Reviewer's report

Title: Effects of self-rated health on sick leave, disability pension, hospital admissions and mortality A population-based longitudinal study of nearly 15,000 observations among Swedish women and men followed 1973-2003

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Reviewer: Jaana Halonen

Reviewer's report:

Comments for the authors

This study on self-rated health (SRH) and sick-leaves, disability pensions, hospital admission and mortality is based on a large study population from several cohorts in Sweden. Although at least part of the scope of the study is already widely examined, the data could provide possibilities on new interesting findings.

Overall, associations for SRH with mortality and disability pension are widely studied. A quick look at the literature suggests that less is known about sick-leaves and hospital admissions, maybe the authors could focus on these outcomes. The authors could take an advantage on their good diagnosis-specific admission data and the information on the types of sick leave benefits.

Major Compulsory Revisions:

Abstract
1. Some numerical results could be presented in the abstract.

Introduction
2. The "gap" in knowledge is missing, that is, the reasoning for why this study needed to be done? Information on SRH and various outcomes are presented, but what more is needed to be known? Please clarify why this study is important and be more concise. Structure- What is known? What is missing ("However,..."), but need to be known? and What we did and how? -could be useful.

3. Sick-leaves and disability pensions are not mentioned in the introduction. These must be presented here and some background should be given for why these outcomes need to be studied. There are several studies on disability pension that could be referred here, e.g.:
   Pietiläinen et al. Plos ONE 2011;6(9)
   Krokstad et al. IJE 2002
   Månsson et al. Eur J Epi 2001;7(1)
Månsson et al. Scand J Public Health 2001;29(2)

4. Page 3, 2nd paragraph: Has SRH "become a recommended part of standard health surveys" or is it "becoming a recommended part of standard health surveys"? Expression: "come to be recommended as a..." is vague

5. Page 3, para 3: "...poorer SRH in later cohorts..." This is also vague, later than what? Do you mean that in recent studies decreasing/increasing trends of SRH have been reported?

Methods

6. Page 4, study population: The used study population needs to be characterized in more detail. Reference to a doctoral thesis is not sufficient if there is no web page where the description can be found in English. If this work is available online in English, please add an http-address to the reference list.

7. Page 4, data collection: The sentence: "The data used in this report was obtained... by questionnaire..." is misleading as most data were not from questionnaires. Were the individual level data from baseline questionnaires? Please clarify.

8. Page 7, statistical considerations: The authors mention that not all variables were measured in all sub-populations, but this should be mentioned and more precisely described earlier in the methods sections were the variables are presented. The reference to missing data could be mentioned in the results.

9. Page 7, last para: The last two paragraphs on page 7 seem to talk about the same analysis? If not, please clarify what the hazard functions are, and for what they are used for.

Results

10. Figure 2: Men and women have the same colours in the Figure, so it is hard to interpret. The Figure legend also says that these are admission rates, but the y-axis suggests that these are percentages. Please clarify.

11. Figure 2 and 4: Please explain why women (also in Figure 2?) have so much shorter follow-up.

Discussion

12. The discussion needs major revision, it is very short and mainly repeats what was done and some phrases from the introduction (some of which can be presented here, if omitted from the introduction).

There is no comparison of these results to those from prior studies (size of the effects, each outcome separately handled). I'm also missing discussion about
what is the meaning of these results. There is no discussion about the limitations of this study (what were the technical reasons for shorter duration of effects in women, is the data valid -possibility of errors?), or how generalizable these results are to other populations.

13. Page 11, 1st para: If the follow-up time for women (for technical reasons?) was much shorter than for men, it is not relevant to compare the duration of the effects among men and women.

Minor Essential Revisions

Introduction

14. Page 3-4: References to differences by SES or age groups are unnecessary since these have not been studied in this work. These could be mentioned in the methods as justifications for adjustments for these covariates.

Methods

15. Page 4, study population: Cohort characteristics can be presented in the results section.

16. Page 7: Please provide the SAS procedures for each analysis, and give the formats in which the results for each analysis are presented (e.g. hazard ratios with 95% CI's)

Results

17. Page 8, 1st para: It is unnecessary to repeat the results that are presented in Table 2, same for the last paragraph on this page and Table 3.

18. Page 9, 1st para: Please provide the 95% confidence intervals for the numbers of sick leave days. P-values are not needed when 95% CI's are provided (hospital admissions, disability pension, mortality).

19. Figure 5: Figure 5 has parts a and b, but it is not clear from the figures, which part refers to men and which to women.

Discussion

20. Page 10, 2nd para: Submitted work cannot be referred to as: "was recently reported".

Level of interest: An article of limited interest

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.
Declaration of competing interests:

I declare I have no competing interests