Reviewer’s report

Title: Factors associated with infants' and young children's (6-23 months) dietary diversity in Pakistan: Evidence from the Demographic and Health Survey 2012-13

Version: 0 Date: 03 Feb 2017

Reviewer: Sarah Kehoe

Reviewer’s report:

General comments

This is an interesting and well written manuscript describing a secondary analysis of cross-sectional demographic and dietary survey data in Pakistan. The objective was to study relationships between socio-demographic factors and dietary diversity among children aged 6-23 months.

The findings in relation to dietary diversity of children are important.

The authors conclude that because there is a cross-sectional association between socio-demographic factors and diet diversity that this relationship is causal. A major recommendation to the authors would be to recognise that association does not imply causation.

It is likely that availability and affordability of nutritious foods is an issue for at least some of the households. This issue is not well covered in the discussion. The conclusion recommends 'education programmes' and 'practical efforts to change the behaviour of communities'. I think the authors could be more specific about their recommendations and also consider how other factors (e.g. availability) that they have not assessed in this study might affect dietary diversity. These are mentioned in the introduction but not in the discussion.

Abstract

Lines 4-6: I suggest re-wording the aim statement. At present it appears that mother's diets are an outcome in the analysis.

Lines 16-18: Please state whether the associations were positive or negative.

Introduction

It would be helpful if these terms could be defined:

1) malnutrition (e.g. low weight for age/ height for age/ weight for height / other?),
2) 'food insecure'

Lines 36-37: Presumably this refers only to adults. Are there any data on the proportion of children for whom energy requirements are met?

Lines 42-43: Was the NNS able to show causation or was an association observed?

Lines 51-53: These points may be more appropriate in methods and discussion sections.

Lines 61-62: Could the authors give brief examples of cultural influences?

Lines 67-69: Make clear that the study is investigating associations rather than contributory factors.

Methods

A bit more detail on the survey response rates would be helpful. Were there any exclusion criteria?

If women had more than one child in the specified age range, were all children included in the data collection and analysis?

Lines 85-89, please make clearer how the dietary data were collected. Were women asked whether children had consumed each of the food groups in the past 24 hours using the 15 food groups as a checklist, or were women asked to recall all of the foods consumed by the child in the past 24 hours?

Who conducted the interviews?

Were all of the data collected by interview?

Line 107: the authors could consider using the term 'domestic violence'

Line 117: how was wealth assessed?

Statistical Analysis

Were variables assessed for normality of distribution? It may be more appropriate to use median and inter-quartile range instead of mean and SD for some variables including birth order, parity, number of children, dietary diversity score.

Results
Lines 143-147: more detail could be given in this section about the diversity of diets e.g. fruit, vegetables, dairy etc. In Table 1, it may be interesting to divide the children into thirds by age and present the diversity data for each third as well as the overall intakes.

Line 146: Meat is an animal/flesh food. It may be better to say 'very few children consumed liver, kidney and other organs'.

Table 2: please give a description of the autonomy and diet diversity score as a foot note.

Discussion

Lines 192-196. These three sentences could be condensed into one sentence.

Line 197: suggest changing 'influencing' to 'associated with'.

Are there any national/international recommendations for infant diets? If so, could the results of the survey be compared with these?

Line 207: Which countries are included in this comparison?

Lines 219-220: Please clarify what is meant by 'individual food intake strongly influences dietary diversity'.

Level of interest

Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English

Please indicate the quality of language in the manuscript:

Acceptable

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