Reviewer's report

Title: The contribution of psychological distress to socio-economic differences in mortality: a population-based follow-up of 28 years.

Version: 1 Date: 30 September 2010

Reviewer: Mark Hamer

Reviewer's report:

This is a well performed analysis that examines the contribution of psychological distress to social inequalities in mortality. Major strengths include the large sample size, adequate follow up, and well defined causes of death.

I do not have any major revisions, only suggestions for discretionary changes:

1. Please clarify how the random sample was selected - ie, was it by household address, etc?
2. Please present more detailed information about the participants excluded from the present sample - ie, did they differ in key characteristics such as SES markers?
3. The paper does acknowledge that the distress measures are not validated and this is a limitation. Another issue to consider is the possibility that the measures reflect transient but not chronic stress since the question enquires about the last 30 days. One would only expect chronic stress to impact on health thus there may be some misclassification that might lead to effect dilution.
4. It would be interesting to add health behaviours into the models. Psychological distress is often highly correlated to smoking. In addition there is a higher rate of smoking in lower SES groups.

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.

Declaration of competing interests:

I declare that I have no competing interests.