

Reviewer's report

Title: Prevalence of complaints of arm, neck and shoulder among computer office workers in Sudan and the validation of an Arabic risk factors questionnaire

Version: 1 **Date:** 22 January 2008

Reviewer: Johan Hviid H Andersen

Reviewer's report:

Review of the paper:

Prevalence of complaints of arm, neck and shoulder among computer workers in Sudan and the validation of an Arabic risk factor questionnaire.

I propose the title:

Prevalence of complaints from the neck, shoulder and arms among computer workers in Sudan, and validation of an Arabic risk factor questionnaire.

The paper aims to present prevalence rates of CANS in a working population in Sudan, and further to report on psychometric properties of the questionnaire in Arabic. There are no reports of associations between exposure and complaints, which seem to come at a later time?

I miss important papers in the introduction and discussion section. The largest risk factor study to date is the Danish NUDATA-study (Andersen JH et al, Brandt LP et al., Lassen CFL et al and more), which is not mentioned.

The report of prevalence is straightforward, but I miss information on handedness? The rates for right sided complaints in the shoulder, upper arm and elbow are surprisingly low, also for men in the distal arm regions. Are the participants right or left handed? For further analyses this is important in drawing inferences about mechanical exposures and complaints. For descriptive purposes I will suggest a simple correlation analyses between all the regions to illustrate how they are correlated.

There were very few severe cases (9), and this is in line with result from the Danish cohort studies, which even included clinical examinations. This point to an important discussion: Are these studies of computer workers about fluctuations in every day aches and pain, or are they about anything of clinical and societal importance. Without going into depth with this question it should be mentioned in the discussion.

The analyses of the psychometric properties of the questionnaire seems okay, and the analyses performed in a thoroughly way.

For further studies I will strongly suggest to include more objective measurements of the exposure, see e.g. Homan MM, Armstrong TJ. AIHA J 2003; 64(1):48-55. Blangsted AK et al. Int J Ind Erg 2004; 34:237-41. Heinrich J

et al. Occup Environ Med. 2004; 61(12):1027-31, Douwes M et al. International Journal of Industrial Ergonomics, 2007;37:425-431, and Mikkelsen S et al. Occup Environ Med 2007; 64:541-7.

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

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