Author's response to reviews

Title: Impact of community-acquired paediatric rotavirus gastroenteritis on family life: data from the REVEAL* study

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Author's response to reviews: see over
Dear Nina,

Thank you again for your interest in our manuscript "Impact of community-acquired paediatric rotavirus gastroenteritis on family life: data from the REVEAL* study" (ref MS2252050329412445), and for the thorough and constructive review of our submission.

We have responded to each of the comments of the reviewer, as detailed on the following pages, and have modified the manuscript in a few places, marking the changes in bold text.

We hope that you will now find this manuscript suitable for publication in BMC Family Practice. I remain available for any further questions you may have.

Yours sincerely,

Carlo Giaquinto
Response to reviewer's comments regarding manuscript entitled, "Impact of community-acquired paediatric rotavirus gastroenteritis on family life: data from the REVEAL* study" (ref MS2252050329412445).

Reviewer #1:

The article reports the results from a widely known study on rotavirus GE in children. Although the burden of RVGE has been studied by other authors, this study adds interesting information in the European context. The article may benefit of some additional information on methods that are mostly reported in reference.

Major points

1. The methods section is insufficient. Although the Authors clearly reference an article where the study design is fully reported, readers may not have immediate access to it, and may not be able to appropriately interpret the results. The Authors should state which population was included in the study, how it was selected, and how the follow up was performed;

Response:

We have added a more detailed overview of REVEAL in para 1, Methods section. As REVEAL was not a cohort study, patients were only followed to the end of the GE episode, as described in para 2, Methods section.

2. The Authors state that the overall response rate of the study was high but they do not report the actual total figure. The low response rates observed in UK and Belgium should be accompanied by comments on reasons for selection of patients: were patients responding to the questionnaire of the same age, same social census than those not responding?

Response:

We have added the numbers of responders for each country study area to Para 1, Results section. We cannot provide an explanation for the lower response rates in UK and Belgium as follow-up ended with the questionnaire submission, and we do not have specific information on social status for each responder/nonresponder.

3. The Authors should better explain how additional childcare was defined. Was it the presence of some help in the family for the care of other children? If this is the case, the analysis should be performed taking into account the number of children in the family;

Response:

The question used to define additional childcare has been added to the Results section, as follows:

"The need for additional childcare was identified with a general question that asked whether anyone was hired specifically to assist with care of the child during the RVGE episode."

Additional childcare referred to someone being hired to assist with the care of the child; thus this definition does not include some help in the family.

Minor points

1. The difference in proportions of children requiring a parent who is absent from work by country is interesting. How the Authors would explain the low figures reported in hospitalized children in Belgium, France, and Germany?

Response:

While questions like this are very interesting, the reasons for these observations are certainly very country/culture-dependent, and any discussion to this end would only be speculative. Thus we prefer to avoid pursuing this point.

2. In the general context of the burden of RVGE, the number of extra visits and possibly inappropriate prescriptions or diet out of hospital or primary care may add to the parameters considered in this article. The Authors may further discuss how the burden of RVGE may be underestimated.
Response:
We agree that these are further factors that may add to the burden of RVGE, but these do not specifically relate to the burden of RVGE experienced by the family – the specific focus of this paper.
Reviewer #2:

This is a well-written account that compliments earlier publications by the same group. The information is simple to understand, clearly presented and pragmatically useful. It is based on a questionnaire, and responder rates were high. The limitations of the parental recall methodology are discussed briefly.

Minor essential revisions
1. The limitations of the observational study methodology need to be discussed briefly.

Response:
We believe that we have comprehensively discussed all of the limitations of this particular study in the Discussion section, some of which derive from the fact that it was observational. We are not sure that there is any added benefit to add further generalised statements referring to the limitations of observational studies.

2. The paper needs to discuss validation of the questionnaire that was used.

Response:
The REVEAL study was designed to primarily evaluate the incidence of RVGE in Europe. Here, we describe a secondary objective of the study which was to evaluate the societal costs of the disease, specifically at the family level. We developed this questionnaire only for this one study that was generally applicable across the 7 EU countries, but the questionnaire was not tested and validated by other means before the REVEAL study.

3. Why was the visual analogue methodology chosen to assess stress levels? Were any other methodologies considered and rejected?

Response:
The visual analogue approach is a commonly used method to assess stress, and was selected for this reason. We did not systematically review and reject other methodologies for this part of the questionnaire.

4. The paper would be improved by providing weighted averages as a bottom line in each of the tables; or explaining why this is not appropriate.

Response:
No detailed statistical analyses were performed for this descriptive part of the REVEAL study beyond the determination of means plus SD. While weighted averages may help correct for the different sample sizes between countries, inter-country comparisons are difficult when studying such culturally sensitive data. We have been careful to avoid comparisons between countries in this paper, and thus this additional analysis may in fact lead readers to try to (inappropriately in our opinion) compare data in this manner.

5. More information needs to be given on the reasons for excluding some children from the study, in case this introduces bias.

Response:
The inclusion and exclusion criteria are defined in the earlier report of the REVEAL study (van Damme et al. 2007). We have added the exclusion criteria to the Methods section. We have also added a brief mention of the possible bias that may arise from these criteria to the Discussion section, as follows:

"Furthermore, the exclusion criteria (no telephone access, not native speakers of local language) may have led to some bias in some results."

6. This statement is not useful without showing the data: "Although there were some variations between countries, data suggested that both parents lost time from work if the child was hospitalized, whereas the mother was more likely to lose time from work if the child was managed in the primary-care setting (data not shown)."

Response:
We have removed this sentence from the paper.

Discretionary revisions
A more recent paper from Israel could be cited.

Response:
We believe that the issues related to pneumonia are quite different to those related to RV, and feel that this paper is not directly relevant to our results. However, we have referenced a recent paper from the US that also looked at the impact of RVGE on the family (Mast et al. 2009; update on abstract previously referenced).