Reviewer's report

Title: Burden of disease due to cancer in Spain

Version: 2 Date: 25 July 2008

Reviewer: Duncan Mortimer

Reviewer's report:

The manuscript characterises the BoD of cancer in Spain for the year 2000. Setting aside my concerns regarding the policy relevance of such an endeavor (see below), interpretation of findings is hampered by a lack of detail with respect to methods/results and a failure to consider the potential impact of sampling error and parameter uncertainty on the BoD estimates provided.

Major essential revisions:

Burden of Disease (BoD) for priority setting: The authors contend that the “results of BoD studies can serve as a source of information for allocating resources” (p2) and that “information on type-specific cancer burden of disease is important for prioritizing interventions designed to optimize health benefits for the population” (p2). Note, however, that a number of authors have previously argued that BoD studies are uninformative for priority setting (eg. Mooney & Wiseman, 2000; Shiell et al, 1987; Wiseman & Mooney, 1998). Specifically, many health economists would maintain that identifying the size of a problem is no help at all in working out how best to address a problem. Knowing that cancer is the second-leading cause of DALYs in Spain and attributing this burden to specific cancers tells us nothing about the extent to which this BoD can be reduced or about which interventions would provide the best means of obtaining such a reduction. At a minimum, the section summarizing relevant background information should recognize the existence of such views.

Policy relevance: Setting aside arguments regarding the usefulness of BoD estimates for priority setting, it could be argued that BoD estimates for the year 2000 are now of purely historical interest for any purpose. The authors should therefore provide a justification for using year 2000 data. Are more up-to-date data available or likely to become available in the future for some or all components? If not, then BoD estimates won’t be of much use for tracking changes in epidemiology and monitoring progress over time. Evidence or argument regarding the continuing policy relevance (or otherwise) of BoD estimates for the year 2000 should therefore be presented (eg. Is the epidemiology of cancer stable over the period 2000 to 2008? Is best practice for cancer care the same in 2008 as it was in 2000?).

Applicability of disability weights to Spanish population: Recent evidence from the European Disability Weights project (eg. Essink-Bot et al, 2002; Schwarzinger et al, 2003) suggests that cross-country variation in disability
weights might be significant even across relatively wealthy Western European nations. The authors claim that, despite the potential for variation in disability weights, cancer BoD calculations will be insensitive to variation in disability weights and cite Krujishaar & Barendregt (2004) in support of this claim. In the Krujishaar & Barendregt (2004) study, replacing EU weights with country-specific weights increased breast cancer DALYs from 741.9 to 764.1 for Spain but reduced breast cancer DALYs from 801.4 to 763.7 for France. While these variations in DALYs are relatively minor (predominantly due to the fact that 70% of the total burden of breast cancer is attributable to premature mortality rather than YLDs), not all cancers have the same proportion of DALYs attributable to premature mortality. At a minimum, the authors should recognize that the use of country-specific disability weights might alter the ranking of neoplasms by burden, as well as the absolute burden for cancer and each cancer type.

Modeling: Very little detail has been provided regarding methods or results for predicting incidence and duration. There is therefore insufficient detail in the paper to peer-review these aspects of the study.

Sampling error and parameter uncertainty: Sensitivity analysis has not been performed to reflect parameter uncertainty and confidence intervals have not been provided to reflect sampling error. Some attempt should be been made to communicate the extent of uncertainty associated with the BoD estimates reported in the paper.

Minor essential revisions:

Assumptions: At least one assumption has not been supported by either evidence, argument or expert opinion. Specifically, “…disease duration… for the group of patients who were cured… was set at 5 years” (p6).

References:


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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.