Reviewer's report

Title: Symptom experience, self-assessed health and mortality: results from the West of Scotland Twenty-07 Study

Version: 1 Date: 8 September 2006

Reviewer: Ellen Idler

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General
This paper reports on an analysis of data from a subset of data from the West of Scotland Twenty-07 Study, a longitudinal study of three cohorts. (Only the oldest cohort and only the second round of interviews are used in this study.) The research question concerns the ability of symptom reports to predict mortality. The findings are that, while the symptom counts (modified in different ways) predicted mortality net of demographic characteristics, they ceased to have any effect on mortality once a single self-assessed health item was introduced into the analysis. One strength of the analysis is the data set, with its large sample of elderly persons, and another is its long (13-year) follow-up period.

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

1. The motivation for the paper is not well-established. The first paragraph suggests that the authors’ interest is in explaining the well-known association of self-assessed health with mortality (“Studies of the occurrence and impact of symptoms therefore may provide important insights into the associations between global measures of self-assessed health and mortality.”) This research question suggests a different structure for the analysis, in which symptom counts are treated as a mediating variable and self-assessed health as the primary independent variable. And yet the analysis proceeds in the opposite fashion, with symptom counts introduced first and self-assessed health after. The resulting findings tell us that any impact that any association that symptoms have with mortality is captured by respondents’ overall assessments of health. But it does not tell us if any portion of the self-assessed health — mortality relationship is mediated through self-reported symptoms.

2. The paper does not characterize or provide a source for the set of symptoms included, but from inspection of the list in Box 1, they appear to be largely the symptoms of minor, transient, self-limiting conditions. Symptoms of more serious chronic conditions, e.g. chest pain or pressure, edema of the legs, unexplained weight loss, etc., are not included. Furthermore, the symptoms are simply counted, so that potentially meaningful combinations of symptoms cannot be ascertained.

3. The symptom measures and the self-assessed measure do not refer to comparable time periods -- the former refers to symptoms experienced in the last month, and the latter refers to the last year. Furthermore, self-assessed health has been shown to be associated with chronic conditions and with change in chronic conditions, but not with acute conditions, so there is no real reason to expect a relationship between the two.

4. The measure of chronic conditions is again, just a count, with no consideration of the differential association of these conditions with mortality. Some, like arthritis, frequently show significant, negative associations with mortality, which would therefore mask the positive effects of any other condition.

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

1. The meaning of the variants of the symptom variables is not clear. What is meant by “also tended to have” and “did not tend to have”? The operationalization of these differences is not at all clear.

Discretionary Revisions (which the author can choose to ignore)

1. The manuscript interchanges “self-perceived health” with “self-rated health” and “self-assessed health”. It would be better to be consistent, or to make a statement about intended differences for the different terms.
What next?: Reject because too small an advance to publish

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.