Reviewer's report

Title: The contribution of leading diseases and risk factors to excess losses of healthy life in eastern Europe: burden of disease study

Version: 1 Date: 16 July 2005

Reviewer: Thomas Novotny

Reviewer's report:

General
1. This is an article of general interest that addresses health disparities across Europe (from East to West). Although it focuses on risk factors quite well, given the paucity of data, it neglects sufficient attention to socioeconomic factors, political changes, and psychosocial determinants of both risk factor prevalence and disease outcome. It also has only modest attention paid to health systems factors (e.g., those which could, through adequate secondary prevention, affect risk factor prevalence). The Methods are sound in general, and well published in previous studies, however. The writing is in general very clear. The tables and graphs, with the exception noted below, are clear and helpful.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
2. A major organizational problem with the paper is that there is much discussion and interpretation in the RESULTS section; this should be moved to the DISCUSSION section. Results should simply report data and findings. For example, the discussion at the bottom of page six on drugs, alcohol, and smoking is really part of discussion. In addition, I would delete the comment about muslim states unless there are previous publications to support this conjecture. On page seven, much of the this page is for the discussion section.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
3. Abstract: Three 'subregions' for Europe are denoted in the methods section. However, populations are provided for only two of these, and one looks for the third population figure. In addition, these categories are referred to as 'Subregions' which denotes to this reviewer a geographical proximity. Since the countries selected for each category are all over the map and are selected on the basis of health indicators, I suggest using the term 'category' instead of subregion. In the conclusion section of the abstract, '...and injury control strategies eg for road traffic injuries.' should be reworded: 'and injury control strategies (for example for road traffic injuries).'
4. Background: wording in first sentence is awkward. Suggest: 'The evolving picture of East-West disparities in health indicators across Europe have been described in terms of....' In the next sentence, '...and distribution of diseases and injuries, and their causes' should be 'and their risk factors,' Risk factors are associative and not necessarily causal unless subject to strict causal criteria. Later, 'the attribution of such losses either to diseases or injuries or to the risk factors for these diseases and injuries.' Later: We use the databases....to EVALUATE (not illuminate) the nature and REASONS for the health disparities across Europe. Again, substitute CATEGORIES for SUBREGIONS.
5. Page 11. Instead of 'drink driving' I suggest using 'driving under the influence of alcohol.'
6. Table 1. I would order the ten leading risk factors from highest attributable risk down to lowest. However, 'unsafe sex' with an attributable proportion of 6.3% is number one on the list, and this is simply not believable. If this figure depends on HIV for most of the DALYS, the prevalences
throughout the region are still quite low, with only a few concentrated epidemics. Clearly, tobacco and alcohol must contribute far more to the GBD than unsafe sex in Europe. This really needs an explanation, and it is not even addressed in the text.

Discretionary Revisions (which the author can choose to ignore)
7. Data may not be available on socioeconomic determinants. However there are published articles on psychosocial, policy, and other deficiencies leading to health disparities across the former soviet union that could be cited in the discussion. There really should be some attention paid to these as well as to health systems determinants. Given the disruption in health investments and financing, there is a specific contribution beyond risk factors falling generally under health system failings that should be discussed.
8. On Page 10, a citation to Jha and Chaloupka’s World Bank Report on Tobacco Control in Developing Countries would be suitable at the end of the last full paragraph.

What next?: Reject because too small an advance to publish

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes

Declaration of competing interests:

I declare that I have no competing interests.