Reviewer's report

Title: Predictors of the early introduction of solid foods in infants: results of a cohort study

Version: 1 Date: 27 May 2009

Reviewer: Sara B Fein

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Major compulsory revisions
1. p 2, abstract, line 10. Define “baseline.” Is this about the time of birth? As it stands, it could be interpreted as any time up to 4 weeks.
2. p2, abstract, results: State the direction of the associations. For example, “young maternal age, smoking, and …(you may have to use “method of infant feeding” because it has multiple categories).
3. The background needs to clearly state what the Australian recommendations were when these data were collected. Were they the same as those described as the WHO “earlier recommendations?” Please clarify.
4. p 5 paragraph 2: in the summary of the methods, let the reader know if the sample was representative of Perth births or not.
5. p 6 paragraph 1, line 6: the variable “whether she had returned to work by 12 months postpartum” is misleading—you actually have and use “by 6 months” in some of the analyses.

Minor essential revisions
1. p 1: Footnote 3 should have the “2” deleted and read only “3”
2. p 2, abstract background, line 5: no comma between “foods” and “and”.
3. p 2, abstract line 6: period at end of sentence.
4. p 2, abstract, line 17: add “of” between “44%” and “infants”
5. p6 paragraph 1 line 6-7. Clearer to replace “whether she has smoked during pregnancy” with “smoking during pregnancy”
6. p 6, paragraph 3, line 4: explain who were the “non-participants.” Were these everyone eligible (base 1068) who was not interviewed or only those contacted (base 870) who were not interviewed?
7. p 13 1st paragraph, last 2 lines: you need to acknowledge that your recommendation for defining early introduction of solid food as “before 17 weeks” conflicts with the recommendation of WHO and the National Health and Medical Research Council of Australia.
8. Table 1. The labels for maternal age are incorrect. They should probably read: <20; 20-29; > 30
9. Table 3 You state the time period of interest in 2 ways: before 17 weeks and “by 16 weeks”. These are the same in your data, but it is clearer to the reader to keep one term. Because you recommend it in this paper, “before 17 weeks” is probably best.

Discretionary revisions
1. p4, Background. 2nd paragraph, line 2: I am not familiar with the use of “Western” to describe populations. Does this mean those of European origin? Developed countries? I can’t see how it could be geographically based because I think that the US and Australia are included (and not near each other) but I expect that Mexico, which is the same as the US in terms of east-west placement, is probably not. The term also appears on p 9.
2. p 4 paragraph 2 line 3: do you mean “over weight” in childhood?
3. p 4, lines 3-5: edit. Perhaps the second clause could read something like “as to whether sufficient evidence exists to support…”
4. p4 paragraph 2 line 7: comma between “variation” and “the National”
5. Clarify what your breastfeeding measures represent. On p 8 3rd paragraph, you state that univariate analysis showed that women formula feeding at hospital discharge were more likely to introduce solids before 17 weeks. This variable was not among those significant in the multivariate analysis, although feeding at 4 weeks was. On p 10, paragraph 2 line 5, you state that you did not find an association between timing of solid food introduction and ever having been breastfed. This is the first mention that you consider one of your variables to measure “ever breastfed,” and I assume it is the hospital discharge feeding method that you mean. This should be clarified. But also, I would interpret the univariate association to indicate an association between the variables. This is particularly reasonable because the multivariate model included a variable that partially overlaps with feeding method at discharge. I am entering this comment as discretionary because there are different schools of thought on this issue.
6. A similar issue as in #5 above arises with education, where you found a significant association in the univariate analysis. This may be particularly important if your results will inform consumer education policy or programs. Less well educated new mothers may need additional education and support, even if this association disappears when other variables are controlled. It will be more difficult, and possibly too late, to target mothers who formula feed at 4 weeks.
7. p 10 paragraph 2, line 5, this phrase is unclear: “While we did not find a previously reported association with ever having been breastfed…” When I first read it, I thought that you meant your literature search did not turn up any studies that reported an association with ever breastfed. Note that your reference 26 also found this association, if you count feeding method at hospital discharge as ever breastfed (and I would).
8. In the discussion or conclusions, it would be appropriate to also mention the importance of addressing in consumer education problems mothers face regarding the decision of when to introduce solids, such as what to do if a baby
seems hungry but is below the age recommended for feeding solid foods. Also, there is a peak at 16 weeks of introducing solid foods (Fig 1). It would be appropriate to discuss this finding. I wonder if mothers were told “4 months” and thought in terms of 4-week months: 4x4=16.

9. Is the only limitation of your study the one mentioned on p 12? I did not read the methods reference, and so I cannot help to identify others.

10. Table 2. Why did you use whether the mother returned to work by 12 months as the employment variable? According to Table 1, you have information on whether the mother returned to work when the infant was < 6 months. This time is much closer to and includes the period (17 weeks) that you are interested in. The earlier return to work is a more appropriate variable for the model. Given that the 12-month employment was not significant, it is possible that 6 month will not be either, so this may be easy to fix.

11. Table 2 footnote b is awkwardly stated.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests