Reviewer's report

Title: Agreement between self-reported and general practitioner-reported chronic conditions among multimorbid patients in primary care - Results of the MultiCare Cohort Study

Version: 2
Date: 31 October 2013

Reviewer: Concepcion Violan-Fors

Reviewer's report:

Comments
When assessing the work, please consider the following points:

Summary comments.

The manuscript discusses an interesting subject in multimorbidity and offers a lot of information about the agreement between self-reported and general practitioner-reported data. The manuscript could be of interest to a broad range of readers. I think the authors need to better emphasize their new question (#3: Which patient characteristics predict agreement between self-reported and physician-reported chronic conditions?). The methods section should be revised and strengthened (see specific comment). The Results section is well written, but the figures need some review (see specific comment). In the Discussion section, the "Strengths and weaknesses" subsection needs improvement because it addresses only supposed strengths (see specific comment on study limitations). For these reasons, my decision is: Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

1. Is the question posed by the authors well defined?

The authors considered 3 questions. However, the second question is redundant. I suggest deleting the second question because it will be included in reporting the results of the first analysis:

1. To what extent is there agreement between self-reported and physician-reported chronic conditions among multimorbid patients in primary care? (note suggested language editing)

2. Which chronic diseases have particularly low concordance?

3. Which patient characteristics predict agreement between self-reported and physician-reported chronic conditions?

This change would better align the questions with the two-part objective stated in the abstract but not clearly stated in the full manuscript as the study objective.

2. Are the methods appropriate and well described?

This paper is based on data from the MultiCare Cohort Study, and the authors cite relevant previous articles, (references 18 to 23). Nevertheless, readers would
benefit from a very brief description of the study, with subsections such as
design, recruitment, sampling, response rate, data collection, missing values,
and descriptive statistical methods, etc.

In addition, a table or figure is needed (could be a flow chart) to explain the
process of selecting the diseases included in the study (46 diagnosis groups # 32
diagnosis groups # 26 diagnosis groups). This should include a brief explanation
of the reasons for selecting the final diagnosis groups and how each category
was defined.

3. Are the data sound?

The manuscript addresses 3 questions (2 if the redundant question is deleted).
The first two were in other articles but not addressed in patients with
multimorbidity. The third question contributes new information that is valuable for
multimorbidity research and for the development of clinical guidelines detailing
which chronic diseases are prone to a high level of disagreement between
patient and physician reports.

Results comments:

Figures and Tables.
The figures showing the stratification by disease group are difficult to understand
because the specific disease groups are not named. Furthermore, the
information presented in the figures is the same as that presented in the
additional file, I suggest deleting the figure and replacing it with the table format
used in the additional file.

Missing values :
Please explain if there are differences between non-responders and responders
(patient self-report).

Did you consider imputation methods for the self-report missing values, as in the
previous paper (reference 19)?

A Statistical subsection:
- logistic regression. Independent variables should be described (continuous,
categorical, etc)

4. Does the manuscript adhere to the relevant standards for reporting and data
deposition?
Yes

5. Are the discussion and conclusions well balanced and adequately supported
by the data?
The authors have presented a good discussion section, but it should be
shortened.
The subsection “agreement between patient self-reports and general
practitioners and practitioners reports" and the “Agreement report” subsections
are well done. The subsection “patient characteristics associated with
agreement” offers a good reflection about patient profile (patterns, sex and age) and implication of these profiles in the patient management.

6. Are limitations of the work clearly stated?

The subsection "strengths and weaknesses" requires major revision.

“Our recruitment only took place in larger German cities, so that rural areas are not included” ... The authors said, "our study is representative of an older multimorbid cohort in primary care [19]”. I don't understand how the sample can be representative of the rural and urban population, given the differences in social, cultural, and other characteristics between the two residential areas. I suggest changing the affirmation to “our study is representative of an older multimorbid cohort of the urban population in primary care”.

Another limitation that needs to be stated is that the sample is a non-random, population-based, convenience sample. This could affect the results because the doctors that participate in the survey could have more motivation than those who don't participate. This convenience sample could be affected by selection bias and limited representativeness.

In the paragraph that begins, " The names of some diagnosis groups ... were partly different”, the authors said the names of the diagnosis groups had to be adapted to be more patient-friendly in the interview. Had the names of the diagnoses been validated previously? If yes, the process and results should be explained. If not, please explain the reason. How were the adapted names standardized?

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes

8. Do the title and abstract accurately convey what has been found?

Title: OK
Abstract:
Background: Please revise the research questions, according to the suggested changes. Multimorbidity must appear in the stated objective and research questions!
Methods: adapt according to suggested changes
Results: Summarize the most relevant results using numbers, not text only (example: include the results of kappa coefficients (0.61-0.80) and odds ratios for positive patient agreement with their GP for the diagnosis groups: osteoporosis (OR=7.16).
Conclusions: ok

9. Is the writing acceptable?

The text should be revised by a native speaker, particularly for the use of prepositions, consistent verb tense and, to a lesser extent, word order.
**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.