Author’s response to reviews

Title: QUALITY OF LIFE PROFILE IN THREE COHORTS OF COMMUNITY-DWELLING SWISS OLDER PEOPLE

Authors:

Nazanin Abolhassani (nazanin.abolhassani@chuv.ch)
Brigitte Santos-Eggimann (Brigitte.Santos-Eggimann@chuv.ch)
Christophe Bula (Christophe.Bula@chuv.ch)
Rene Goy (Rene.Goy@vd.prosenectute.ch)
Idris Guessous (Idris.Guessous@hcuge.ch)
Yves Henchoz (Yves.Henchoz@chuv.ch)

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Author’s response to reviews:

Dear editor and reviewers,

Thank you for your constructive comments concerning our manuscript entitled “QUALITY OF LIFE PROFILE IN THREE COHORTS OF COMMUNITY-DWELLING SWISS OLDER PEOPLE”. We answer your questions or comments in detail in the following texts. We hope that our response and the changes in the manuscript meet your expectations.

Responses to Editor Comments:

1. In the ethics approval and consent to participate statement, please include information on the consent to participate.

Reply: The statement was added in the ethics approval and consent to participate statement.

“Informed consent was obtained from all individual participants in Lc65+.”

2. Please add a section "Additional files" (after the References/Figure legends) where you list the following information for each additional/supplementary file in the file inventory:

- File name (e.g. Additional file 1)
- Title of data

- Description of data

Reply: We added a section “Additional files” and the detailed information for the supplementary figure 1 was provided as requested.

In addition, as requested by the reviewers to provide information on representativeness of the Lc65+ cohort as well as the instrument, we added supplementary table 1 and 2 and added the information as requested above.

3. Please ensure that the supplementary figure is formatted correctly. Currently parts of the figure overlap with each other.

Reply: The supplementary figure was formatted correctly.

Responses to reviewer#1

1. I suggest the authors add information in the background related to the importance of QoL, why is it an important concept to understand, its relationship to other health-related variables, etc. I suggest the authors also add stronger justification for this study, in relation to why it is important to study this topic and how the results can be used now and in the future.

Reply: In the introduction, we added information about the importance of QoL. Also, we added justifications for the current study.

2. The authors drew data from the Lausanne cohort of persons aged 65 and older. More discussion of this cohort, in relation to how similar it is to other groups of older adults (e.g., in relation to factors such as age distribution, education, chronic conditions, etc) would be valuable. This would help in determining the applicability of results to other countries. Further, a brief summary of the study design would be helpful here, recognizing the authors refer readers to a previous paper.

Reply: To help the reader in determining the applicability of results to other countries, we provided a more detailed summary of the study design, supplementary tables comparing gender and birth year distributions between the population of Lausanne and participants to the Lc65+ study, and added a paragraph on the representativeness of the Lc65+ cohort:

“Eligibility was defined by the place of residence (Lausanne, a Swiss city of 125000 inhabitants) and by the year of birth. Subjects living in an institution or unable to respond by themselves due to advanced dementia were excluded. Compared to the total population of Lausanne, participants
to the Lc65+ study in 2016 did not differ in gender or in birth year distributions (supplementary table 1). Furthermore, the socio-economic characteristics of participants enrolled in 2004 closely reflected the Lausanne general population in the same age category in aggregate statistics from the Population Office or from the 2000 Swiss national population census.” (Santos-Eggimann et al. 2008)

3. The authors describe demographic and health related measures used and the QoL tool used; additional information should be added related to the reliability and validity of this QoL tool.

Reply: As requested, we provided the 28-item questionnaire as supplementary table 2 and added more information about the QoL tool as below:

“This 28-item questionnaire was developed by a research group on the quality of life of older people (Henchoz et al. 2015), based on the available evidence, including the World Health Organization report on social determinants of health (Wilkinson & Marmot 2003), the synthesis of the literature (Kelley-Gillespie 2009), and the experience of the group’s members.” …

… “This factorial structure was highly consistent between an exploratory and a validation sample, with adequate internal consistency within each domain.” (Henchoz, Y. et al., 2015)

4. The authors note that for importance and satisfaction related to QoL domains with more than one missing constituent items, data were treated as missing. Please indicate how much missing data there was, and clarify why multiple imputation was not used.

Reply: As requested, we provided the frequencies and percentage of the missing data (see the tables (1-2) at the end of this document). In addition, because of the low percentage of missing data (mainly less than 10%), we decided not to impute missing data. To explore a potential impact of missing data on the results, we imputed missing data using multiple imputation and the descriptive results showed very minor changes (see tables 3-4, at the end of this document). If the reviewer judges necessary, this sensitivity analysis may be incorporated to the manuscript.

5. The authors conclude with a statement that "it would be critical to gain better insight on whether perceived QoL is modifiable by psychological, societal, or economic interventions and to support methods to improve positive psychological coping strategies." This statement is not at all connected to the background text or the findings of this study, and needs stronger linkage to the topic of this paper.

Reply: We agree with the reviewer and we omitted the mentioned sentence. In addition, we modified the conclusion in the abstract.
Responses to reviewer #2:

1. I am not familiar with the QoL instrument used, however, and am curious why authors did not use the SF-36v2, the gold standard health related QoL instrument. Perhaps there are specific Swiss cultural elements included in the instrument they used, or perhaps they created this instrument. I would encourage the authors to include the instrument used as a Figure in the paper, or better describe it, anyway. I would expect to see an "instrument" sub-category under methods and perhaps a paragraph dedicated to scoring procedures.

Reply: As the reviewer mentioned correctly, the SF-36v2 is the gold standard instrument for health related QoL but not for general QoL, which is a broader construct.

We agree with the reviewer to provide the instrument in the paper. Therefore, we added the 28-item questionnaire as supplementary table 2. To increase the visibility of the questionnaire in Methods, and incorporate it in subtitles while keeping the same structure, we mentioned it in parentheses (28-item questionnaire) in subtitles “Importance of QoL domains” and “Satisfaction with QoL domains”. Also, to better describe the instrument, we added the text below:

“This 28-item questionnaire was developed by a research group on the quality of life of older people (Henchoz et al. 2015), based on the available evidence, including the World Health Organization report on social determinants of health (Wilkinson & Marmot 2003), the synthesis of the literature (Kelley-Gillespie 2009), and the experience of the group’s members.”

“This factorial structure was highly consistent between an exploratory and a validation sample, with adequate internal consistency within each domain.”