Reviewer's report

Title: Explaining the social gradient in sickness absence: a study of a general working population in Sweden

Version: 1 Date: 28 January 2013

Reviewer: Torill Helene Tveito

Reviewer's report:

Review of manuscript BMC Public Health 29.01.13:


The authors have submitted a well-written manuscript on an important topic. However, I have a serious concern about the study.

Major compulsory revision

1. The study participants were assigned their socioeconomic position by placing them in five categories of occupational position, from higher non-manual employees to unskilled workers. The higher non-manual employees as the highest socioeconomic position were used as the reference group in the analyses. The results show that the social gradient in sickness absence was explained by physical work conditions, i.e. heavy lifting and awkward working positions. However, I suspect that heavy lifting and awkward working positions will be correlated with socioeconomic position. Employees in higher non-manual positions have less heavy lifting and awkward working positions regardless of sickness absence than both skilled and non-skilled workers. If this is true, physical work conditions and socioeconomic position cannot be used in the same model. To assess if this is a problem, the authors need to test for collinearity between physical work conditions and socioeconomic position.

Minor essential revisions:

2. The authors use the concept randomized population sample in their paper. This is a cross-sectional study and a less confusing concept would be a random sample (if that is the case) or a representative sample (if that is the case). Randomized is most commonly used when the researchers allocate the participants to different conditions, but you have not randomized them, you have drawn a random or representative sample from a given working population.

Methods:

3. In the description of the measurement of job demands and job control, a reference for the questionnaire is missing. The only reference is at the end of the paragraph and is a reference for the definition of job strain versus non-job strain. Maybe this reference is the correct reference for the questionnaire too, but this
needs to be clear in the text.

Results:
4. In the paragraph following the suggested place for Table 1 in the description of model 2 the authors write: “Yet, in men the association between lower non-manual and higher non-manual became statistically insignificant …”. I suppose that this association is not what the authors want to report, this needs to be clarified.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests