

Manuscript Title

Early Childhood Caries - Essential Information for Primary Healthcare Providers

Author(s)

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Summary

The manuscript was received on December 11, 2020 and was peer reviewed by three reviewers and an editor.

The initial recommendation of Revise and Resubmit was made on January 21, 2021.

The first revision was submitted on February 4, 2021 and was re-evaluated by the editor and reviewers.

A second recommendation of Minor Revision was made on February 22, 2021.

The second revision was submitted on March 9, 2021 and was re-evaluated by the editor and reviewers.

The manuscript was accepted for publication on March 19, 2021.

Peer Review Comments (first round)

Reviewer 1

Page 1, Line 19 - Why include this word 'diphyodonty'

Page 1, line 27 – amongst should be "among" if written in American English.

Page 2, line 3 – oral intake -> eating

Page 2, line 3 - Another issue is that early loss of primary teeth can result in need for orthodontic care.

Page 2, line 7 – leave out 'unpleasant'

Page 4, line 10 - Current best practice to reduce the risk of ECC includes twice-brushing with fluoridated tooth paste for all children. A "smear" of fluoridated tooth paste should be used for children less than three; a "pea size" amount should be use for children between 3-6.

Page 4, line 13 – increases -> may increase

Page 4, line 16 – delete 'cheaper packaged'

Page 4, line 19 - It is an extremely rare for children to have low salivary flow.

Page 5, line 9 – flash light instead of 'pen torch'

Page 5, line 12 - delete cavity. Cavity and caries are the same

Page 5, line 22 – 'can be treated' in place of 'can be restored. Also eliminate 'reduced salivary flow'.

Page 6, line 8 – *sippy* cup

Page 6, line 21 – eliminate ‘dipped in boiled and cool’

Page 6, line 24 - eliminate ‘moisten with water’ and replace "with the appropriate amount of fluoridated toothpaste"

Page 6, line 27 - on when a child is able to tie shoe laces

Page 6, line 28 - this whole paragraph should be moved up to

Page 6, line 29 - Eliminate the amount of fluoride here. Has been covered earlier

Page 7, line 2 - This area need to be moved up to page 4 and blended in

Reviewer 2

1. Overall language of the manuscript is poor. Grammar and Syntax needs to be enhanced for better readability.
2. Whole manuscript is not in accordance to title of the manuscript.
3. Manuscript writing should be more specific with the aim and title of manuscript.
4. Points should be more specific, like:
 - a. What points a Paediatric Doctor should check regarding ECC which might help for referrals and better understanding
 - b. Role of Paediatric Doctor in referral of ECC case
 - c. Role in preliminary diagnosis of ECC

Reviewer 3

1. This manuscript covers the important issue regarding the considerable disease burden certain young children encounter due to ECC, including discomfort, pain, difficulty eating, trauma from dental restorations, and social distress from the disfiguration ECC may cause. The author correctly points out that many parents are unaware of this disease burden, but likewise could point out that so are many health care providers.

2. In some statements the author is too categorical, with statements such as: [Page 1, lines 6-7: Abstract] “awareness amongst pediatricians is inadequate,” and “have only limited knowledge...” Unless accompanied by a citation of published literature demonstrating this, it would be better to simply say “...may be inadequate...” and “may have only limited knowledge.” There are a few other examples in the manuscript as well. Likewise, the comment [Page 7: Lines 8-10] should probably read: “...have been found effective in children in some studies.” In fact, fluoride varnish has been found to have only modest or minimal effect in other very good studies.

3. The references to ‘pediatricians’ and ‘pediatric dentists’ should in most cases refer to ‘medical care providers’ and ‘dental personnel.’ Many young children receive their medical health care from other than pediatricians, and likewise many receive their dental care from other than pediatric dentists. An easy way to accomplish this would be to insert an asterisk after ‘pediatricians’ in [Page 1: line: 6] and ‘pediatric dentists’ [Page 5: line: 3] and note at the bottom of the page that these terms are used generically to include other health care providers to children.

4. The 'Purpose' of the study is listed at the end of the Abstract rather than at the end of the Introduction as is customary, though since this is not really a 'study' in the formal definition of research so it may not be that important.
5. On Page 3 in the section on "Pediatricians' role..." the author seems to indicate that the role is only for oral health education and perhaps diagnosis, but not to be involved with any of the therapeutic modalities available. Clearly many health care providers are already applying fluoride varnish routinely to young children.
6. Other statements are a little too categorical, such as the first lines of Page 4 on the ways that *Streptococcus mutans* can be transmitted to very young children. In reality, simply the extremely close contact of mothers with their young children is in itself a source of transmission of the bacteria without the mothers doing anything 'wrong.'
7. In recommending that 'fluoride supplement' be given, the author needs to summarize the current recommendations and give a reference so the reader can get more information on this.
8. The author should mention that one of the very highest risk factors for severe ECC is for a prior sibling to have had severe ECC. This is easily determined by a simple question.
9. Last, I would suggest that the author 'double down' on the importance in high-risk children of diagnosing early childhood caries in the earliest stage possible, which very often is long before anything thinks their children needs to see a dentist. The recommendation having the first dental appointment at age 1 year is a good start toward achieving this goal.

Peer Review Comments (second round)

Reviewer 1

Page 1, Line 9 and Page 2, Line 14 – "health visitors" – what is health visitors? Please check and correct.

Page 2, Line 23 – affecting -> that often first affects

Page 2, Line 24 – the tongue -> the tongue and salivary fluids

Page 2, Line 25 - "nursing bottle caries" -> "nursing bottle caries" and "baby bottle tooth decay"

Page 3, Line 14 – delete "fizzy drinks"

Page 3, Line 20 - We could -> We can

Page 3, Line 28 - eliminate "due to prenatal and perinatal under-nutrition"

Page 3, Line 30 - at greater risk

Page 4, Line 2 - which are vulnerable to early colonization by cariogenic bacteria -> which make the tooth more susceptible to dental caries.

Page 4, Line 3 - -> which may present barriers to oral hygiene procedures. Please re-phrase.

Page 4, Line 12 – to manage them.

Page 4, Line 17 – modalities -> methods

Page 4, Line 21 - delete “approved” and change “to predict” to “can help predict”

Page 4, Line 26 - is this lift the lip for parents or for health professional?

Page 5, Line 17 – eliminate “care givers”

Reviewer 2

1. This is an important topic regarding the considerable disease burden certain young children encounter due to ECC, including discomfort, pain, difficulty eating, trauma from dental restorations, and social distress from the disfiguration ECC may cause. The author correctly points out that many parents are unaware of this disease burden, but likewise so are many non-dental health care providers.

2. This first revision was a considerable improvement over the original version, but there remained a number of modest but important errors of omission and commission that I felt considerably weakened this manuscript, and that it should not be accepted for publication without correction. I found it easier to make these recommended corrections in the document itself rather than to enumerate all the changes, so in the attached version of the manuscript I have included my recommended changes using the track changes option so that they are readily visible.