Reviewer’s report

Title: Effects of breast-feeding duration, bottle-feeding duration and non-nutritive sucking habits on the occlusal characteristics of primary dentition

Version: 3 Date: 4 March 2015

Reviewer: Julie Cichero

Reviewer’s report:

GENERAL FEEDBACK

The authors present a clinically useful piece of research that has a sound hypothesis, good methodology and excellent sample size. There is a clear, concise review of the literature. The title and abstract give a clear indication of the subject material and findings. The writing is clear and easy to understand. There is some interesting information regarding links between breastfeeding weaning time and likelihood of pacifier use, and also discounting links between long term bottle feeding and non-nutritive sucking. Both elements will be of interest to researchers and clinicians. Occlusal patterns associated with both pacifier use and digit sucking are well described. Prevalence of both types of non-nutritive sucking in such a large population and consideration given to culture are also welcome additions to the literature. There is some data that would have been collected that is not reported in the study; please see further details below.

MAJOR COMPULSORY REVISION

There is some data that needs to be included in the tables and in the results/discussion. (1) Please include information on the group from Table 1 that were ‘never breastfed,’ and (2) please include information on bottle feeding 0-6 months, and (c) preferably also include those who were mix fed. These are referred to in the discussion on p 11, but not annotated in the tables or formally assessed in the results.

Please include a section on limitations of the current study.

MINOR ESSENTIAL REVISIONS

Abstract – background ‘Both maternal breast-feeding for a short period’ – This makes it sound like breast feeding is associated with occlusofacial abnormalities but this is not what the article is suggesting. Rather that breastfeeding is protective to occlusofacial abnormalities. Suggest re-wording to ‘Early transition from breastfeeding and non-nutritive sucking habits…’ or “Breastfeeding duration and non-nutritive sucking habits…”

Data analysis section – ‘compared with children who were breast-fed for between 6 and 18 months (Table 2).’ – Table 2 shows breast feeding as 0-6 months or >6 months. I can't see that there is a column for breastfed for between 6-18 months
to support the statement, just >6 months.

MINOR ISSUES NOT FOR PUBLICATION
p. 9 line 260 change (just above the discussion) ‘While A digit …’ to ‘While a…’ lower case needed please.

p.11 line 330 (within the Discussion) “The present study showed that 40.9% children were early weaning…” suggest changing to “…were weaned early…”

p11. Lines 306-308 (within the Discussion). Please provide a reference for the statement that “bottle feeding is associated with increased prevalence of abnormal swallowing patterns (or tongue thrusting habits)”.

p. 13 line 390 (just above the Conclusions) – typographical error “furture” = “future”

DISCRETIONARY REVISIONS
1. It would have been good to see the bottle-feeding data for 6-12 months; 12-18 months and >18 months of age. In many countries by 12 months of age infants have successfully transitioned to cup feeding, although I appreciate this may not be the case in China where data was collected. If your data collection does have the ability to provide information (p5 line 129 suggests you have this data) regarding any impact for infants bottle fed from 6-12 months in addition to the other age spans reported it would strengthen the article.

2. The demographics indicate that the parents were very highly educated. Can the authors comment or provide information from the literature regarding socio-economic impact on the results if conducted where parent education was lower? I think this aspect should be included in the discussion.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.