Author's response to reviews

Title: Assessment of Primary Health Care Received by the Elderly and Health Related Quality of Life: a Cross-sectional Study

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Author's response to reviews: see over
We thank to the comments, which were addressed in a point-by-point response.

Editor's comments:

Methods

“The sample size calculation was increased by 25% to maintain statistical power due to losses or lower prevalence of some morbidities (mental disorders), adding more 20% of participants.”

You have only 9-8 patients with mental disorder, if you want to esteem the difference in prevalence ratio of low PHC score among people of mental disorder (being this disease 0.02 in your sample = 9/433) your sample should be:

sampsi 0.90 0.75, ratio(0.02)

Estimated sample size for two-sample comparison of proportions

Test Ho: \( p_1 = p_2 \), where \( p_1 \) is the proportion in population 1 and \( p_2 \) is the proportion in population 2

Assumptions:

\[
\begin{align*}
\alpha &= 0.0500 \text{ (two-sided)} \\
\text{power} &= 0.9000 \\
p_1 &= 0.9000 \\
p_2 &= 0.7500 \\
n_2/n_1 &= 0.02
\end{align*}
\]

Estimated required sample sizes:

\[
\begin{align*}
n_1 &= 3317 \\
n_2 &= 67
\end{align*}
\]

It is better to add a generic phrase as “The sample size calculation was increased by 25% to maintain statistical power due to losses” and to not calculate prevalence ratio for rare diseases.

Answer:

We replaced the previous sentence by the current suggestion: The sample size calculation was increased by 25% to maintain statistical power due to losses.

“Multiple linear regression was used to assess the independent association between PHC score and chronic conditions (as dummy variables) with quality of life.”

You have to rephrase “Multiple linear regression was used to assess the association between PHC score and quality of life domains adjusting for different covariate according to different regression models.”

Answer:
It was accepted this suggestion: Multiple linear regression was used to assess the association between PHC score and quality of life domains adjusting for different covariate according to different regression models.

It is possible to perform a fully adjusted linear regression model?

**Answer:** the last model is the full model.

A multivariate analysis the low PHC score was explained by work status as well as by the type of health care model. As reviewer I do not understand this phrase.

**Answer:** it was rephrased: In a multivariate analysis, the low PHC score was also associated with work status.

In table 4 report please also Confidence interval of β coefficient.

**Answer:** they were included in table 4.

**Reviewer’s report**

**Title:** Assessment of Primary Health Care Provided to the Elderly and Health Related Quality of Life: a Cross-sectional Study

**Version:** 4  
**Date:** 10 April 2013  
**Reviewer:** Joan Gene Badia

Reviewer's report:

**Abstract**

- In order to improve the understandability of the study, the first sentence must refer to the primary care services reform ongoing in Brazil.

**Answer:**

The reform of primary health care service is not underway in Brazil. The reform has already been implemented in the last decade. Nowadays, the reform is consolidated, but has not been fully evaluated. The first sentence of the abstract refers to the epidemiological transition.

The aim of the study improved with the new wording, nevertheless it remains not clear enough:
Study population must be better clarified in the aim, (elderly population who received care....).

Answer:

The suggestion was added to the aims: ... quality of life in elderly individuals who received care in those units.

You compare the primary care orientation of the services “received” by theses elderly patients (not “provided”). You interview patients, you do not evaluate directly the services provided.

Answer:

I am not sure if the reviewer criticism was referring to the title or to the aims of the study. There were two suggestions for the aims, one from each reviewer. In the abstract we accepted one and in the main text we reproduced the textual words of the second reviewer.

The title was changed from “Assessment of Primary Health Care Provided to the Elderly and Health Related Quality of Life: a Cross-sectional Study” to “Assessment of Primary Health Care Received by the Elderly and Health Related Quality of Life: a Cross-sectional Study”.

The statement of the objective b) is also confusing to me. You want to know if the PHC orientation of the services perceived by the elderly population cared in Brazilian primary health care is associated to the organisation of the services (FHS vs BHU), or to the sort of patient’s chronic diseases.

