Reviewer's report

Title: Estimating Alcohol-Related Premature Mortality in San Francisco: Use of Population-Attributable Fractions from the Global Burden of Disease Study

Version: 1 Date: 11 September 2010

Reviewer: Peter Byass

Reviewer's report:

This is a very interesting paper, and even if there is inevitably a degree of speculation involved in some of the assumptions, it opens an interesting debate.

Major compulsory revisions:

1. The concept "premature mortality" is used from the start, and seems to be synonymous here with YLLs. This needs clarifying from the outset (and in the Abstract).

2. From a public health perspective, it is very important to understand how the alcohol-attributable YLLs might be distributed among individuals. Of course your analyses are not carried out at the individual level, but it would help considerably to add to Tables 1 and 2 the numbers of deaths from each cause in the underlying registry data were added. For example, it makes a lot of difference knowing whether the 6252 YLL attributable to alcohol use disorders (which is the major component of YLL attributable to alcohol) related to 6000 or 600 deaths, or whatever. This concept of how YLLs might be distributed over people then needs bringing into the discussion.

3. As you mention in your third limitation, the lack of age stratification in these analyses detracts from the interest and value of the findings. Is there any way of estimating e.g. YLL attributable to alcohol under/over 50 years of age?

Minor essential revisions:

4. The table headings are not clear or well-structured - don't mention for example the period and place to which the data relate, etc.

5. On p4 the rest of the world needs SI metric equivalents for the US alcohol consumption recommendations

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests: