Reviewer's report

Title: Population-based Consultation Patterns in Patients with Shoulder Pain Diagnoses

Version: 1 Date: 3 September 2012

Reviewer: Niels Gunnar Juel

Reviewer's report:

Major Compulsory Revisions
Page 6
The ICD-system
This system is the most precise coding system available. Nevertheless the criteria for the shoulder diagnoses in the m75-chapter is insufficient and the diagnoses are overlapping concerning tissue specificity and different diagnoses. Specific criteria for each number is not defined and complicates the classification. In research the term subacromial impingement syndrome is commonly used for shoulder pain with partial cuff ruptures (rotator cuff syndrome), impingement syndrome, tendinitis with calcification and bursitis, also rotator cuff tendonitis and supraspinatus tendinosis. The icd-10 classification is therefore not good enough for diagnostic purposes alone.

Other numbers than m75 in the icd-10 are used for shoulder pain – ligamentous instability – m24.2, other types of instability – m24.3 and m24.4, shoulder pain nud or pain from the shoulder joint - m25.5. Osteoarthritis in the AC- and GH-joints are not mentioned. Localized myalgia in the neck/shoulder region is coded m79.11 and is often difficult to separate from shoulder joint related pain. Nerve lesions in the shoulder and neck (5.root) are found in other chapters, but might not be taken into consideration here.

These weaknesses of icd-10 and the missing criteria should be discussed in the text and be used as a background for the grouping proposed on page 7. The grouping concept is good, but not shown properly in the results and omitted in the discussion. Myalgia should be discussed as well as the age-related conditions like osteoarthritis and full thickness rotator cuff tear.

Page 7 Study cohort
It would be interesting to know the age and sex distribution of the total kohort.

Page 11 and 12 Discussion
In the discussion work load is mentioned as an important cause of shoulder pain in this cohort, but I cannot see that work load is reported in any way in this study. In figure 1 it seems more likely that shoulder pain increases with age than work load and then decreases with less demanding use of arms and shoulders after 60-70. This has to be discussed, maybe age is more important than work load?
Could the small differences between sexes in consultation rates be explained by differences in myalgia?

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The discussion on methodological aspects is nice and some of the above are discussed here. Nevertheless the authors keep their conclusion below: "One third of all reported occupational injuries, among which shoulder disorders constitute a large part, are in fact attributed to ergonomic conditions. Hence, relevant interventions at workplaces may have large preventive effects. To further explore such conditions linkage to an occupational register would provide extended knowledge." In my opinion this is far too strong considering the weak method and lack of work load registration. Age should be considered as a cause.

These comments is important in the abstract too.

References:
29. does not work

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

No competing interests.