Reviewer’s report

Title: Prevalence of dental caries in children and adolescents with type 1 diabetes: A systematic review and meta-analysis

Version: 2 Date: 05 Aug 2019

Reviewer: Nathalia Ladewig

Reviewer's report:

General comments

Dear authors, questions were adequately answered. The article is more clear, understandable and well-written. However some gaps still remain.

English grammar and writing were improved. However, there are some typing errors and words repetitions that should be reviewed.

Summary

1- Data from abstract results still does not match with in-text and flowchart information: 488 articles were identified as eligible, but only 358 were non-duplicated according to your int-text results and flowchart. However, in the abstract, it says 488 non-duplicated. Please review this information.

Introduction

1- Please review typing errors and words repetition, such as, "worldwide" repetition in the 3rd and 4th lines; "Dental caries" repetitition in the beginning of the sentence from the 9th to 10th lines; "impart" instead of "impact"; "2001-1012" instead of "2001-2012".

Material and Methods

1- Please review typing errors: Kappa score is among open brackets.

2- The registration at PROSPERO database should have been done before the systematic review started. Luckily, it was not found any protocol regarding dental caries in children and adolescent with type 1 diabetes.

Results

1- "Six studies evaluated dental caries using the DMFT index, one study assessed dental caries using
DMFT and dmft, one study evaluated dental caries using DFS and dfs, one article evaluated dental caries using DFS and dfs, and one study assessed dental caries by DFS alone.: this information is well described in your table, so it is not necessary to also described within your text. However, if you opt to maintain it, please review the information in bold because it says the same thing.

2- The pooled mean (SD) DMFT/dmft and the sensitivity analysis were redone according to the use of DMFT exclusively. But, as you perfectly stated in your review, there is only one study that used both scores (DMFT+dmft). So, the results of not considering this single study do not seems relevant. Mainly because you also performed a subgroup analysis based on the mean age of participants.

3- Table 1: It is still not clear what do you mean by "Number of type 1 diabetes" and "Number of dental caries". Also, "Age, year" is dubious. Please consider the option "Age in years" or "Age (years)".

Discussion

1- There are a large number of citations to explain the differences between dental caries prevalence according to population age. I strongly suggest to summarize these data. Also, one of the references used [38] presented a prevalence of dental caries higher than the present study, when you are trying to highlight that diabetic children have a worsen oral health condition.

Conclusion

1- "Additionally, our results suggested that more frequent monitoring and controlling of glycaemia are necessary for diabetic individuals suffering from poor metabolic control and dental caries.": I strongly believe that your results do not suggest that. Your results suggested that the prevalence of caries is worse among those with bad metabolic control. You can discuss the management of diabetic individuals suffering from poor metabolic control but you cannot conclude what you did not test it. Please, review this sentence. Again, some information are not related to the aim of your study.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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