Reviewer's report

Title: Physical activity is associated with a low prevalence of musculoskeletal disorders in the Royal Norwegian Navy: a cross sectional study

Version: 1 Date: 21 November 2006

Reviewer: Alex Burdorf

Reviewer's report:

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. Abstract to be included
2. The description in classification of PA should not be part of the statistical analysis, but presented together with the measurement. How does this classification corresponds with often used guidelines? Also, categorical interpretation means that in table 3 either categories have been merged or that in fact the scale is used as an ordinal scale (this assumes linearity which can be questioned strongly given the debate in the literature!).
3. The discussion is much too optimistic about measuring PA in leisure time and at work. Both concepts used are entirely different and I severely doubt the usefulness of the work index (eg is measured past and current exposure, is attributed equal importance to different factors, it assumes linearity etc). This should be addressed in more detail.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. You should be less definite on the results of the single study in reference 11, since reviews show a quite disturbing picture!
2. In the introduction you could introduce (CDC) guidelines on physical activity and whether the 2 hrs/week will increase the likelihood to comply with the vigorous intensity guidance (see eg Pate 1995).
3. Please provide a reference for the measurement of PA
4. Reference 22 is not the best one for the Nordic questionnaire. Also, I am surprised that the word reduced mobility is included, since this was definitely not the case in the original Nordic. Please help us out here!
5. The description of the tables should not represent all figures, please summarize the important findings.
6. Table 1, PA should be presented as used in the analysis
7. Table 3: see earlier remark. I am surprised by the small CI for head etc, given the small number of subjects in the classification categories of PA and the low number in the lowest PA category.

Discretionary Revisions (which the author can choose to ignore)

1. ‘More exposure to physical risk factors’ (page 6) is not well phrases (what is more: higher, longer, combined etc)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

'I declare that I have no competing interests'