs to be changed as there was no target based intervention

Author Response:

Thank you for your comment. We have modified the title according to the suggestion made by another reviewer.

2.introduction: line 12 showing a dramatic representation

Author Response:

Changed accordingly, thank you.

3.line 17 repeat in sentence noticed Author Response:



Changed accordingly, thank you.

5.line 56 check grammar

Author Response:

We are grateful for your commentary and suggestions, which we have addressed to the fullest extent for every one of your comments. The language and terminology has been further polished in accordance with your suggestion.

6.materials and methods:

line 10 word repetition, content validity reviewed by expert, needs to check statistically inclusion and exclusion criteria not explained?

Author Response:

We have removed the repetition and added the following lines:

"A minor modification was done to make the questionnaire culturally and demographically appropriate and to incorporate the indigenous oral hygiene tools used, Indian food items consumed while questions pertaining to tobacco use were omitted. The content was reviwed and validated by experts who have carried out extensive research in child and maternal health. The mean Lawshe's Content Validity Ratio (CVR) was discerned to stand at 0.92. After data collection, an interactive oral health education camp was conducted and children were also referred to a dental hospital for comprehensive treatment."

7.discuss the potential source of bias Author Response:

We have discussed the potential sources of bias in the limitations of the study as follows:

"There are potential sources of bias such as interviewer bias and social desirability response bias."

references please check according to journal guidelines eg; ref no5

Author Response:

We have modified the references as suggested.

2<sup>nd</sup> Editorial decision 16-June-2021

Ref.: Ms. No. JCTRes-D-21-00030R1

Determination of the Oral Health Status and Behaviours, Treatment Needs and Guardians' Perception of Oral Health among Preschool children attending ICDS Anganwadi Centres of Belgavi, South India: A Cross-Sectional Study



Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger Editor-in-Chief Journal of Clinical and Translational Research

Comments from the editors and reviewers:

Reviewer #3: Authors have addressed all the comments

Reviewer #4: I have read the manuscript with great interest and all requested changes and suggestions, were done in an appropriate manner. All the best.

Reviewer #6: The authors made a considerable effort in revising the manuscript according to the remarks by the reviewers. However, the manuscript my need few other corrections in the text and the references listed, that can be taken care at the technical/ proofing stage.