Reviewer’s report

Title: The impact of education on risk factors and the occurrence of multimorbidity in the EPIC-Heidelberg cohort

Version: 1 Date: 15 July 2008

Reviewer: jean-bernard Ruidavets

Reviewer’s report:

The aim was the study of the association between educational level, an indicator of socio-economic position, and multimorbidity in a sample of subjects aged #50 years from a sub-cohort of the EPIC Study

Minor comments

In table 1: chronic condition of hypertension is given for women but not for men

In this table, 179 women with cancers represent 2.8% whereas 50 subjects with hyperuricemia represent 3.8%.

All the data reported in this table should be carefully checked

In table 1, the marginal numbers concerning the various educational levels must be reported for men and women.

In table 3, the number of subjects must be reported too

In « Results » multimorbidity rates should be reported for each sex

We noticed discrepancies between OR in the text and OR in tables (line 179 in particular)

In the «discussion » indications of tables should be checked (line 257)

Major comments

After a thorough reading of the paper, it was impossible to know if incident pathologies only have been taken into account in the analyses. Were subjects with pathologies at inclusion excluded from the analyses or were these analyses carried out for all the subjects, including subjects with pathologies at inclusion and those for whom the disease occurred during the follow up?

If incident pathologies only were taken into account, it should be accurate to justify the use of a logistic regression in multivariate analyses.

No information concerning participants’ follow-up is reported and more particularly concerning subjects lost for follow-up: their number, distribution according to sex, their educational level etc… Only some pathologies (those more easily identifiable by patients) reported by subjects were checked by a comparison with their medical records. What about the results obtained after the confrontation between reported and checked data? The authors mention validation studies carried out for some pathologies, details should be provided concerning these validation studies.
**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.