Reviewer's report

Title: Perceived exertion, comfort and working technique in professional computer users and associations with the incidence of neck and upper extremity symptoms

Version: 1 Date: 30 August 2011

Reviewer: Jack T. Dennerlein

Reviewer's report:

In the manuscript, “Perceived exertion, comfort and working technique in professional computer users and associations with the incidence of neck and upper extremity symptoms,” the authors show an association between perceived exertion and comfort as reported by computer users and subsequent musculoskeletal symptoms. This work has implications for identifying computer users who may be at risk for developing musculoskeletal disorders, allowing for targeted prevention. While I believe that this manuscript will be of interest to the readers of BMC Medical Journals, the authors should revise the manuscript to include more a more detailed description and justification of the methods.

Major Comments

Background

1) Please provide more connections between the information introduced in the “background” and the three hypotheses. For example, although there is a good description of some proposed causes of symptoms such as working technique, working posture, and perceived muscle tension, it is unclear why “perceived exertion”, “comfort”, and “working technique” were chosen to be researched in this study, and why the authors expect these factors to be associated with symptoms.

Methods

Study Population

2) Please provide more details on your study population. For example:

a) What types of work places did you recruit participants from?

b) How did you recruit participants?

c) How many people were approached for recruitment, and how many of these filled out the initial surveys?

d) What types of jobs did the participants perform? As written, it is unclear how the participants could be considered “professional computer users” but only work at a computer for a self-reported less than 4 hours per day. Please describe what else the participants do for the duration of their work days.
e) Do any participants experience high physical exposures?

f) Was there any loss-to-follow-up during the 10-month follow-up?

Follow-up
3) The last sentence of this paragraph is unclear.

Ratings of perceived exertion and comfort
4) Were these ratings measured only one time, during the baseline questionnaire?

5) How stable are these scores over time?

Data treatment and analysis
6) Once participants first reported a symptom, were they then considered a case for the rest of the follow-up? Are participants considered cases separately for the three upper extremity regions (for instance, can be a case for neck but not for shoulder)?

Results
7) Please clarify the result that “the risk of experiencing symptoms in any of the other regions under investigation was also higher” described in the “results” section. From table 1, it does not appear that the authors looked at whether perceived exertion in one region affects symptoms in another region.

Discussion
8) The authors mention that in this study there was no clear relationship between comfort and symptoms in shoulder or arm regions, while a relationship was found in other studies. Please speak to whether the authors have any ideas why this was the case.

9) Please include a “limitations” section in the discussion.

Figures
10) Please explain the numbers in Table 1. It is unclear what is indicated by the values for “events” and “censored”.

Minor Comments
11) Please change the following sentence in the “background”, to: “Both cross sectional and longitudinal studies have suggested, however, that factors related to the individual (age and gender), working technique, working posture, muscular rest and perceived muscle tension as well as factors related to the work place or work organization…”

12) Please remove the extra period at the end of the first paragraph on page 8.

13) Please incorporate more information into the figure captions.
Level of interest: An article of importance in its field

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