Reviewer's report

Title: Prevalence and determinants of tobacco use amongst junior collegiates in twin cities of western Nepal: A cross-sectional, questionnaire-based survey

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Reviewer: Aart Nicolaas Mudde

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General

The MS reports a study into the prevalence and some of the possible determinants of tobacco use in Nepalese youth between about 15 and 20 years of age. The fact that not much comparison can be found in the literature adds to the relevance of the study.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. It is a pity that the comparable Nepalese studies are rather old. This reduces the power of the comparisons. Moreover, the special situation of Nepal makes the results interesting: a developing Asian country has very specific characteristics which are different from other developing countries (Africa, South America). The total lack of restrictive legislation makes the comparison with countries with such legislation also relevant. However, the MS misses chances in the area of these latter contrasts.

2. The determinants measured are limited to the ones included in WHO’s Global Youth Tobacco Survey. This has the advantage that results are comparable with similar surveys in other settings, but might not be the most appropriate combination of concepts for a country as Nepal. Critical remarks concerning the instrument are missing now in the discussion. Moreover, it seems that not the total GYTS was used, I miss questions about tobacco related school curriculum and about environmental tobacco smoke.

3. What puzzles me, and what is not discussed now, is the fact that prevalence of tobacco use among young people is much lower in Nepal than in Western countries with strict legislation, heavy taxes and massive information campaigns. I would like to see this matter discussed. The conclusion that Nepal needs information campaigns and strict legislation seems to be undermined by this comparison.

4. A major flaw in the presentation is the representativeness of the research group. The age distribution is not presented, nor is the lowest and highest age. It is not explained why five publicly and eight private colleges were drawn, Moreover, school sizes seem to differ greatly and may have from one to five streams. Was all that taken in to account in the sampling procedure? Finally, the
higher tobacco use prevalence in the younger and older groups in the sample worries me. It might be related to the sampling procedure, but because this procedure remains unclear, I cannot judge this.

5. Finally, the data analysis section is not specific enough. I assume that logistic regression is used. It is not specified how missing values were to be handled. Comparing table 1 and 2 leads to the conclusion that \(1590 - 1561 = 29\) respondents were missing in the logistic regression as a result of missings, but on which variable(s)? Could these missings not be imputed by group means?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Not being a native speaker myself, I cannot fully judge the quality of the English language in the MS. In places articles seem to be missing.

2. Abstract: because the study is cross-sectional, no causal conclusions can be drawn. It would therefore be better to speak of related variables or correlates than of determinants.

3. Background, 7th line: the link between certain chronic non-communicable diseases and tobacco use is not made and therefore the line of argument is not clear.

4. Background: the very high prevalence among adults and the relatively low prevalence among youngsters makes one wonder what the critical age of onset might be.

5. Background: a reference to Green & Kreuter could be made here.

6. Background: is anything known about the level of awareness/knowledge of the risks of smoking among the general public in Nepal?

7. Study area: the information could be limited to figures about population density.

8. Study area: 7th line: a young mean age could also be the result of low life expectancy

9. Section ´Definition of variables´ can be integrated in section ´Questionnaire´, in which all measured concepts have to be dealt with. Now the section about definition is not complete.

10. Data collection: absenteeism can be high in developing countries. That might affect the representativeness. Moreover, how can ages differ from below 15 to over 20 in 11th and 12th grades? Some clarification of the school system is needed.

11. Smoking pattern and access to tobacco: please calculate all prices mentioned into USD. Last sentence: was this question only asked to smoking respondents (only 200)? Then we cannot see whether the price of tobacco is a barrier for use.

12. Cessation: the percentage of smoking or chewing respondents who sought help is very high. Is there an explanation? What type of help could that be?

13. Discussion: I assume that there is also no legislation concerning sampling and
sponsoring by the tobacco industry?

14. Discussion: the fact that tobacco users see report having more users in their environment (family, friends) can also be caused by selective perception. This mechanism has been shown in the literature.

15. Figure 1: these are two figures, and their lay-out is not similar.

Discretionary Revisions (which the author can choose to ignore)

**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:** Needs some language corrections before being published

**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