Author’s response to reviews

Title: Determinants of smoking initiation among women in five European countries: a cross-sectional survey

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Author’s response to reviews: see over
Author's covering letter for initial submission

Title: Determinants of smoking initiation among women in five European countries: a cross-sectional survey

Authors:

Version: 1 Date: 14 January 2010

Comments: see over
Dear Ms Abigail Brown,

Thank you for considering our manuscript for BMC Public Health. We would like to thank the reviewers for their careful reading of our work. Below is our point-by-point response to their comments.

Reviewer 1

...the odds ratio can be used as an association estimate, but it should not be interpreted as a relative risk because of the high prevalence of the outcome. Thus, please rephrase the second paragraph of the Results section.

Second paragraph of the results section has been rephrased to interpret OR as association estimate.

Please double check the CI reported in the last paragraph of the Results section.

CI reported in last paragraph of results has been revised to match the table.

Please consider to delete in the title of Table 2 the sentence “n’s shown without weighting”.

The phrase “n’s shown without weighting” has been deleted from the title of the tables

Please be consistent throughout the manuscript with the use of thousand separators.

Use of thousand separators has been made uniform.

Reviewer 2

It is uncertain what the added valued of the paper is, as compared to previous studies on determinants of smoking initiation. The introduction does not make clear which questions on the patterns and determinants of smoking initiation have not yet been answered, and how this survey can be used to address these questions.

This text has been added to the manuscript:

“The objective of this study is to determine if ever smoking and smoking initiation are associated with certain characteristics or beliefs about smoking in women in five European countries. In particular, this study aims to elucidate if these characteristics or beliefs about smoking are different for women in countries at different stages in the tobacco epidemic, with northern European countries generally being at a more advanced stage of the epidemic than southern European countries. As current policies are being rapidly reformed in Europe, and as rates of smoking are rising among European women, understanding reasons why European women smoke is crucial in guiding future tobacco control measures.”

The European added value of this paper is not clear. One would expect that new lessons would be learned from comparisons between these five countries, or that the authors would aim to construct a European overview out of these five different countries. However, the Discussion section rarely addresses the variations between countries observed. Instead, the discussion is mostly “geography blind”, and even uncritically includes references to findings outside of Europe.
Though the five countries included in our study were at different stages of the tobacco epidemic, the association between friends and family smoking was found in all countries. This association was strongest in Sweden and Czech Republic, two countries with very different tobacco epidemics. Mean age of smoking initiation was youngest in Sweden, which is in the more advanced stages of the tobacco epidemic. Mean age of initiation was oldest in the Czech Republic, which is in an earlier stage of the tobacco epidemic. Inclusion of other countries in the discussion was meant to provide a comparison and context to our findings.

**Much of the discussion focused on determinants of smoking initiation...the potential for recall bias is very large here, but not evaluated by the authors...**

The results are potentially biased to an important extent due to the selective nature of the sampling method (landline telephone calls) together with sometimes low non-response rates (ranges from 31% to 65%).

We have added this discussion of the sampling method and recall bias to the discussion:

“One major limitation of the study was the stratified sampling approach using available telephone numbers. This method was chosen to allow the study to reach a large sample of women that was proportionally representative of smoking rates in each age group. However, administering the survey via telephone makes it difficult to verify self-reported data. The potential for recall bias on reported age of initiation may have affected the accuracy of results. This bias was not likely to be differential by age group and thus should not affect the overall picture of the results. Also, since no mobile phone numbers were included in the phone list, the study could have excluded a substantial number of women from our study who may have unknown differences than those who could be reached by home telephone. Level of income and/or education may have affected whether women had a landline or whether they relied solely on cellular phone use. Thus, the participants may not be an accurate representation of their respective countries.”

[The authors] overlook the well-known fact that the association between education and (ever) smoking has radically changed in subsequent generations, with the “timing” of this change varying between European regions. These changes have been charted in much detail in European overviews by Huisman et al, Giskes et al, and Schaap et al.

We agree with the reviewer and have added this text to the discussion:

“Our null findings on socio-economic status and smoking initiation could have also been due to generational differences between the younger and older women. In younger women, less education has been found to be associated with ever smoking; however, education has been found to be less predictive for older age groups. The generational shift varies in different European countries, with larger inequalities in Northern Europe, and this could have also diluted our overall results (Huisman, Schaap, Giskes, Cavelaars)”

Reviewer 3

*In the methods section the authors should provide detailed information on how the oversampling of smokers was accomplished.*
Methods section has been revised to read:
“To ensure adequate power to examine subsamples of smokers and nonsmokers for each question, smokers were oversampled to reach 28% of subjects; weighting was done in the analyses to make results representative of each country’s female population.”

The distribution of age at smoking initiation is probably skewed and its overall figures are likely to be meaningless given the inclusion of women from different age-groups in the analysis. The authors should provide the necessary information to show that treating this variable as continuous was appropriate.

Using a log transformation of age as the outcome yielded very similar results. Age (untransformed) was kept as the main outcome to preserve interpretability.

The authors should provide detailed information on the yielding of the surveys in each country and this issue should be thoroughly discussed.

Our sampling strategy was based upon recruiting a nationally representative sample of women based upon age and smoking status. We used the most recent smoking prevalences in each country that were available in the WHO Global Infobase (www.who.int/infobase/); these data provide smoking status according to the age categories seen in the manuscript. Also see response to reviewer 2 on sampling method and recall bias.

I would not compute p values for trend when the exposure is defined by an ordinal variable.

P-values for trend have been deleted from results.

The abstract should include more quantitative information on the results section and the way the objectives (“why European women begin smoking”) are defined is probably too ambitious.

More quantitative information has been added to the abstract and the objectives have been narrowed to focus on the five European countries.

The introduction is too extensive and lacks objectivity. The authors should make an effort to make clearer which is the potential of this study to produce new evidence and how a sample of women from different European countries may contribute to the accomplishment of the objectives.

See comment from reviewer 2

It would be interesting to have information on the proportion of current smokers in table 1.

Proportion of current smokers has been added to table 1.

The n’s per category should also be provided in table 1.

N’s per category has been added to Table 1.
The statements regarding this association should be rephrased taking into account how “depression” was evaluated.

This text has been added to the discussion:
“…since depression was only evaluated by self-report, the definition of depression may have been used very broadly by the participants and it is difficult to make any specific clinical conclusions.”

Please provide the criteria followed to define France as the reference category.

For this study, any one of the countries could have been chosen as the reference category. France was chosen because the mean age at initiation was very close to the overall mean for the five countries.

Regarding the reasons reported for smoking initiation, the category “other” represents a much larger proportion than many of the other reasons presented in detail. Both the criteria used to define these categories from an open question and to present these specific reasons should be provided.

The WELAS questionnaire was based on the American Legacy Foundation Questionnaire. Though participants were asked an open-ended question about reasons for smoking initiation, interviewers were given a set list of reasons for smoking initiation. All responses not captured in this list were categorized as “other”.

Discretionary Revisions
Since the questionnaire format plays an important role in the results obtained in surveys it would be interesting to provide an English version of the questionnaire used as a supplementary file.

We are currently analyzing the other sections of the questionnaire data and are preparing manuscripts. We would prefer not to have the entire questionnaire published at this time.

Thank you again for your consideration of our manuscript.

Yours sincerely,
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