Reviewer's report

Title: Course and prognosis of non-traumatic arm, neck and shoulder complaints: design of a prognostic cohort study

Version: 2 Date: 8 July 2012

Reviewer: Andreas Holtermann

Reviewer's report:

The manuscript describes the design of an observational study investigating the course, determinants of the course and relationship between diverse medical treatments and patient outcomes among persons with CANS. The repetitive measures over 1 year will provide novel and useful information about the natural course and treatment of CANS for general practitioners and health-care professionals. The manuscript is generally well written. The background and argumentation for the need of conducting the study are sound. The design and methods seem rather appropriate for investigating the aim of the study. However, a statistical power estimation is lacking.

Detailed comments

- Abstract, second sentence: uncertain which prevalences you refer to
- Abstract, first sentence: unsure what you mean about “…due to loss from work…”
- Abstract, the sentence ”no controlled measurement of outcomes for CANS related to multiple interventions and a variety of patient characteristics in diverse clinical settings” is not easy to comprehend. What is meant by “controlled measurements of outcomes” and ”multiple interventions” and ”patient characteristics in diverse clinical settings?”
- Abstract and other places in the manuscript: you write that “the study will give health-care professionals indications for optimal treatment and referral”, I don’t think the study will provide an ”optimal treatment and referral”.
- Methods, Design: why is only students and employees enrolled in the study? Don’t you think this will reduce the generalizability of the study to the general population (e.g. with lower educational and socioeconomic background?)
- Methods: You mention “CKT” on page 5 before I think it’s defined
- Methods: a power calculation of the number of participants included in the study is required
- Methods: why only 4 repetitive measures during the 1 year follow-up? Because of the fluctuating state of musculoskeletal pain, wouldn’t it be more appropriate to have more frequent measures?
- Design: The variables now only included at baseline “the prognostic determinants” may change over time. Wouldn’t it be best to also have repetitive
information about those throughout the year?

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

**Quality of written English:** Needs some language corrections before being published

**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'