Author's response to reviews

Title: Adolescents' health and health behaviour as predictors of injury death - A prospective cohort follow-up of 652,530 person-years

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Version: 3 Date: 15 February 2008

Author's response to reviews: see over
Dear Assistant Editor Claudia Browning

Thank you for your e-mail including the second comments on our manuscript entitled "Adolescents' health and health behaviour as predictors of injury death - A prospective cohort follow-up of 652,530 person-years".

We thank the reviewers for their further comments, and have revised the manuscript as specified in our point-by-point responses below (in italics).

Appreciating the interest and support received, we hope that the revisions made and arguments given are satisfactory and that the revised manuscript is now acceptable for publication in the BMC Public Health.

We look forward to hearing from you soon and are willing to discuss our paper further whenever needed.

Yours sincerely,

Ville Mattila, MD, PhD
Our point-by-point responses below are given in italics in the same order as the suggestions were given in the comment letter.

**Reviewer's report**

**Title:** Adolescents’ health and health behaviour as predictors of injury death - A prospective cohort follow-up of 652,530 person-years  
**Version:** 2  
**Date:** 26 October 2007  
**Reviewer:** William Pickett

**Reviewer's report:**

General  
The authors have been professional in their responses to the reviewers, and in their presentation of cogent arguments for the decisions that they made. In terms of my comments, I identified a couple of issues that they can choose to consider if they wish.

Well done; this is very nice work.  
*Thank you very much!*

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

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

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**Discretionary Revisions (which the author can choose to ignore)**

I accept the argument that this study is strong, in that it is large, longitudinal and covers a long time period. The authors correctly suggest that this makes it kind of unique to our literature. I don't accept the argument that you need to have longitudinal data in order to infer causation. I guess that most of the existing literature that has emerged surrounding causes of injuries of this type is cross-sectional or case-control in nature. These types of studies are often classified as "second class" evidence compared to longitudinal data, but I don't agree with that if they are well done. With respect to causation, epidemiologists typically use the Bradford-Hill checklist (strength of association, significance, biological plausibility, dose-response, temporality, consistency) and not just the fact that results come from longitudinal data. Many other disciplines just focus on whether the findings come from longitudinal studies. I am an epidemiologist and I am biased towards our way of thinking. Cross-sectional studies have everything to address these criteria with the exception of temporality. So, this is a long way of suggesting that I was arguing that lots of good evidence exists about risk factors for injury; but agree that most of this does not come from longitudinal analyses. I just place more value on the existing evidence than do the authors. With respect to analysis of specific types of injury, what I was referring to was external causes of injury. It would be interesting to perform analyses of risk factors for motor vehicle injuries, then poisonings, then falls etc. Your numbers are in fact pretty tiny and I can see now that it probably makes sense to limit the analyses to the intentional/unintentional outcomes that you started with. However, it would be interesting to see if the results are consistent for the road
traffic accident outcome that is common.

Thank you for your comments. The authors do not state in the manuscript that longitudinal data is needed to confirm causality, we only discussed this issue on our reply to the reviewer. In addition, the majority of our references are based on cross-sectional study settings. The authors naturally agree that well done studies concerning injury epidemiology are needed, whether they are cross-sectional or longitudinal.

The authors also agree with the reviewer’s opinion that it would be interesting to perform analysis by external causes of injuries. However, injury death is such an uncommon end-point in this age group, fortunately, that we had to satisfy ourselves with limiting the analysis to injuries by intention.

**What next?:** Accept after discretionary revisions  
**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 competing interests.
Reviewer's report

Title: Adolescents' health and health behaviour as predictors of injury death - A prospective cohort follow-up of 652,530 person-years

Version: 2 Date: 29 October 2007

Reviewer: Matti Hillbom

Reviewer's report:

General

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

Please, check and correct the percentage figure on Results, para 2 ...72 (0.5% should be 49.3 %) and ...74 (0.5% should be 50.7 %). It is also curious that after omitting 14 subjects you still have exactly the same figures in Table 4 as you showed before! This suggests that a perfunctory revision has been performed.

Thank you for your comments. The percentages in page 9, para#2 have been corrected as suggested. The authors have carefully re-checked all the figures in table 3 and 4, but since omitting 14 cases did not affect HRs or CIs by one decimal accuracy, the figures actually remained unaltered.

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

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Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.