Reviewer's report

Title: Prevalence of cognitive impairment in individuals over 65 years of age in an urban area. The importance of certain personal factors. The DERIVA study.

Version: 1 Date: 10 October 2011

Reviewer: Alexander Kurz

Reviewer's report:

> 1. Is the question posed by the authors well defined?

Yes, the study seeks to determine the prevalence of cognitive impairment and dementia in an urban population in Spain. In addition it represents a case-control study of potential risk factors for cognitive impairment.

> 2. Are the methods appropriate and well described?

Not quite. The selection of participants should be described in more detail, including an explanation what "healthcare areas" are and how stratification by these areas was done. The operationalisation of CIND should be provided: how were "low scores" defined, and was a low score on one of the tests sufficient? Was there a priorisation among tests, given the differences in sensitivity? Similarly, the definition of dementia should be justified. Why did the authors assume that impairment on two areas of activities of daily living is worse than impairment on two, assuming that these areas are highly intercorrelated? How were activities of daily living assessed - by informant interviews? Who were the informants (some of the patients had spouses, some did not - could this be a source of bias) ? Was the sample size large enough for a case-control study and how was it justified?

> 3. Are the data sound?

The authors should provide an explanation why the prevalence of CIND was three times higher than the prevalence of dementia, which appears to be out of proportion.

> 4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Yes
> 5. Are the discussion and conclusions well balanced and adequately supported by the data?
See above comments

> 6. Are limitations of the work clearly stated?
Some additional sources of bias should be mentioned

> 7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes

> 8. Do the title and abstract accurately convey what has been found?
Yes

> 9. Is the writing acceptable?
Yes

**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:**
No.