Reviewer's report

Title: Sports activity and combined use of snus and cigarette smoking among young males in Finland in 1999-2010

Version: 2 Date: 7 February 2012

Reviewer: Tord Finne F Vedøy

Reviewer's report:

The second version of the paper is much improved and it seems that we to a great extent agree on the comments given on the first version. However, I have some comments that I hope the authors will consider implementing in the third version.

DR=Discretionary Revisions
MER=Minor Essential Revisions
MCR=Major Compulsory Revisions

1. MER: General comment: The authors should be consistent when using the concept "sports activity". In the current version I also encountered the concepts "sports training" (pp. 2, 8, 10 and 19) and "sports participation" (pp. 11 and 21). Also, the concept is sometimes expressed in singular "sport activity" (pp. 2 and 12) and plural "sport activities" (pp. 8 and 11).

2. MER: Page 8: Under “Subjects and methods” the authors refer to the models in the first stage of analysis as bivariate. This might be misleading as both age and one other independent variable were included as independent variables in the models (if understood correctly).

3. MER: Page 8: the 5th sentence suggests that "urbanization" was not part of "sociodemographic status". As reported on page 8, "urbanization" was part of "sociodemographic status" and the word "urbanization" should be deleted.

4. MER: Page 8: 6th sentence: The authors should indicate which differences were tested. Differences in tobacco use prevalences at different points in time?

5. DR: Page 8: The first paragraph should be divided in 2 after 3rd sentence (New paragraph starts with "Next...").

6. DR: page 8: The above mentioned comments suggest that the section titled “Statistical analysis” may benefit from some textual revision.

6. MCR: Under “Results” and “Discussion” the authors state that “aerobic sport activities […] were not significantly associated with snus use, cigarette smoking, or dual use compared to those not engaged in aerobic sport activities”. As far as I can see from table 2, several of these activities were significantly negatively associated with tobacco use: walking, swimming, cycling and skiing in the case
of snus use; running, cycling and skiing in the case of smoking; walking, running, cycling and skiing in the case of dual use. In all cases the ORs are below 1 and the 95% CIs does not include 1 (If I have understood the table correctly).

7. DR: Model fit statistics may be included in the text. For example: “For all models Nagelkerke R2 varied from 0.039 - 0.139…”, or they could be included in table 2. NOTE: the test-statistic is written Nagelkerke, not Nagelkerge.

8. MER: Page 10, last sentence: use the expression "were controlled for" instead of "were adjusted in the ..."

9. MER: Page 12, 2nd sentence: Does "lower cigarette smoking" mean "lower smoking prevalence"?

10. DR: Page 12, 2nd paragraph, 1st sentence: "intake" may be changed to "uptake".

11. MER: Page 13, 3rd paragraph: The authors should discuss the possibility and and implication of reverse causality between smoking status and sports activities.

**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