Reviewer’s report

Title: A prospective cohort study of health behavior profiles after age 50 and mortality risk

Version: 1 Date: 1 February 2012

Reviewer: Deirdre McLaughlin

Reviewer’s report:

This paper considers the combined effects of selected health behaviours (smoking, Physical activity and alcohol consumption) on adults over the age of 50 years. The conceptual basis of this paper is important as it considers how these behaviours, as a group, affect survival. The paper is well-written and organised and relies on data drawn from a large number of participants (N=19914). The authors control for a range of health-related variables at baseline that could affect survival.

The authors have made the best use of the data available to them and have acknowledged the limitations both with the data that have been used and other factors which could have been explored and which may affect survival (eg nutrition).

Overall, this is an interesting paper which presents a novel approach to calculating the combined effect of modifiable behaviours on survival and I recommend that it should be accepted with no changes.

Level of interest: An article of importance in its field

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