Author's response to reviews

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

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Author's response to reviews: see over
Natalie Pafitis  
Executive Editor  
BMC Public Health  

MS: 1718854128783890  
**Title:** Assessment of Primary Health Care Provide to the Elderly and Health Related Quality of Life: a Cross-sectional Study  

Dear Dr. Pafitis,  

We appreciate the extensive comments of the reviewers, who seem favorable. We believe that now all the criticisms were answered, and the result is a dramatically improved manuscript.  

Best regards,  

Sandra Fuchs, MD, PhD
EDITOR'S COMMENTS:

1) The Poisson regression to calculate prevalence ratio is Poisson regression with robust variance. In the methods is reported “Modified Poisson regression”, you could better specify.

**Answer:**
We expanded the description of statistical analysis in the methods section and added a reference.

**Change the manuscript:**

The chi-square test was used to compare proportions, analysis of variance (ANOVA) to test differences between means, and the multivariate analysis was carried out using modified Poisson regression – an alternative to analysis of binary outcomes in cross-sectional studies – assigning a constant at risk time for all participants provides risk ratios equivalent to prevalence ratios. Since the variance of the coefficients tends to be overestimated, which result in higher confidence intervals, robust variance estimators was used [28]. Modified Poisson regression was performed to assess independent associations and to calculate adjusted prevalence ratios with 95%CI for reported major health problems, type of PHC model, and low score of PHC.

2) Secondly you may report data as below (see example table): the covariates which you include in model only for adjustment you may report at the end of the table, instead you may report all PRRs of all independent variables that you enter in each model. More independent variables you add in the model, more PRRs you will report.

**Answer:**
We changed the report of confounding factors to the footnote. Please, see table 4.

We thank to the editor and the reviewer for the suggestions, which helped to further improve the manuscript. In the following paragraphs we presented the answers to each reviewer’s comments. The manuscript was modified accordingly.
Reviewer's report

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

Version: 3 Date: 29 January 2013

Reviewer: Joan Gene Badia

Thank you to the authors for being introduced many of the changes suggested by the reviewers. After the first review, some key issues continue being unclear to me.

Major Compulsory

1) A clarification: in the method section authors understand the PCATool as a outcome measure, and it is not. The questionnaire only measures if the services in the community have an orientation to the primary care principals according the views of the service’ users. It can be used to evaluate the two different sorts of services provided (PHC and BHU), but it, its relation with the chronic conditions and why you measure it is less clear to me. May be it can be clarified by the authors in the text. It might be clearer if authors present their hypothesis related to PHC orientation and chronic diseases and to quality of live. What they expected to find? It is very clear for the FHS, which are expected to score higher than the BHU.

Answer:

We agree with the reviewer that PCATool assesses whether services in the community have an orientation to the principles of primary care, according to the views of service users. However, it is assumed that the PHC achieves these goals for FHS, but it is necessary to evaluate if they have been achieved in Northern Brazil. The hypothesis is that the goals are achieved in the FHS assistance to chronic disease and that patients with these diseases have higher quality of life, since patients have more support than those who receive traditional health care in BHU. We rephrase the text.

Change in the manuscript:

The hypothesis tested was that the goals are achieved in the FHS assistance to chronic disease and that patients with these diseases have higher quality of life, since patients have more support than those who receive traditional health care.
2) The objective in the abstract and in the text must be re-written. In the objective you must state what you measure, with which instrument and in which population. The PCATool is a measure, only a method. The important is what it measures.

I am wondering if your objective is the following:

1) “we compare the PHC orientation of the primary care services provided in Brasil by FHS and BHU using the PCATool in elderly patients.
2) “the PHC orientation in the treatment of main chronic conditions in Brasil was assessed using the PCATool in elderly patients
3) if there is an association between the PHC orientation of the services and the elderly patient’s quality of life

Answer:
We could not have written it better.

Changes in the manuscript:
This study conducted in elderly patients aimed: a) to compare the Primary Health Care (PHC) orientation of the primary care services provided by Family Health Strategy (FHS) vs. traditional care model (Basic Health Units; BHU) using the PCATool; b) the PHC orientation associated with the main chronic conditions; c) if there was an association between the PHC orientation of the services and the quality of life.

4) The lack of association between the chronic conditions and the PHC orientation might be due to the reduced number of patients in some groups (cardiovascular diseases and mental health) or to other confounding variables, and also to the fact that such health problems are treated in the same way in both sort of services. Authors must include this limitation and discuss it in the discussion section.

Answer:
The suggestion was incorporated in the limitations of the study.

Change in the manuscript:
The study was underpowered to test the associations between cardiovascular disease, mental disorders with PHC orientation, due to the reduced number of patients affected. Even so, the association was statistically significant for the former. Lack of association with mental could be additionally due to uncontrolled confounding factors besides age, sex, years at school, working status, model of care, hypertension, and cardiovascular disease included in the model.
5) How the authors explain the association of higher scores in PCATool and the metal component of quality of life and the lower scores with the physical component? What was the hypothesis?

Answer:

We expected that patients with higher scores in PCATool had higher scores in both mental and physical components. The associations with quality of life have been scarcely investigated in population-based surveys carried out in the elderly population. The association of PCATool score with mental component seems plausible, considering that highly oriented patients with high mental component score are more likely to use the full support and services provided by the units. As already pointed out in the discussion, morbid conditions can reduce health and, in turn, the physical component of quality of life [36, 37]. Studies conducted in China [31] and Germany [32] have shown that low quality of life markedly increased the use of health services, but this relationship was characterized for PHC without comparison with traditional Chinese medicine or other type of healthcare. In the elderly, the deterioration of quality of life mainly due to the physical functioning rather than mental [38] was shown through the opposite association with PHC score. The inverse association between PHC score and physical component of quality of life in the elderly suggests the difficulty to benefit from health care system due to loss of physical functioning.

6) The study design can only establish association, not causality. It can’t be a conclusion that the PHC orientation “increases” the mental component and “reduces” the physical one. This is not proved by the study.

Answer:

We agree with the reviewer and change the conclusion accordingly.

Change in the manuscript:

The association between PHC scores and model of care reiterates the role of FHS in health care for the elderly, and their contribution to higher quality of life, particularly for the mental component.

English is good.

Level of interest: An article of limited interest

Quality of written English: published

Statistical review: no.

Declaration of competing interests:

I declare that I have no competing interests

Level of interest: An article of limited interest
Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
Declaration of competing interests:
I declare that I have no competing interests.
Reviewer: Maria Luiza Garcia Rosa

Reviewer's report:
I carefully read the paper "Assessment of Primary Health Care Provided to the Elderly and Health Related Quality of Life: a Cross-sectional Study" in this last version and I consider it appropriate for publication