Reviewer’s report

Title: A survey on beliefs and formula-handling practices of parents and child care workers in Palermo, Italy

Version: 2 Date: 27 July 2009

Reviewer: Elizabeth C Redmond

Reviewer’s report:

The research presented in this paper may provide an interesting and useful contribution to food and consumer research; however, considerable revisions to the content of the paper are required before publication.

Suggestions for revision and improvement of this paper are noted below according to subheadings suggested by BMC Pediatrics.

TITLE AND ABSTRACT?

The title of this paper requires amendment as it currently indicates that the survey determines ‘formula handling practices’ and this is not actually the case. The study determines beliefs and perceived importance of formula handling practices.

The abstract also requires considerable improvement; currently the abstract does not indicate rationale or aims of the study and these should be included.

It is suggested that methods section of the abstract is made more concise and more results are presented. It is important to ensure that the method does not state that ‘practices’ are determined in the survey as this is not true; the authors need to ensure correct reference is made re self-reported practices or / and beliefs about handling practices. Writing style and presentation of results also needs to be more concise.

The conclusions of the abstract could be reached by conducting a literature review. The authors need to conclude this abstract specifically to the findings of this research study with implications of findings.

QUESTION POSED WELL DESIGNED?

The purpose and rationale for the study as written in this paper may be improved upon. The authors need to clarify and more clearly define the rationale for this study as well as aims.

The background literature is acceptable, however, requires expansion to provide a stronger argument for study.

METHODS APPROPRIATE AND WELL DESCRIBED?

There is a need for a clear rationale for development, design and inclusion of subject areas in the questionnaire.

Although subjects addressed in statements to determine perceptions of formula
handling practices are of considerable relevance and importance to formula safety, the wording of many of the statements is ambiguous and in some cases the focus difficult to interpret.

There is no mention of a pilot study – this is required as a standard for good social science research methods.

Currently there is no inclusion of information to suggest validity and reliability of the data or data collection methods.

The authors indicate that no ethical approval was required for implementing the study – I assume this is regards to a ‘Health Service’ organisation. However, as a questionnaire is being distributed to parents and nursery staff there is a need for ethical approval to have been obtained from the University / School where the research was undertaken.

It is suggested that the authors indicate that completion of questionnaires implied respondent consent to participate in the study.

There is a need to indicate a more clear approach taken for sample selection and respondent inclusion in the study, as well as the number of questionnaires distributed in the methods section.

Confirm use of correct inferential statistical tests.

DATA SOUND?
To increase reader understanding of the respondent demographic profile etc it may be better for the authors to tabulate the profile in the results section – as opposed to paragraphs of %.

It would be of benefit if cumulative positive and negative perceptions of handing behaviours could be reported using coded /scored responses to statements.

Please can the authors clarify the relevance of sentence 1 page 6.

There is a need to clarify the use and interpretation of inferential statistics in this paper. Currently, it is not always clear to the reader exactly what the significant difference /correlation is between.

The authors need to ensure that reported data represent psychological perceptions / beliefs regarding handing practices, not actual practices.

Presentation of findings from the questionnaire is not concise and formatting needs improvement – currently there appears to be 13 tables reporting on perceptions made on the same rating scale.

DISCUSSION AND CONCLUSIONS WELL BALANCED AND ADEQUATELY SUPPORTED BY DATA?
The discussion requires placing more emphasis on the results showing perceived importance of practices.

Line 2 of the discussion: please provide referenced evidence that childcare workers are ‘skilled’ food handlers. Please indicate background levels of food safety training etc.

Rather than discussing ‘high scores’ etc in the discussion, it is suggested that
interpretation of findings includes (e.g.) generic and specific positive (or negative) perceptions.

It is suggested that the discussion is strengthened by further interpretation of findings and inclusion of specific reference to microbiological risks and implications of findings related to other psychological variables and actual practices.

Line 1, page 10. Reference made to ‘consistent performance’ of childcare workers requires amendment to reflect findings of the questionnaire – it may be better to indicate ‘consistent perceptions’ or similar to reflect psychological data as opposed to ‘practices’.

The conclusion suggests that provision of instructions to childcare workers re powdered infant formula safety should minimise microbiological risks – please could the authors expand upon this point to discuss the effectiveness of instructions upon such practices.

LIMITATIONS OF WORK WELL STATED?
Limitations of this study stated on page 11.

AUTHORS CLEARLY ACKNOWLEDGE WORK – PUBLISHED AND UNPUBLISHED?
Inclusion of reference list with published work.

WRITING ACCEPTABLE?
The writing style in this paper requires improvement.

It is suggested that the authors do not use terms such as ‘respondents within parents...’ and reference to “performance’ of respondents and ‘parents were asked for participating to the investigation’ as such terminology either doesn’t make sense or does not accurately reflect data presented.

The authors make reference to ‘germs’ (page 5) – this is considered to be lay terminology. Use of the term ‘germ(s)’ should only be used when specifically quoting statements included in the questionnaire.

Presentation of data in terms of ‘answer patterns’ requires clarification and defined using academic terminology.

There are a number of spelling errors throughout the paper that require correcting (eg page 11, line 5 of the conclusion; ‘insure’ should be ‘ensure’.

ADDITIONAL POINTS?
There is a need for the authors to define ‘less educated’ and ‘more educated’ levels.

Please confirm whether the respondents powdered infant formula handing education was determined, and if so how this related to perceptions of practices.

It is suggested that the authors refer to Enterobacter sakazakii with reference to the reclassification of Cronobacter – see references: (1) Iversen, C., Lehner, A., Mullane, N., Marugg, J., Fanning, S., Stephan, R., et Joosten, H. 2007b. The

**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, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

'I declare that I have no competing interests'