Reviewer's report

Title: Maternal perspectives on the use of probiotics in infants: a cross sectional survey

Version: 2
Date: 29 July 2014

Reviewer: Ravi Patel

Reviewer's report:

In this study by Bridgman et al., the authors report the results of a survey evaluating maternal perspectives on probiotics, including self-use and use in their infant children. As probiotic use among this population has increased over the past few years, this study provides some important insight. Overall, the manuscript is clearly written, the methods are appropriate and well described, the results are thorough, and the authors acknowledge important limitations and contextualize their results in the discussion. This includes what I think is the major limitation of this study: decreased generalizability due to over-representation of older, married women with higher-levels of education in this sample. Nevertheless, this study does provide information that would be of interest to clinicians, policymakers and/or researchers.

Discretionary Revisions

1. In the Methods under the heading “Survey,” more clarification regarding the incentive for questionnaire completion (“lottery prize draw”) would be appreciated.

2. In the second paragraph of the discussion (where the authors discuss the limited study of attitudes towards probiotics), recent data on parental perspectives of probiotics for preterm infants would be relevant for inclusion (Sesham R, Oddie S, Embleton ND, Clarke P. Probiotics for preterm neonates: parents’ perspectives and present prevalence. Arch Dis Child Fetal Neonatal Ed. 2014 Apr 10. doi: 10.1136).

3. Figures 2 and 3 could be combined into a single figure with two panels (A and B).

4. If measured, the age in months of infants at time of response by the mothers would be useful information.

Minor Essential Revisions

1. I would recommend clarifying the following statement in the discussion: “In reality, research in both adults and children suggests that probiotic use only transiently alters gut microbiota profiles [20];” to differentiate between older children and infants.

2. In the Methods under the heading “Study subjects,” more information on how mothers were enrolled in the Alberta Pregnancy Outcomes and Nutrition (APrON) cohort would be useful. Specifically, what were the inclusion and
exclusion criteria for the APrON cohort (target population for this study) and how were mothers approached and enrolled into the APrON cohort?

3. In the Methods under the heading “Data Analysis,” more description of the statistical methods applied would be appreciated to help the reader understand what specifically is being compared (this could either be done here or as a footnote under the relevant tables).

4. Footnotes for Table 2 should be placed on separate lines and “(N=392)” can be removed from the title, to be more consistent with the other tables.

5. For tables 4 and 5, clarifying the specific hypothesis being tested in the footnote would be useful for the reader (i.e. statistical tests comparing the mean ranks, comparing the distribution of responses, etc.).

6. In the Results, the authors should clarify the ordering of free-text questions pertaining to “the definition of probiotics” (second paragraph under the heading “Awareness and understanding of probiotics”) in relation to the questions with results reported in Table 3. It is clear that the free text answer preceded the other questions after reviewing the supplement, but this is not as clear when reading the manuscript text.

7. Data on several questions that were in the survey (e.g. screening of neonatal microbiota) are not presented. The authors should consider reporting these as supplemental data or clarify why these were not reported.

**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