Reviewer's report

Title: Certified causes of death in patients with mesothelioma in South East England

Version: 1 Date: 20 October 2008

Reviewer: Michael J Goldacre

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Minor essential revision

1. It would be good if the authors could give data on the percentage of deaths where mesothelioma was coded as the underlying cause of death. The reason for suggesting this is that the underlying cause of death is still the most readily-accessible statistic tabulated in routine mortality statistics in many populations. In England, for example, prior to 1993, there are no routinely-available national annually-produced official mortality statistics, other than by underlying cause. I appreciate that the mesothelioma registry itself has been routinely sent cases that include all mentions (not just underlying cause); and that there were imprecisions in the coding of mesothelioma, anyway, in the ninth revision of the ICD. Nonetheless, mortality statistics by ‘underlying cause’ are still the standard easy-to-get statistics in many populations, and they may be the only statistics available to some people who might want to compare mesothelioma in English statistics with their own population (and might therefore find the figures in this paper useful). The percentage of mesothelioma coded as underlying cause is likely to be high.

Discretionary revisions

2. The table and the text giving data by age could be more elegantly presented, eg the age-groups could be included in the table and cross-tabulated against total deaths, deaths coded as mesothelioma, deaths coded as lung cancer, etc.

3. The paper is written as if there is no literature on the reliability of death certification. A consequence is that the reader has no ‘feel’ for whether mesothelioma is coded reliably, compared with other diseases, in cause-of-death data. There is, of course, a very substantial literature (two papers that are reasonably commonly referred to, and cover some of the literature, are: Goldacre MJ. Cause-specific mortality: understanding uncertain tips of the disease iceberg. J Epidemiol Community Health 1993, 47, 491-6 (apologies for self-citation!); and Johansson LA, Westerling R. Comparing Swedish hospital discharge records with death certificates: implications for mortality statistics. Int J Epidemiol 2000, 29(3):495-502). Both are record linkage studies (as is the present paper); and both cover a wide range of diseases. By comparison with other diseases, the authors’ percentage, for mesothelioma, of people with the disease on the certificate, compared with the total number of people who died with the disease,
is high. I think that it is worth noting that the "certification rate" for mesothelioma is relatively high, compared with that for many conditions.

4. The statement in the Abstract, Method, that “patients who had a cause of death specified on the death certificate were analysed” is a bit disconcerting – we expect that the vast majority of people who die will have a certified cause of death. Maybe the authors mean that they did not have access to a death certificate for the seven people omitted from the cause-of-death analysis. Perhaps the authors could clarify in the main text and modify the second sentence in the Method in the Abstract. The Abstract gives no numbers, and I think that it should, so that the reader has an idea of the size of the study. Many readers will only be able to get the Abstract. Perhaps the submitted second sentence of Method could be replaced with “There were 2200 people, known from the registry to have had mesothelioma, for whom there was a cause of death available on a death certificate” (or words to this effect).

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

**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.