Reviewer's report

Title: Prevalence and Social Environment of Cigarette Smoking in Cyprus Youth

Version: 2 Date: 3 March 2008

Reviewer: Pascal Bovet

Reviewer's report:

The paper, which reports results on a large sample of students of secondary and post secondary classes, is much improved as compared to first version. However there are still some issues that need be addressed. A main comment underlying these issues is that there tends to be some confusion between facts (scientific evidence brought about the figures) and (good) will to advocate that goes beyond facts of the study. As the authors rightly point out (last paragraph of introduction), the paper should contribute scientific information and evidence contribution and limit comments to the data. The paper will be of great contribution provided some further clarification is made.

I raised in my previous review the issue that smoking in children (based on smoking on at least one day per month) is not equivalent to smoking in adults (based on smoking every day). The authors have added some information in their revised introduction, although they might emphasize that the evidence the refer to is based one single study in the USA and there remains much to learn on this issue in other populations, so the significance of smoking in youth (on 1 day per month) to predict smoking in adults (every day) is still very limited. The authors should recognize in the background this limited body of evidence, and the need for other studies in other populations to address this issue more universally: this is indeed a major area for further research in the area of youth smoking.

Are the figures in Figure 1a and Figure 2a consistent with Table 2? Table 2 indicate that around 50% of regular smokers (on at least one day) actually smoke every day, while Figure 2 tends to show that more than half of regular smokers smoke on a daily basis, at least at age 17+?

The conclusion that smoking prevalence is very high (vs. high) is not supported by figures of the paper (appearing in abstract and in discussion). To qualify a prevalence of very high (or even high), there should be some indication of what is meant by "high": what is the gold standard? What is found elsewhere? The authors would do well to provide some prevalence results of GYTS in other countries (and references) so readers can appreciate by themselves how the prevalence in Cyprus compare with other countries.

Also, the claim of an alarming increase (abstract and discussion-first paragraph) is not supported by the findings. How can a single survey possibly provide trend data? The claim that smoking among girls is twice than that of
adult females (abstract) is fallacious (for the reasons stated above: one cannot directly compare prevalence based on different definitions). At best, the authors could speculate that the high prevalence of smoking among female teenagers may possibly predict an increase in the smoking prevalence among the next generation of female adults.

Speaking of comparison, the only data provided by the authors that allow direct comparison of smoking prevalence over time among youth in Cyprus is the data referred in the second paragraph of introduction (study by MOH in 1997). Authors should provide information on how smoking was assessed in 1997 (smoking on one day per month? every day?) as it is likely difficult for readers to find the reference of this study (since it is a report of MOH not available on Medline).

I mentioned in my previous review the existence of a study that assessed the effect of non-response in GYTS (in fact the effect of non-inclusion of students absent of class on the day of the survey), since the authors allude to the effect of missing data in the paragraph on limitation (discussion). I would suggest that authors take into account this reference in the text as this is the only study that has specifically examined the effect on smoking prevalence among participants and non participants in a GYTS study (ref: Bovet P, Viswanathan B, Faeh D, Warren W. Comparison of smoking, drinking, and marijuana use between students present or absent on the day of a school-based survey. Journal of School Health 2006;76:133-137, i can send a pdf of this paper (pascal.bovet@chuv.ch). In their answer to my comment in my previous review, the authors claim that they assume that non response has little effect because few students refused to participate and more than 90% of eligible students have participated. The reality is different, as the aforementioned study has shown: the effect of absent students on the day of the survey (even if less than 10% of eligible students are absent) is in fact quite substantial (and this tends to underestimate the actual prevalence of smoking). This issue is important as students may not be in position to decline a survey in school (and nearly all students present in school participate) but students who do not attend school on the survey day may include a substantial proportion of students who may marginalized themselves to some extent (by often being absent from school) and adopted unhealthy behaviors (such as smoking, drinking, etc). This emphasizes that prevalence found in GYTS studies tend to be underestimated (even if more than 90% of eligible students participate). This issue deserve to be mentioned and referenced.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a
statistician.

**Declaration of competing interests:**

I declare that I have no competing interests