Reviewer’s report

Title: Associations between work-related stress in late midlife, socioeconomic position, and serious health problems in old age: A longitudinal study with over 20 years of follow-up

Version: 2 Date: 25 June 2014

Reviewer: Oliver Hämmig

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Some of my concerns have been addressed, e.g. by using education as an indicator of SES, by clarifying or rather justifying a cutoff at 9 in the diseases/symptoms measure etc. However, some limitations still are not sufficiently discussed in the paper. Just stating that „our assessment of work stress is limited“, for example, without telling in what way and with what consequences is not enough. Not assessing lifetime or at least long-term exposure to work stress may lead to a non-differential misclassification bias and, in fact, result in an underestimation of the true effect, but nevertheless needs to be discussed more extensively in the Discussion section. And the rationale for the chosen statistical approach (dichotomization of ordinal-scaled variables and stratification of association analyses by number of domains with serious health problems and additionally by health problems in each of specific domains as well as by high/low level of education) is either still missing or not really comprehensible and convincing. In addition, the newly provided reason for performing (multinomial) logistic instead of linear regression analyses is not adequately positioned under „statistical analysis“ since subsequently presented study results are anticipated and taken as a justification for choosing this approach.

In sum, the paper even in its revised version cannot hide or blind us to the fact of somewhat disputable and poor measures as regards work exposures and health outcomes and the partly incomprehensible statistical approach. But I must admit and agree with the authors that the use of improved measures would presumably not change much of the overall pattern and probably strengthen rather than weaken the findings and associations between job strain in middle age and health outcomes in old age.

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.