Reviewer's report

Title: Determinants of (sustained) Overweight and Complaints in Children and Adolescents in Primary Care: the DOERAK cohort study design

Version: 5 Date: 30 May 2012

Reviewer: Juergen John

Reviewer's report:

Dear colleagues,

Thank you very much for your detailed responses to my comments and questions, which in most cases did allay my concerns. However, two points are remaining where not all my doubts could fully be resolved. I have categorized both remaining issues as “discretionary revisions”, so that you can choose to ignore my recommendations for improvement. Nevertheless, I think that considering my comments could help to make some useful clarifications in the final version of your manuscript.

Discretionary revisions

1. Regarding your description of the sample size calculation, I did not cast doubt on whether a proportion of 25% overweight children in the study population seems feasible. Rather, I am not convinced that you will reach an absolute number of 500 overweight children. Given

- a prevalence rate of 15% of overweight children in the registered population,
- a projected study participation rate of 20% of all GP trainees' young patients, and
- a representative 50% sample of the patient population to be cared for by the GP trainees,

a simple backward calculation shows that actually all overweight children in the registered service population must consult a GP practice during the time of acquiring study participants in order to come up to near a number of 500 children. Therefore, I feel that you are somewhat over-optimistic regarding the targeted number of overweight children participating in the study.

2. Regarding the risk of a selection bias, you write that the GP and GP trainee equally divide the consultations, so that the GP trainees who participate in the study will see a representative sample of the patient population consulting the general practice. But there are numerous techniques of realizing an “equal divide” which are associated with substantial risks of a selection bias. Therefore, some technical details on how the “equal divide” is planned to be made should be given. (Of course, I agree with you, that the invitation by the GP trainee probably is the larger problem in this context.)
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