July 14, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 9966-review.docx).

The manuscript has been improved according to the suggestions of reviewers. I am attaching two versions of the manuscript: one showing each revision in highlight-changes mode (file name: 711149966-reviewCHANGESTRACKED.docx) and the other being a completely clean copy (file name: 711149966-reviewCLEAN.docx).

Title: Epidemiology of upper gastrointestinal symptoms in Brazil (EpiGastro): a population-based study according to sex and age group

Authors: Maria Rosário Dias de Oliveira Latorre, Aline Medeiros da Silva, Decio Chinzon, Jaime N Eisig, Telma R.P. Dias-Bastos

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Editor's comment 1:

Authors indicate in more than one place that the telephone survey is a "validated telephone survey." I would like to know how this validation has been accomplished.

Authors' response 1:

Further information has been added concerning these topics, mainly to the Methods section, to provide further background:

Concerning the survey instrument/questionnaire, we have added the following to page 5 of the Methods:

"The study targeted adult inhabitants of São Paulo who owned landline telephones. For telephone interviews, interviewers explained that participation was voluntary and that there would be neither any penalty for refusing to participate (or withdrawing consent) nor compensation for participating. Telephone respondents provided informed oral consent, and these were recorded."

Concerning the study sampling protocol, we have added the following:

"A probabilistic sample was conducted using a computer-assisted telephone interviewing survey system."
Concerning validation, we have added the following to the Methods section (pg 6):

"The interviewing software and survey instrument were developed and validated using two subsamples (50 individuals in each) of respondents. In a pilot study, the first 50 interviews were conducted initially by telephone, followed by face-to-face interviews in the household 2 to 7 days later. For the next 50 subjects, the sequence was reversed. The pilot study was conducted from November 23, 2010, through March 1, 2011. Validation of our survey data was based on the pilot-study findings of: 1) high agreement between interview modalities with regard to comorbidities ($\kappa \geq 0.61$; $P < 0.001$) and 2) no significant differences between mean age, body mass index (BMI), and the grade of evaluation of dietary quality (each $P > 0.070$) as reported by respondents across the two interview modalities. These items also showed high intraclass correlation coefficients ($r_{icc} > 0.78$; $P < 0.001$)."

Editor's comment 2 and 3:
Summary statements give a range of those who are positive for GERD. Why cannot it be stated precisely the % positive? Either they are positive or they are not. So better, in summary statements to say "25 % of respondents...."

Also, for Dyspepsia, the statement is "about 20 - 25 % of respondents reported symptoms consistent with dyspepsia." Why cannot it be stated precisely the % positive? Either they are positive or they are not. So better, in summary statements to say "25 % of respondents reported symptoms....."

Authors' responses 2 and 3:
Our survey captured numbers (%) of respondents who self-reported symptoms that were consistent with GERD or dyspepsia. It is important to remember that survey respondents were not seen by physicians who recorded whether respondents had or did not have GERD or dyspepsia.

The summary ranges of self-reported symptoms were for low to high frequencies of the different reported symptoms reported by respondents within the prior 3 months. It is not possible to add numbers of respondents with each symptom of GERD or dyspepsia and then average these as a percentage using the number of total respondents in the denominator for two reasons: 1) each patient could report more than one symptom consistent with GERD or dyspepsia and 2) each of the frequencies of reports was weighted, as described in the Methods.

As a means of summarizing the data, the revised manuscript includes bar graphs (Figures 1 and 2). Rather than express ranges of frequencies of self-reported symptoms, the text now focuses on respondents reporting leading (highest-frequency) symptoms of each condition at least once monthly. Examples follow:

Abstract (pg 2):

> "More than 20% of respondents reported leading symptoms consistent with GERD (e.g. gastric burning sensation = 20.8%) or dyspepsia (e.g. abdominal swelling/distension = 20.9%) at least once a month."

Results:
"GERD (pg 8):

> In all, 27.3% of respondents experienced a sensation of stomach burning in the prior 3 months: 20.8% at least once a month and 6.5% less frequently (Figure 1)."...

"Dyspepsia (pg 8):

> Abdominal swelling or distension was reported by 26.8% of survey participants within the previous 3 months: 20.9% at least once, and 5.9% less than once, monthly (Figure 2)."

Conclusions (pg 13):

> Approximately 21% of respondents from São Paulo reported leading symptoms consistent with GERD (e.g. gastric burning sensation = 20.8%) or dyspepsia (e.g. abdominal swelling/distension = 20.9%)."

Editor's comment 4:

Language is clear and accurate. References seem appropriate and adequate. Graphics and Tables are fine.

Authors' response 4:

We thank the editor for this favorable appraisal of our work. According to the WJG's author guidelines, our paper does not need to be reviewed and certified by an English-language editorial company because the Editor awarded our paper an "A" rating with regard to its language.

1 The following, other substantive changes were made in the revised manuscript:

a. Methods: we have moved the text on sample size calculations and statistical weighting of the survey to the Methods, from the Appendices, so that the latter are not too long or unwieldy. The Appendix now contains only 3 Tables on weighting data, which are "called out" in the Methods text.

b. Methods: we have removed statistical analysis language related to comparing raw data between telephone and in-person interviews (also removed this from Results, text and tables). These data do not belong to this paper.

c. Results: we have removed the piegraphs concerning diet and converted piegraphs concerning dyspepsia and GERD symptoms from piegraphs to bar graphs, which are easier to read. The piegraphs also may have implied that percents added to 100, which they did not in all cases. One reason to remove the piegraphs was to reduce the total number of figures and tables. (Removing the data on agreement of self-reported symptoms of GERD and dyspepsia, as mentioned above, enabled us to omit 2 more tables. The total # of graphics is now 9: 7 tables and 2 figures.)

a. Discussion: Additional information was added to the Discussion to render it more germane to our data. In particular, further epidemiologic data from published references were cited concerning associations between age and gender and the prevalences of self-reported symptoms of GERD and dyspepsia in other populations. Because more than half of our study population reported being overweight or obese, we have also included more information about associations between this behavioral risk factor and GERD.

2 The article format has been updated in accordance with the guidance and templates provided to us by the editor. The editors' comments have been addressed, including specifying comparisons and tests for *P* values.

3 References and typesetting were corrected. DOI numbers (where available) were added to the references in the bibliography. A "COMMENT" was added at the end of the document.

4 Some other, small refinements were made to the text, which are shown in the track-changes version.

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

Maria do Rosário Dias de Oliveira LATORRE, PhD
Department of Epidemiology, Faculty of Public Health
University of São Paulo
Av. Dr. Arnaldo 715, São Paulo (SP), Brazil 01246-904.
Tel: +55 11 3061-7935
Fax: +55 11 3061-7799
E-mail: mdrddola@usp.br.