Reviewer's report

**Title:** Prevalence and Main Determinants of Tobacco Use in Cyprus Youth Through the Use of the GYTS

**Version:** 1  **Date:** 13 January 2008

**Reviewer:** Pascal Bovet

**Reviewer's report:**

It is an interesting paper that is well written, based on standard methods (GYTS), large sample size, and a fairly large range of age for this type of studies (in particular by having also included of high schools). The paper definitely adds important information on tobacco use and determinants in youth.

**Major**

The definition of smoking in youth is not apparent in the paper (usually smoking at least on cigarette during past 4 weeks/month). This definition should appear in the Abstract, in the Methods and each table that mentions "current smoking".

In the results in the abstract, it should be clarified to which extent "tobacco use" represents "use of cigarettes" and/or "use of other tobacco products" by providing corresponding results (in the case of Cyprus most of the consumption seems to come from cigarettes). But it would be useful to mention what is tobacco use not related to cigarettes.

The background section is too long, sometimes too general, and not always referenced. Since the paper is on tobacco use in youth, it is not necessary to summarize effects of tobacco in general or in adults (the two first paragraphs). Instead, the background section should concentrate on current knowledge related to tobacco use in youth (effects on health in youth, evidence for addiction -amount of cigarette smoked to become addicted-, time of tobacco use needed for addiction, factors influencing youth smoking (adults, peers, media), etc). All the background information provided should be appropriately referenced.

In particular, authors should summarize (in background or in discussion) the available scientific evidence that relates smoking in children (generally defined as smoking at least 1 cig on at least one day per month) with definition in adults (at least 1 cig per day) including references. This information is crucial to provide a valid basis to compare current prevalence of smoking in youth (with definition on smoking on at least one day per month) with prevalence of smoking in adults, i.e. how well the prediction of future adult smoking can be made based on youth smoking (using different definitions in children and adults). For example, it would be useful to provide specific figures on tracking, i.e. what is the proportion of "youth smokers of at least one cigarette per month" that actually will become "adult smokers of at least 1 cig per day". One might think that quite
a few children smoking “one cigarette on one day per month” are experimenters (e.g. smoking a cigarette at a party to look “cool”) but may not necessarily become adult smokers.

Table 2. It could be useful to provide the results separately for youth who are smokers and youth who are not smokers (i.e. two columns, perhaps a third column for total). Consider making two tables out of this current table 2: one table for factors that are of interest for both smokers and non smokers (exposed in ETS, media and advertising, etc) and another table for characteristics that are pertinent only for smokers (buy cigarette, cessation). For this new table, perhaps provide information across age categories (smokers of secondary school and smokers of high school). Provide in footnote definition of “current smoker”. Sample sizes could be given (overall, smokers, non smoker, etc).

Figure 1. This figure could be more informative if, for example, two or three categories of smoking intensity were shown (prevalence for youth smoking (for example) at least one cigarette on 1-5 days per month; 6-29 days per month; and every day (or another way of categorizing smoking frequency). If not shown in a figure, this information (prevalence by number of days smoking in a month) would be welcome at some other place (table). Figures on the proportion of smokers (by gender) who smoke at least one cigarette every day would be particularly useful (given by category of age of children), since the study also includes age of 18, which also defines an adult (for whom smoking is defined as smoking at least one cigarette every day). Also provide definition of “current smokers in footnote or title.

Minor

Consider changing title of paper as “Prevalence and main determinants of tobacco use in Cyprus youth” and remove “through the use of the GYTS”, which is a methodological issue. If authors prefer to keep GYTS in title, then spell it in full letters “Global Youth Tobacco Survey”.

Although there is information on tobacco control measures in Cyprus in the paper, it might be better to summarize in one paragraph the information on the main control measures in Cyprus and their implementation: cost of 20 cigarettes packet; law/regulations on advertising and sponsoring; tobacco promotion practices; size and content of warning on tobacco packets; ban of smoking in public places (secondary school, high schools; restaurants, bars and discotheques as well as rules for minors and availability of vending machines.

The use of “one in four,” “one in five,” “one in ten,” etc is difficult to grasp for many readers. It would be easier that results are presented systematically as percent. The use of more general quantification could appear occasionally but, then, be on the form of “about half,” “approximately a third of,” “about a quarter of,” etc.

Some details in information in the methods could be dropped (workshop in Denmark, details on sending data to CDC (last paragraph before statistical
analyses), etc.

Statistical analysis, second line. What is meant by ‘correlation of the data’ and was done to take this correlation into account in analysis? (while information weights to account for sampling is clearly described).

Around 8% of secondary school students and 10% of high school students did not participate. It would be useful to comment on this fairly high non participation of students: absent on day of survey? refusal? if refusal do we know some of the reasons? Also, can authors comment on expected effect on overall results (for example see: Journal of School Health 2006;76:133-7).

Cessation (page 10): definition of ‘dependant’ should appear in the ‘methods section’ (as well as definition of ‘current smoking’).

Discussion. Some reference is made on ‘influence by fashion magazines’ (first paragraph). It would be interesting to know if the comment is general or local, i.e. such magazines are read frequently by youth in Cyprus and if these magazines are made in Cyprus for Cyprus, if there are local magazine that target youth (and in local language), and if these journals include advertising for tobacco.

As mentioned above, a paragraph would be needed to make the link between youth smoking and adults smoking, e.g. how one can, based on best scientific evidence, anticipate trends in adults based on data in youth (knowing that definitions are different in youth and adults and based on available tracking data that do not equate fully youth and adult smoking).

Table 1. Provide age (mean and range) for both middle school and high school students in table. Provide definition or ‘current smoking’ as a footnote of table. Sample sizes could be given (overall, boys, girls, etc).

Table 3. Provide in footnote the definition of ‘current smoker’ and provide sample sizes (overall, current smokers, non-smokers). (Each table should be self explanatory with respect to the terms used and the sample sizes).

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