Reviewer's report

Title: Symptom load and functional ability: Results from the Ullensaker Population Study

Version: 1 Date: 18 September 2012

Reviewer: Roar Johnsen

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This cross-sectional, questionnaire based, study explores the associations between different types of complaints and symptoms and functional health status ased by four dimensions in COOP-WONCA. They found a strong and consistent positive association between functional health status and the number of symptoms and complaints, and they claim that counting symptoms might be valuable in research on medically unexplained conditions.

The group has reported previously from the same study the association between number of musculoskeletal pain and functional health status, and the association between number of musculoskeletal pain sites and the number of other common symptoms. In this report the authors study the total symptom load and functional health status.

The study is important as it elucidates the complexity of symptom based syndromes and gives no support to identifying specific symptom complexes when known medical conditions are excluded.

There are some challenges in the design, analyses, presentation, and inference.

Major compulsory revisions

1. The response rate was 53%. When reporting prevalence rates it is of interest whether the responders are representative for the population regarding at least sex and age distribution. If not Table 1 should be stratified for gender and age-groups for aggregated number of symptoms.

2. The sex differences in prevalence rates of reporting symptoms and complaints require stratified analyses on gender. If not presented, at least should the results of such analyses be commented on,

3. Under Methods p 2, 1. Sentence: “Functional status was recorded using …”, which is correct. COOP-WONCA assesses functional health status which is not the same as functional ability? The authors should consider using the term functional (health) status throughout the manuscript.

Minor Essential revisions

4. To interpret multiple correlation coefficients in multiple linear regression models as explained variance is not straight forward. In the presented models, not stratified for sex models but adjusted for age and sex, sex would probably
contribute to some of the explained variance and not only the number of symptoms included.

5. Being a cross-sectional study, the direction of the relationship between functional status and symptoms could not be stated. Not clearly expressed, but the overall impression from the analyses, presentation of results and the discussion is that the experience of symptoms affects the functional status. Inherent in a reduced functional status could be experience of both symptoms and complaints? A few word on the two-ways relationship has been welcomed.

**Level of interest:** An article of importance in its field

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

**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