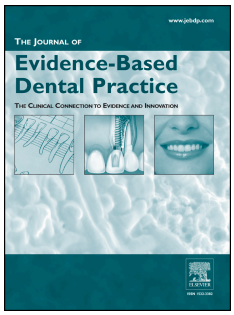
Accepted Manuscript



A History of Suboptimal Breastfeeding May Increase the Risk of Developing Anterior Open Bite, Posterior Crossbite, and Class II Canine Relationship

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PII: S1532-3382(18)30092-7

DOI: 10.1016/j.jebdp.2018.03.004

Reference: YMED 1265

To appear in: *The Journal of Evidence-Based Dental Practice*

Please cite this article as: Rossi-Fedele G, Doğramacı EJ, A History of Suboptimal Breastfeeding May Increase the Risk of Developing Anterior Open Bite, Posterior Crossbite, and Class II Canine Relationship, *The Journal of Evidence-Based Dental Practice* (2018), doi: 10.1016/j.jebdp.2018.03.004.

Letters to the Editor

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Dear Editor,

First, we thank your journal for highlighting and discussing our previously published systematic review entitled: "Malocclusions in young children: Does breast-feeding really reduce the risk? A systematic review and meta-analysis."[1] In addition, we have read with interest the "Review & Evaluation" published in your journal entitled "Limited Evidence Suggests that a History of Suboptimal Breastfeeding May Increase the Risk of Developing Anterior Open Bite, Posterior Crossbite, and Class II Canine Relationship,"[2] and authored by Dr Flores-Mir. However, we would like to respond to some inaccurate comments made by the reviewer.

Dr Flores-Mir writes the following: "There are several points that I would like to raise. The authors claim that the effect of breastfeeding on primary dentition malocclusion development has not been synthesized before. This is incorrect, as 2 previous systematic reviews about this association were available at the time of the search.[1,2] It is puzzling that while executing a comprehensive evidence-based search they would not have popped up."

First, a systematic review aims to include primary (component) studies rather than systematic reviews. Second, we are even more confused to see that the reviewer's second reference is related to a systematic review on the mixed and permanent dentitions, which form part of that paper's title: "Breastfeeding, bottle feeding and risk of malocclusion in **mixed and permanent dentitions**: a systematic review" by Abreu et al.[3] The exclusion criteria for that systematic review explicitly stated, "**Studies on primary dentition conducted with children younger than 7 years**; …**were excluded,"** amongst other exclusions. So Dr Flores-Mir is incorrect to state that "The review by Abreu et al.[2] focused on primary and mixed dentition malocclusions". It is therefore important that we highlight the error of his affirmation.

Similarly, we would like to highlight that the other systematic review mentioned by Dr Flores-Mir, does not include, in any part of the manuscript proper, either of the words "deciduous" or "primary". Dr Flores-Mir states that "Although the review by Peres et al.[1] considered malocclusion at any age, almost all the included studies were from the primary dentition." Although this might be true, there are two important issues that must be considered:

1. Those authors should have highlighted this point in their published manuscript because at the end of the day, the reader of a systematic review should not be expected to read the component studies, as this will defeat the purpose of reading (and writing) a systematic review.
2. Those authors did not differentiate between the different dentition stages and, therefore, undertook meta-analyses that combined all of the studies, regardless of

dentition stage. This approach is erroneous, in our opinion, since there is considerable heterogeneity amongst the demographic variables and dental presentations, so that the results of the meta-analyses are
likely rendered inaccurate and cannot be truly relied upon to inform clinicians in their management of patients according to specific dental or chronological ages, or dentition stages. As we have mentioned in the protocol for our review "It would be imprecise to apply the findings from more developed dentition stages to the primary dentition."[4]

We would like to stress that we focused our systematic review on the primary dentition, since no previous systematic review had attempted to do this. We would also like to suggest that future researchers may wish to consider separate meta-analyses in cases where their included studies comprise different dentition stages. We have successfully done this in a previous systematic review and meta-analysis investigating non-nutritive sucking behaviors and malocclusions,[5] and we will also be using this approach in a new systematic review that has recently been approved by the Joanna Briggs Institute.[6]

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