Answer:

We rephrased the background and the aims according to the previous suggestions of both reviewers. The background was expanded to present how the organization and provision of services are based on models of care and characteristics of the population that might affect them. The aims evolved markedly for the main text (please, see below) and we adopted your suggestion literally to rephrase them: “The only clear objective to me is the comparison of the degree of person centered care (PHC score) in two different ways of providing primary care in Brasil.” Therefore, the current version states that the aim is the comparison of the PHC score among two different ways of providing primary care in Brazil, defined a priori by the models of care (Family Health Strategy vs. Basic Health Units). Chronic conditions as hypertension, diabetes mellitus, mental disorders, chronic pain, and obesity may affect both, the health care and the PHC score.

Current version: This study aimed to compare the degree of person centered care (PHC score) in two different ways of providing primary care in Brazil (Family Health Strategy vs. Basic
Health Units): to assess the association of hypertension, diabetes mellitus, mental disorders, chronic pain, obesity, and central obesity with PHC score; and to evaluate the PHC score with quality of life in elderly individuals who received care in those units.

Method: The number of interviewed patients must be in results.

Answer: The number of elderly was added to the results: “A total of 511 elderly individuals were identified, two declined to participate, resulting in 509 individuals interviewed”.

In methods you must clarify the inclusion criteria.

Answer: The eligibility criteria was to be 60 years old or older, be at the unit in that day, to consult or participate in a group activity, and for those who were visited at home by the staff of PHC.

Answer: We rephrased the information:

We interviewed elderly patients - 60 years or older - who consulted at BHU or FHS units in that day or participated in a group activity, and those who were visited at home by the staff of PHC, selected through a random sample.

You must mention where was performed the survey (at the point of delivering care: health centre or home)

Answer: The rephrased methods have the information (please, see above).

Results: start with the number of patients interviewed and the response rate. Results must be in figures. Second sentence is difficult to understand because is everything in negative (Chronic problems were not independently associated with lower PHC score, except hypertension and cardiovascular disease).

Answer: It was added to the abstract results: “A total of 511 elderly individuals were identified, two declined to participate, resulting in 509 individuals interviewed”.

We rephrase the second sentence: “Except for hypertension and cardiovascular disease, other chronic problems were not independently associated with low scores in PHC”.

Background.
Same problems in clarifying the objective are present at the end of the background section

Answer:

The aims evolved markedly (please, see below) and we adopted your suggestion literally to rephrase them: “The only clear objective to me is the comparison of the degree of person centered care (PHC score) in two different ways of providing primary care in Brasil.”

Submitted: The aims of this study were to evaluate whether elderly patients who consulted in units with FHS had higher PHC attributes attainment than those who consulted in the traditional care model; if morbidities - hypertension, diabetes mellitus, mental disorders, chronic pain – were reported as major health problems; if body mass index of obesity and central obesity was independently associated with major PHC attributes attainment; and whether the PHC score was associated with quality of life in elderly individuals.

Revised: This study aimed to compare the degree of person centered care (PHC score) in two different ways of providing primary care in Brazil (Family Health Strategy vs. Basic Health Units); to assess the association of hypertension, diabetes mellitus, mental disorders, chronic pain, obesity, and central obesity with PHC score; and to evaluate the PHC score with quality of life (QoL) in elderly individuals.

Current version: This study aimed to compare the degree of person centered care (PHC score) in two different ways of providing primary care in Brazil (Family Health Strategy vs. Basic Health Units); to assess the association of hypertension, diabetes mellitus, mental disorders, chronic pain, obesity, and central obesity with PHC score; and to evaluate the PHC score with quality of life in elderly individuals who received care in those units.

Methods
Consent was only asked to the health centre staff? Not to the patients interviewed?

Answer: It was described in the methods section.

The Ethical Committee of the Hospital Nossa Senhora da Conceição, from Porto Alegre, accredited by the Office of Human Research Protections the Institutional Review Board, approved the project (registry: GHC 090 090/09) and all participants signed a consent form.