Reviewer's report

Title: Validation of self reported diagnosis of hypertension in a cohort of university graduates in Spain

Version: 1 Date: 27 June 2005

Reviewer: George Stergiou

Reviewer's report:

General
1. The study sample is too small to address this issue and, therefore, this work can only be accepted as a pilot study.
2. Important findings based on subgroup analysis regarding the effect of age or sex on validation of self-reported hypertension cannot be investigated.
3. Why did the investigators select an even smaller control group?
4. Table 2: The confidence intervals suggest low precision of the study and need for larger study sample.
5. There is a potential for a selection bias because study subjects were participants of cohort study. These suspects are being regularly asked about their hypertension status and blood pressure levels. As a result it might be more likely that these subjects have their blood pressure measured. Therefore, the information they provided regarding hypertension diagnosis might be more reliable that non-study participants.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. How many subjects in each group were treated for hypertension? In treated subjects the validation of self-reported hypertension is not a big issue. The challenging question is the validation of self-reported diagnosis in untreated subjects. These diagnoses are questionable and therefore require separate analysis and report.
2. A table providing comparative information of the two study groups regarding the available parameters (age, sex, BMI, confirmed hypertension, confirmed normotension and over- and underdiagnosed hypertension should be added.
3. 95% confidence intervals for sensitivity, specificity and kappa should be provided.
4. Table 1: p values for comparisons between age groups and BMI groups are needed together with 95% confidence intervals.
5. The proportion of invited subjects that was included in the final analysis (about 76%) should be provided in the abstract.
6. A reference with validation data confirming the accuracy of the automatic device used for blood pressure measurement should be provided.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. Table 1: Omit “CI: confidence interval”

Discretionary Revisions (which the author can choose to ignore)
- None
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory 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

Declaration of competing interests:
I have no competing interest regarding all the above