Reviewer's report

Title: Can work ability explain the social gradient in sickness absence: a cross-sectional study of a general working population in Sweden

Version: 2 Date: 10 November 2011

Reviewer: Marianna Virtanen

Reviewer's report:

Review of the Manuscript "Can work ability explain the social gradient in sickness absence: a cross-sectional study of a general working population in Sweden" submitted to BMC Public Health

The study aimed to examine whether self-reported work ability explained social gradient in sickness absence. My comments regarding the manuscript:

Major Compulsory Revisions

1. Sickness absence involves two main requirements: 1) a person must be diagnosed as having a disease and 2) his work ability must be essentially reduced due to this disease. Therefore it was quite a surprising finding in your study that 75/78% of sick-listed people had high work ability according to their own opinion. Why were they then sick-listed? Do you have any diagnosis data on those sick-leaves? In my opinion, the socioeconomic gradient in sickness absence should have been almost totally explained by work ability since reduced work ability is an inherent concept of sickness absence.

2. You had people who had sickness absence of >14 days before the survey was sent. There might be a large proportion of people who had infectious diseases, who were operated etc. In your table 2 it seems that from the sick-listed women and men, 46% and 44%, respectively, were still sick-listed at the time of the survey. Those who were no longer sick-listed did not consider their work ability as poor, because they received the survey after they had recovered. One way to address this problem is to restrict the analysis to individuals who were still on sick leave (as an additional analysis). You should also include this issue as a limitation in your Discussion and if you still have a finding that work ability did not significantly explain the socioeconomic gradient, you should try to explain why it did not happen. Is there something wrong with the Work Ability Index? Are people in Sweden on sick leave for other reasons than reduced work ability? etc.

3. It might be worth including some information on socioeconomic differences in diagnosis-specific mental and physical sickness absence, see e.g., Virtanen M et al. Occup Environ Med 2011; Andersen LL et al. Occup Environ Med, 2011. You can assess whether the differences are more pronounced in physical than mental sickness absence which helps you to understand why mental work ability did not have any major contribution to the association in your study.

Minor Essential Revisions
4. You use the term "incident cases" which is not appropriate in your study. Incidence refers to first onset of a disease and in your analysis you do not have information on earlier morbidity, I guess. I would recommend you to use the term "prevalent cases" instead.

5. It would be important to provide more validity information on Work Ability Index in addition to a correlation with the total scale.

6. Your Introduction covers well the existing literature. You might shorten the paragraph starting with "To find an explanation...".

7. Table 1: add "Employed" to the column title "Participants". There is an asterix which is not referred.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.