Author’s response to reviews

Title: The prevalence of dementia in a Portuguese community sample: A 10/66 Dementia Research Group study

Authors:
Manuel Gonçalves-Pereira (gpereira@nms.unl.pt)
Ana Cardoso (amargaridapc@gmail.com)
Ana Verdelho (averdelho@medicina.ulisboa.pt)
Joaquim Alves da Silva (jalvesdasilva@nms.unl.pt)
Manuel Caldas de Almeida (malmeida@scmmora.pt)
Alexandra Fernandes (alexandrafernandesmgf@gmail.com)
Cátia Raminhos (csraminhos@gmail.com)
Cleusa Ferri (ferricleusa@gmail.com)
A. Matthew Prina (matthew.prina@kcl.ac.uk)
Martin Prince (martin.prince@kcl.ac.uk)
Miguel Xavier (migxavier@gmail.com)

Version: 1 Date: 12 Sep 2017

Author’s response to reviews:

Ref: Manuscript BGTC-D-17-00158, submitted to BMC Geriatrics: The prevalence of dementia in a Portuguese community sample: A 10/66 Dementia Research Group study

Lisbon, the 13rd September 2017
Dear Senior Editor - BMC Geriatrics,

Dr. Matteo Pasini,

Thank you so much for your letter dated 22nd August 2017. We are also thankful to both reviewers for their suggestions and thoughtful comments. We have addressed the required points as you may see in the revised text and in our brief notes/rebuttal below.

We sincerely hope that we have succeeded in improving in our manuscript, so that it may now found acceptable for publication in BMC Geriatrics.

All authors have read and approved this revised version of the manuscript.

Looking forward to your decision,

Kind regards,

Manuel Gonçalves-Pereira
(corresponding author)

Answers to Editorial and Reviewers’ comments:

Editor’s comment: please add the ‘Abbreviations’ section after the Conclusions.

Reply:

We did so. We also corrected a few typos, mostly regarding the 10/66 DRG designation and changed ‘elderly’ for ‘older people’ throughout the text.

Reviewer #2 comments:

1) The sample needs to be better described in terms of identification. How were those older than 65 years identified in the community? Was it through some administrative database or through enumeration of each household? The authors state that the informants were appointed. Who appointed them and using what criteria.
Reply:

Thanks for the opportunity of clarifying this. As stated in the manuscript, we followed the 10/66 DRG protocol for prevalence studies (ref 17: Prince et al, 2007) and the 10/66 DRG Manual (link provided in ‘Study design’). This means that, for each defined area, mapping was carried out to identify and locate all households where potential respondents (aged 65 and over) could be recruited. This information was now added (cf. last sentence of Methods/ subsection Setting and page 7 of the first manuscript submitted):

"Mapping was carried out to identify each distinct household, prior to door-knocking to identify potential eligible participants (aged 65 years and over) with final eligibility confirmed during fieldwork."

Regarding informants, we also applied the 10/66 DRG Manual, as now clarified in the text (cf. Methods/ subsection Participants and line 55, page 7 of the first manuscript):

"For each participant, a reliable informant was appointed by consensus within each household. In most cases, this was the closest family member and a co-resident, but the main criterion was to choose the person who knew the participant best (being or not a member of the household, or the family). Time spent with the older person was helpful in this decision. Where it was readily apparent that the older person needed care, the main caregiver was selected."

2) The authors state that nursing homes were excluded and then go on to describe this group in various sections of the article. I suggest that they remove it entirely or use it to do some sensitivity analysis or prediction of prevalence of dementia in nursing home dwelling older adults.

Reply:

Following the Reviewer’s suggestion we clarified throughout the whole text that nursing home residents were eventually excluded from the present study, despite our initial attempt to include a significant proportion of them.

Summarising these changes, we:

2.1. Completed the following sentence in Limitations:

"Third, our inability to access and survey representative samples of older residents of residential care and nursing homes is a significant limitation. We were not able to accurately define the number of older people who could not be approached in institutions. Therefore we did not
perform a sensitivity analysis to estimate the number of dementia cases and calculate an adjusted total prevalence in nursing home residents."

2.2. Deleted all the following parts of the text regarding nursing home residents’ results:
- Last paragraph in Results (page 15, lines 2-19 – first manuscript submitted);
- Page 17, lines 28-36 – first manuscript submitted.

2.3. Recalculated totals which now only regard community-dwellers in: Abstract (first two sentences in Results) and Results/ subsection General description of the two samples (first paragraph).

2.4. Rephrased the last sentence in Methods/ subsection Participants.

2.5. Corrected a typo in Table 3, concerning wrong total numbers of participants in Table 3 – urban, rural and overall (these numbers included nursing home residents in a previous draft of the manuscript).

3) Questionnaires/questions determining dementia subtypes and CDR need to be better defined.

Reply:

Readers may find further details in references (cf. first sentence in Measures: “The full array of measures and corresponding details may be found elsewhere[17,20]”, but we now added more details – albeit not too many, to keep balanced the amount of information provided on other measures (cf. Methods/ subsection Measures/ last paragraph, and line 19, page 9 of the first manuscript).

"Dementia subtypes were also assessed using an algorithm previously described[17], matching the NINDCS-ADRA Alzheimer’s Disease[32], NINDS-AIREN vascular dementia[33] and Lewy Body dementia[34] research diagnostic criteria. All the necessary information for applying this algorithm was retrieved from 10/66 DRG assessments (e.g. HAS-DDS), which also identify other prevalent conditions relevant to the differential diagnosis of dementia and dementia subtype (e.g. psychosis, depression, stroke).

Severity of dementia, classified as questionable, mild, moderate or severe, was assessed according to the clinical dementia rating (CDR)[35]. This CDR summary score was calculated through an algorithm using 5-point scales on six domains of cognitive and functional performance (memory, orientation, judgment and problem solving, community affairs, home and hobbies, and personal care)."
4) The authors need to define the qualifications/experience of the mental health professionals who conducted the study.

Reply:

This part of the text now reads (cf. Methods/ subsection Preparation and procedures/ line 40, page 9 of the first manuscript):

"All the interviewers were mental health professionals (psychologists, nurses), acquainted with the study protocol and rigorously trained in the assessment procedures."