Reviewer’s report

Title: Cardio-metabolic risk factors in Asian adults with prehypertension

Version: 2 Date: 18 June 2013

Reviewer: Yoshitaka Murakami

Reviewer’s report:

The manuscript is becoming much better than it used to be. Two major concerns are still remained in the manuscript.

1. The definition of the study population should be clear in the title, method and the interpretation of the result.

I understood from your reply comment that the study population in this manuscript was the people without hypertension, diabetes and self-reported cardiovascular disease. I have a concern that readers of the manuscript do not recognize that the study population is _not_ the general population in Singapore which include some hypertensive participants in the population. I think that this study population is so called the ‘healthy population’ or non-hypertensive population. You should notice this in the title, the method and the results and you should comments on this issue in the discussion section. Otherwise, people will misunderstand this extremely high prevalence of pre-hypertension, which never happen to the ‘general population’.

2. Population attributable fraction (PAR) in the cross-sectional study is confusing for most epidemiologists.

I read your reply that Steenland K et al. have showed the PAR of cross-sectional studies in their text. I have already checked this and understood what their opinion. I also found that this is the only text that mentioned the PAR of cross-sectional studies. All other textbooks and the methodological papers deal with the PAR of cohort studied and case-control studies, not cross-sectional studies. Etiological relationships between exposure and an outcome, which cannot examine from cross-sectional studies, is an essential point for PAR calculation. I think the use of PAR is cross-sectional studies is a wrong concept and should be avoided. If you insist on calculating such figures, you can replace PAR to other word such as ‘an overload from pre-hypertension’ or ‘extra prevalence from pre-hypertension’.

Level of interest: An article of limited interest

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.