Reviewer's report

Title: Determinants in adolescence for adult sickness absence in women and men: A 26-year follow-up of a prospective population based cohort (Northern Swedish Cohort)

Version: 1 Date: 30 August 2012

Reviewer: Frans J.M. Feron

Reviewer's report:

With the manuscript entitled “Determinants in adolescence for adult sickness absence in women and men”, authors present a community based longitudinal study based on determinants of sickness absence in a life course perspective respectively a gender perspective. Both elements, the longitudinal follow-up of more than 25 years and the issue of gender differences, are rather unique in public health research regarding the main theme of sickness absence. As such, this manuscript is of outstanding interest in the field of public health.

Major remarks:

The research questions are well defined and the applied methodology is appropriate. However, some questions remain regarding the description and definition of the concepts “sickness absence spells” and “truancy”, especially regarding the measures on the age of 16 and 18. As the authors stated in the discussion, the register data on sickness absence give no information on frequent, short term (<14 days) absence in adults. The authors do not elaborate the distinction between self reported sickness absence and (self reported?) truancy at the age of 16 and 18. It is well known that youngsters at this age do not attend school after reporting sick, so using a “legal” reason for school absence, whilst actually the medical condition is not a reason to stay at home (or elsewhere). The results as presented in table 2 regarding the number of nurse visits and the number of physician visits give reasons to suspect “illegal absence” covered by “legally reporting sick”. In fact, in such cases this could be interpreted as truancy. Furthermore, I could not find out how the authors did handle the issue of frequent, short term absence in adolescents: is there also a lack of information regarding frequent absence shorter than 14 days? Of course, school absence due to sickness or due to truancy can both be interpreted as a lack of “regular social participation”, but authors should elucidate these aspects. Or did authors combine sickness absence and truancy? And how about truancy at the age of 18? Was truancy at this age not reported because compulsory school attendance ends after the age of 16 in Sweden? Besides these remarks, I want to question the classification of sickness absence and truancy: measuring both in terms of “Often” – “Sometimes” – and “No” does not clarify what exactly is meant, frequency of reporting sick or duration of sick leave.

Minor remarks:
Data seem sound to me and, as far as I can judge based on the given information, statistics are used quite correctly. In the discussion, authors stated the risk of type-2 errors. However, they did not mention whether a post hoc analysis was performed. Besides this, the discussion is well balanced regarding strengths and limitations of the study.

Finally, one very small detail: in table 1 (Individual health 18 yrs – Sickness absence - Sometimes) “174)” should be “174”.

**Level of interest:** An article of outstanding merit and interest 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.