Reviewer's report

Title: Job Strain, Effort -Reward Imbalance and Work Life Balance in Relation to Body Mass Index in a Representative Sample of Australian Workers

Version: 3 Date: 12 August 2005

Reviewer: Tores Theorell

Reviewer's report:

General

This work is valuable for researchers who are aiming at increased understanding of associations between work environment and cardiovascular disease. They have a good study sample and their methods are adequate for this goal.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

There is probably more published literature on these associations. For instance I lack reference to Melamed’s work in Israel where they have published extensively about relationships between psychosocial factors and life style factors including BMI. But it is difficult to find this so the authors have done a reasonable literature search.

Why only "similar" cut-off for women as for men? Give the numbers instead

I feel that the authors are overstating some of their findings. It is true that the reader could use own judgment in refuting or accepting statements about odds ratios with lower confidence limits below 1. However both in the crude and the fully adjusted model the only safe work environment finding (which is quite interesting in its own right) is that low control is associated with low BMI in women. I feel that the authors should focus more attention to this main finding instead of making lots of descriptions of findings that may be random or borderline random findings.

The full model certainly overadjusts and it would actually be interesting to know what happens to the associations in a more stepwise fashion. The relationships are attenuated by the adjustment variables but one wonders for instance about hostility and work-home balance. Hostility could be part of a chronic illness problem (NB underweight) and therefore adjusting for hostility could lead to underestimation. Likewise long working hours lead to adverse home-work balance and therefore adjusting for this variable is likely to lead to underestimation of that association.

I think the authors should develop more discussion along these lines and I also feel the manuscript would benefit from less presentation of findings that could be random findings

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

A couple of minor spelling errors were found
Discretionary Revisions (which the author can choose to ignore)

**What next?:** Accept after minor essential revisions

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

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests