Reviewer’s report

Title: Possible associations between carpal tunnel syndrome and marital status: a study of in-hospital incidence rates in the general population

Version: 1 Date: 5 May 2008

Reviewer: Jane Frølund Thomsen

Reviewer’s report:

Major compulsory revisions

1. What was the initial hypothesis of the study? There is evidence in the literature showing that heavy industrial work is associated with CTS but no evidence of varied manual work as a risk factor. The case series by Phalen showed an overweight of housewives but this was because more women were affected (as this study and other studies confirm) and because women at that time did not go to work. Housework in one’s own house cannot be regarded as strenuous compared to industrial work. In western communities women are responsible for and do most of the housework. Thus, housework does not explain the excess risk for married men found in this study. The introduction, the discussion and the conclusion should take this into account.

2. Marital status could be a proxy for some other known risk factor/factors. The authors adequately discuss some of the most likely ones such as BMI, general health and care seeking practise but none seem to be associated with marital status. Parity might explain some of the differences but not for all age groups. Therefore, the authors have to focus more on possible methodological biases. This is not discussed thoroughly. One needs more information on the “self-reported de jure marital status”. How valid are these data? Could there be a tendency to over-report married status when hospitalised? How many missing data? Would missing data by default be converted to “married”? This could possibly be evaluated using central statistics on the distribution of marital status among the population. The very consistent pattern across age groups points towards a more systematic methodological bias.

3. The clinical/electrodiagnostic method and the diagnostic criteria are not described at all. Thus, it is not possible to evaluate the results given on page 8. Some clinical and electrodiagnostic tests have very poor discriminative power and very high false positive rates.

Minor essential revisions:

1. The chi score test: Is this equivalent to the chi square test? This would be a more common term to use.

2. I am not familiar with the described indirect standardisation and cannot comment on that.

3. I think that only one or two decimals in the results section would suffice.
4. The term “with respect to” should be changed to “compared to” (?), eg. page 7, second para, line 2.

**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:**

I declare that I have no competing interests