Reviewer's report

Title: Mortality among Norwegian medical doctors 1960-2000

Version: 2 Date: 17 February 2011

Reviewer: Netta Mäki

Reviewer's report:

Most of my comments were answered satisfyingly, but a few responses were not clear. Please find my REMARKS for your comments below.

Minor Essential Revisions

2. Why did you form the occupational groups using the information on education? This way it is possible that the groups include those who have a certain examination, but who do not practice that particular profession. This is likely especially if the mortality follow-up time is long (which is not mentioned in the text, see number 7, below). This possible source for bias is not even discussed. This contradiction is emphasized by the strong focus on work life in the first paragraphs of the Introduction.

Comment: We have added a short discussion on practice vs. education in the discussion. We think that in human service occupation, and particularly doctors, there is a high concordance between formal education and vocation

REMARK: Please reformulate the sentence in the discussion section. The point is the high concordance between EDUCATION and practising the medical profession, but it not evident in the sentence now.

1. Hypothesis number 1 is “that over the study population doctors have a low and decreasing mortality”. However, the analyses do not answer to this question. Instead they may tell that doctors have low relative mortality and that mortality decreases compared with the rest of the population (this can, however, take place even if their mortality increases). Also in Abstract/paragraph Interpretation the authors say that mortality rates for doctors decreased even though no mortality rates were studied! Similar lapse is in the last paragraph of the Results.

Comment: Thank you for pointing out these errors. They have now been rectified.

REMARK: The idea of the hypothesis number 1 is not reformulated. Please, at least insert the word “relative” before the word “mortality”. Also the first sentence in Abstract/paragraph Conclusions still says that “Between 1960 and 2000 mortality for doctors decreased and…”. However, you have not shown any results on mortality rates (only on relative mortality), so you cannot claim this.

7. There is inconsistency in the years included in this study. In the title and in
Figure 1 it says 1960–2000 but in the Tables 1960–1999. Is the information on education from the first or last day of the year? Does mortality follow-up start immediately after the census? For how long is mortality followed up?

Comment: The information on education is the recorded “highest” education for that individual, regardless of time. The mortality data are taken from another register and linked to the census data, so we assume they cover the exact five-year period. The different expressions 1960-1999 and 1960-2000 are deliberate, since the five year periods always started around the 1st of November. We have added a sentence on this in the Methods section.

REMARK: Your comment brings about a new note. If the mortality follow-up is only five years after each census, you cannot profess that these relative mortality ratios were for the whole decade (e.g. in Table 2). Had you data for the whole decade, the results might be slightly different.

Furthermore, it is good that you added the sentence into the Method section. However, the sentence sounds a bit odd out of this context. It is not clear, that “The first five year period…” refers to mortality follow-up. You should reformulate it.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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.