Reviewer's report

Title: Towards new recommendations to reduce the burden of alcohol-induced hypertension in the European Union

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Reviewer: Arthur Klatsky

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Full Title: Towards new recommendations to reduce the burden of alcohol-induced hypertension in the European Union

To Author:

General comment:

This report is an outgrowth of the proceedings of a workshop held a year ago in Barcelona. It is unclear whether the manuscript is primarily a summary of the proceedings of the workshop or an interpretive discussion, as there seem to be elements of both. It would be helpful and of some interest to see the actual program of the workshop. The reader wishes to know what specific presenters offered. At present, several pages of the manuscript are taken by listing of the affiliations of the several dozen participants as well as by potential conflicts of interest or lack of same. However, the actual content of the workshop is unclear.

Also in need of re-organization is the final section which seems to include sections about recommendations, pilot studies, conclusions, and controlled trials.

Specific comments:

A) Abstract:

1. Methods. "Consensus conference based on systematic reviews, meta-analyses, clinical guidelines----. Were any of these new? How were they presented and/or summarized?

2. Results. Starts with "Alcohol use is causally related to high blood pressure." Was this a consensus? It does not appear that new study data are presented. If this is so, Results should start with "The workshop participants concluded that alcohol use ----. "But this
immediately raises the issue of the role of alcohol dose and whether there is a threshold effect. I do not think that there is consensus that light drinking raises blood pressure - see below.

3. Abstract: Line 47: Grammar problem. "-----there is lack of implemented these measures -----"

B) Background

(I) Alcohol and HTN as risk factors for non-communicable disease:

This section discusses WHO goals, which include a 10% reduction in harmful use of alcohol and a 25% reduction in prevalence of HTN. No one could find fault with these modest goals. Salt intake is mentioned as a "Best Buy" for HTN control; it might be best to avoid lingo, or to define such terms. What other measures are advised by the WHO for HTN control?

(II) The evidence for alcohol interventions to reduce blood pressure

This portion of the manuscript is largely a summary of the case for the existence of an alcohol-HTN association and for the belief that reduction of heavy drinking would reduce HTN incidence and/or result in better control of HTN in heavier drinkers with the condition. Again, it is not clear whether this is a consensus of the workshop participants or a statement of the author's ideas.

It is stated that the alcohol-HTN linkage is "dose-dependent" (line 55, p 7), but not linear. Actually, it is far from clear that lighter drinking raises blood pressure. Some studies show a threshold effect and some show a J-curve - especially in women, with lighter drinkers at lower risk of HTN than abstainers. There is confounding by under-reporting, which lumps some heavier drinkers into the light-moderate category and blurs a threshold effect. Furthermore, in meta-analyses lumping studies showing a threshold and those without a threshold obliterates demonstration of a threshold.

Care needs to be taken to consistently refer to heavy drinking and not just to "alcohol". This report should not be a polemic against any alcohol drinking. A broader context would be desirable. It would be appropriate to mention the fact that light-moderate drinkers have the lowest total mortality, due primarily to lower risk of atherothrombotic vascular disease.
C) Interventions to reduce alcohol consumption

This section is lucid. Again, I suggest putting the matter in the context of all life-style measures that should be implemented to reduce HTN prevalence and the fact that reduction of heavy drinking has obvious and multiple health benefits, including but hardly limited to reduced HTN prevalence.

D) The potential in Europe

The heart of this section is the estimated effect of better HTN screening and addition of brief intervention for hazardous alcohol use or alcohol dependence. The calculations are interesting and the imposing formula in Appendix 1 makes the effort appear mathematically precise. However, it would be appropriate to point out that the structure rests upon assumptions that are estimates at best. But the potential reduction in HTN prevalence from reduction of heavy drinking is surely substantial.

E) Recommendations

There are 4 of these in the results section of the Abstract and in the list of contents, but I find only 3 in this section of the text. This section becomes confusing because of merging of recommendations, pilot studies, conclusions, and controlled trials. Some rewriting is needed here. Perhaps the description of pilot studies and trials would better be relegated to another Appendix. The Conclusions could be briefer and tauter.


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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No

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