Reviewer's report

Title: The Effect of Alcohol on Auditory Thresholds

Version: 1 Date: 23 December 2006

Reviewer: Attias Joseph

Reviewer's report:

General:

This study reports on the effects of alcohol consumption in auditory thresholds of 6 frequencies in 11 males and 15 females. However, the study suffers from a serious methodological drawbacks with very small interest, that makes him inappropriate for publication. Some of them are listed below:

1. Since the study deals with pure tone thresholds, the title should be changed accordingly:….."Pure tone auditory thresholds"
2. The authors must report on the exact method of hearing measurements (dB steps, ways of presentation, how the subjects reacted, how many stimuli in total for each frequency, who did the tests, time of testing...). All those details are important since they can also result in changes in hearing thresholds as reported in this study.
3. In fact, there is no controls for this study. I would suggest, similar group of subjects tested in the same manner without alcohol consumption.
4. Why the authors did not use the paired t test or ANOVA ?
5. The speech reception thresholds of the subjects must also be reported as well as the discrimination scores as this may give hints to the affected site along the auditory pathways.
6. The discussion section is too long containing many speculations for the current restricted results.
7. The experience of each subject in alcohol consumption is not reported which of course can affect the results.
8. The consistency of auditory alterations induced by alcohol consumption should also be tested within the same session and across sessions. This is critical to determine whether it is transient or permanent deterioration. .
9. Obviously and as said by the authors, the more accurate way to measure correlations with auditory alterations is by blood tests. Measuring the amount alcohol consumption without blood tests is inaccurate and misleading.
10. One of the great need of this study is to address whether the alteration in auditory thresholds is simply due to less attention, or more errors after alcohol consumption.
11. More details must be provided concerning, safe and risk level of alcohol consumption, without that it is impossible to appreciate the alcohol consumption of the subjects.

What next?: Reject because scientifically unsound

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

I have no competing interests’