Reviewer's report

Title: The burden of diabetes mortality in Finland 1988-2007 - A brief report

Version: 1 Date: 9 August 2011

Reviewer: Taryn Becker

Reviewer's report:

This study addresses a very important issue by describing the burden of diabetes mortality and trends over time in a Finnish population.

Major Compulsory Revisions:

1) In the first two paragraphs in the Background section, the authors allude to the fact that diabetes mortality has been studied in other countries. In order to set the context for the current study, details on current literature should be included. Information such as which countries have reported such data, listing the mortality rates as these likely varied between studies, describe the time period studied some results related to age and socioeconomic status

2) on Page 5, paragraph 2, the authors allude to a method of capturing socioeconomic status. For readers not familiar with this method, it is not clear how many categories exist (eg. are manual workers and farmers or other entrepreneurs 3 separate categories?) There should also be a brief explanation of how this translates into describing the general Finnish population and provide a reference if this is an accepted classification method.

3) The method of describing the mortality trend is confusing. The authors describe actual years of life lost as well as percent of years of life lost. They report trends between older and younger people but do not provide p-values to accompany these descriptions. There seems to be contradictions. On page 7, they state that "among men, the relative differences between socioeconomic groups in PYLL due to diabetes were similar to those due to other causes". This suggests that diabetes does not contribute to mortality. This needs further interpretation in the discussion

Minor Essential revisions:

1) On page 4, paragraph 1, authors write (see eg. 2-7). There are no examples so this should be removed

2) page 6, paragraph 2, authors present actual numbers of death due to diabetes. This should be accompanied by a percent of the total number of deaths

3) page 6, paragraph 3, "mortality among framers and other entrepreneurs was similar to blue-collar workers". The wording should be in keeping with the three categories described in the methods. A p-value should be provided for each comparison in this paragraph
Discretionary Revisions:

1) page 6, paragraph 3, the authors write "the beginning of the study period". It may be useful to describe which years are being compared.

2) page 7, paragraph 2 authors use the word systematic. This does not seem the appropriate word to describe the relationship and the word marked is not substantiated. For example did the authors mean the decline was more marked among older people than younger people?

3) page 8, final paragraph, it is not clear what is meant by "better treatment balance". This statement should be revised

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests