

## Peer Review Report

# Review Report on Self-reported health as predictor of allostatic load and all-cause mortality: findings from the Lolland-Falster Health Study

Original Article, Int J Public Health

Reviewer: Reviewer 2

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

Self reported health associated with higher allostatic load and higher mortality, in both men and women in a large Danish sample.

#### **Q 2** Please highlight the limitations and strengths.

Large sample size that focuses on the general population. Limited to one area of Denmark and may not be representative of the nation as a whole.

#### **Q 3** Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Abstract – need to describe the follow-on period here for mortality data, otherwise it could be over a very large number of years which would make the findings less reliable

#### Methods

Line 90, “We defined low AL as a summary score of 0–2, medium AL as 3–4, and high AL as 5–10.” Some justification is needed here. What value is there over the continuous measure? Some of the work on AL and mortality has shown differences based on the summary score vs continuous score in that there is not a strict linear relationship present so important to reflect on here.

Line 93 – justification needed for why ‘poor’ and ‘very poor’ categories combined in the SRH measure

Line 136 – How does the death rate in the full sample compare to the analysis sample as lost 12% of data to complete case analysis? Also how does this compare to the general population in the country?

Results – Table 2. It would be helpful to see Kaplan–Meier curves for the T2 results rather than just the overall HRs. Appreciate there may a lot of figures but perhaps could be added to the Supplementary data. Would like to see the AL–mortality

Results T2 – Can you clarify why you did not run mutually adjusted models for SRH/AL and mortality i.e. SRH and mortality adjusted for allostatic load and allostatic load and mortality adjusted for SRH. Would seem an important question to consider the mediating pathways, especially SRH and mortality adjusted for allostatic load as seems to fit the main question being asked here. Otherwise it feels like your paper is investigating different questions (SRH–mortality; AL–mortality etc.) but not considering how it all comes together. Feels like a missed opportunity to me.

#### PLEASE COMMENT

**Q 4** Is the title appropriate, concise, attractive?

Yes

**Q 5** Are the keywords appropriate?

Yes

**Q 6** Is the English language of sufficient quality?

Yes

**Q 7** Is the quality of the figures and tables satisfactory?

Yes.

**Q 8** Does the reference list cover the relevant literature adequately and in an unbiased manner?)

Yes

#### QUALITY ASSESSMENT

**Q 9** Originality



**Q 10** Rigor



**Q 11** Significance to the field



**Q 12** Interest to a general audience



**Q 13** Quality of the writing



**Q 14** Overall scientific quality of the study



#### REVISION LEVEL

**Q 15** Please make a recommendation based on your comments:

Major revisions.