Author’s response to reviews

Title: The social and economic burden on family caregivers for older adults in the Czech Republic

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Author’s response to reviews:

Reviewer report:

Kyra Waligora Mendez, BSN (Reviewer 1): Thank you for the opportunity to review this manuscript. Overall, very interesting study; however, there are methodological and organizational issues that need to be addressed. Some of the analyses were not clearly specified a priori and statistical analyses were not described clearly. Also, study methods are discussed in results and results of these methods are not described, but rather listed. Please see comments for more detailed suggestions.

Unsure why certain parts of manuscript are highlighted. Also, manuscript should be formatted according to BMC Geriatric standards (i.e. double spaced).

Authors: Thank you for your comments. I checked again formatting of the paper according to the BMC guidelines.

Introduction lines 8-24: There are some studies over 10 years old; is it possible to update some of these references? Demographics of caregivers are changing.

Authors: Thank you. The whole part was reworked and more current study was used.

In the introduction, consider commenting on what is known (state of the science) about caregivers in the Czech Republic, instead of discussing Czech's healthcare history.

Authors: Thank you. The part of Czech’s healthcare history was deleted. It was replaced by a description of the situation of informal caregivers in the Czech Republic.

Methods in abstract do not seem to align with methods in paper; Methods in abstract state sample was recruited from senior care homes (seems like institutionalization or long term care facilities), but methods in paper describe “home care agencies.” Please clarify.

Authors: Thank you. The differences were unified and explained.

Page 5 Lines 39- 51: Not clear if your sample is formal or informal (i.e. family/friend) caregivers. Please clarify. Again, page 11 lines 13- 20 confuse reader as to who these caregivers are: formal or informal?

Authors: Thank you. The sample was clarified on the page on the page 5 and page 11.
For data collection methods, how were the survey questions constructed? Were they based on well validated scales/instruments? If not, will affect validity/reliability of study findings. Also noted open-ended questions, so was this a mixed methods study?
Authors: Thank you. Methods section was extended. Information about questionnaire construction was added.

Page 10 Line 29: Table 2 is the types of costs, not diseases. Please correct.
Page 11 Lines 26-27 Again, you refer to incorrect table. Please review results again to ensure you refer to correct figures.
Authors: Thank you. We checked all references to tables and figures.
Some of the findings in the results section are redundant (One example: Page 8 lines 28-30, Page 9 Lines 22-25, and Page 10 Lines 47-51 all discuss employment status of caregivers with the same or similar numbers). Please synthesize and condense.
Authors: Thank you. We synthesized information. Information about the same facts was put in one place.

Also, for tables 3, 4, and 5 it is important to put the total sample size supporting these numbers (so readers can understand the denominators).
Authors: I put total sample size in table 3 (partially as a sum, partially as a comments below the table), in table 4 the sum was added. In the table 5 the sum was already in previous version.

For Figure 1, Your chart key is not clear-- Who is the "Patient" referred to in the key: Caregiver or care recipient? Also, consider putting percents in Figure 1 instead of "Patient number" as you refer to percents in your results. A little confusing to reader when interpreting results.
Authors: Thank you. Figure 1 has been rewritten, the description has been corrected X-axis values are percentages.

For results section 3.3 and 3.4, please provide additional details in your methods/statistical analysis section to address the analyses that were performed. Also, please check statistical language used throughout manuscript, some errors were noted. For example, pg. 13 lines 15-16 .01 is significance (p-value), not a confidence interval. Also, were there any previous scientific findings, theories, or hypotheses that were driving your statistical analyses? Sometimes it is a unclear why you are exploring various relationships and whether you had specified relationships a priori.
Authors: Thank you. Chapter methodology was significantly extended and improved. Additional details were provided. Also previous scientific research paper and hypotheses which are base for our research were described. We checked statistical language.

In Section 3.4 Cost Analysis (p. 13), how were publicly available data and insurance costs linked to your dataset? Were you somehow able to link these data to people who were in your sample? There are issues in terms of generalizability, as these costs may not be what your sample paid (we are just assuming your sample paid this amount). Please acknowledge that this is an assumption you are making and it is a limitation. For this section, also discuss your findings more, rather than focusing on how calculations were performed (calculations should be in methods or supplemental materials, not results). It was also not clear you would be performing these analyses from your study purpose/methods sections. Please address.
Authors: Thank you. Cost analysis was deeply described in methodology. Link of these data to people who were in your sample was described.
In discussion section (pg. 15- 17), please try to add more discussion about how your results relate to current scientific literature. Also, you discuss findings in your conclusion that weren't necessarily reported in your results (i.e. pg. 16 lines 33-35), unless I missed it (as it did not appear to be a main/important finding in your study). Also, please acknowledge some of the limitations of your study in the discussion, not necessarily your conclusions (as you do not want readers focusing on study weaknesses as concluding thoughts).

Authors: Thank you. The discussion was fundamentally restructured. Some sections in the light of the comment have been deleted, a new section has been added. Part of the discussion is also devoted to the limits of work. Please ensure references are cited according to BMC Geriatrics' reference style.

Authors: Thank you. We checked and corrected reference style.

Amy Ng (Reviewer 2): The study investigated elderly family caregivers' economic burden in the Czech Republic. Totally 155 subjects were recruited from the home care centres to complete a survey questionnaire.

- The study shown that the target population were those who work in long-term care homes and also visit adults in their homes. Thus, it was not clear whether the staff in the care homes or family caregivers will give the data, or the logistic to fill in the questionnaires.

Authors: Thank you. Family caregivers are respondents of survey. Chapter Methodology was significantly extended and all consequences were described.

- Besides, there were 7.1% caregivers' profile belongs to "Other relatives and professional caregivers" category. The reason to include professional caregivers in data collection was not explicitly stated.

Authors: Thank you for your comments. Information about professional caregivers was wrong. This fact was deleted from all relevant parts.

- In the discussion about disease in relation to the care cost. The study reported the disease types of care recipients but not well addressed the care demand of different disease types. It seems inconclusive to assume that no disease type was accorded to the care cost.

Authors: Thank you. The discussion was fundamentally restructured. Some sections in the light of the comment have been deleted, a new section has been added. Discussion regarding costs was added. Furthermore, part of the discussion is also devoted to the limits of work.