Reviewer’s report

Title: Associations between e-cigarette access and smoking and drinking behaviours in teenagers

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Reviewer: Ziyad Ben Taleb

Reviewer’s report:

Overall, I think this is a valuable and timely done study that address an important topic and examine an overly vulnerable age group that is being consistently targeted by the tobacco industry. The authors of this study have done a great job in conducting this research.

Here are my comments intended for discretionary revisions

• You have used the Tobacco Survey that covers schools in North West England. Is this representative for other teens in the rest of the country? How would it compare to South of England. I think the authors should discuss this issue.

• The authors stated that student for whom no marker of deprivation was available were excluded from analyses (n=1,253 cases). How would this will affect the internal validity of the study? Dose those 1,253 participant may have different characteristics than those selected? (The issue of selection bias). I believe this should be discussed as well.

• The authors stated that Hierarchical logistic regression was used to account for clustering of students within schools, with the exception of analysis of regular smokers (Logistic regression was used) However, logistic regression was also used in the model for the association between access to e-cigarettes and alcohol drinking behavior in non-smokers. What was the justification for that? How could dependency between observations from the same school would can affect the result?

• One of the interesting finding the this study find is that almost quarter of teenagers that had accessed e-cigarettes had also tried smoking conventional cigarettes but not liked them. The authors provided the explanation that “it is likely that flavorings make e-cigarettes an attractive option to teenagers who would otherwise be put off conventional cigarettes by their taste”. I believe that there is a room for alternative explanation, since we can’t establish the temporal relation, it’s also possible that teenagers have tried conventional cigarettes first and probably didn’t like the taste, then tried e-cigarettes, but perhaps, once they get hooked on nicotine they will initiate smoking again. Therefore, the reader should know that e-cigarettes would not be considered as a path away from cigarettes.

• What are the possibilities of information bias? Is it possible that the rates of
access to e-cigarettes are even higher than what was reported, in case there was a social desirability bias in completing the survey?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no conflict of interests