Reviewer’s report

**Title:** Incident somatic comorbidity after psychosis: results from a retrospective cohort study based on Flemish general practice data

**Version:** 1  **Date:** 9 August 2011

**Reviewer:** Peter Schofield

**Reviewer’s report:**

This is an interesting and useful study looking at somatic co-morbidity among people with a psychotic illness. The research question is well defined and the method, a frailty model giving hazard ratios for increased risk, is appropriate. The methodology is well described as is the statistical procedure. The data, a large primary care dataset, appears ideally suited to the research topic. The presentation of the paper and the reporting of the results, in particular, needs to be improved and i have detailed some recommendations below. The discussion addresses most of the limitations of the study (see comments below) and the conclusions are reasonable and justified on the basis of the results. The authors acknowledge previous relevant studies in the discussion although there are some important omissions with regard to using primary care data to look at psychosis. The title and abstract are very clear.

**Intro**

It is stated that: "Data on psychotic conditions among primary care patients are scarce" - in the UK this is untrue. For example, the general practice research database holds detailed information about psychotic conditions as do many local datasets, including data that i work with here in South London. I would recommend the following articles as a starting point:


This is an important point in the paper that is repeated in the abstract and therefore needs to be addressed. Furthermore this suggests the literature reviewed in the article is not as complete as it could be so more work needs to be done on this – both in terms of methodology, i.e. using primarycare data, and studies looking at the same topic.

**Overall presentation**
At the moment the presentation of the paper as a whole and the results in particular needs improving. There are quite a lot grammatical mistakes throughout the paper and it clearly still needs proofreading. One in particular stood out to me: "diagnosed as having psychosis" - this should be "a psychotic illness"

Presentation of the results

Overall the presentation of the results is poor – and the following points need to be addressed

1) P values are sometimes included in the tables but not consistently. Furthermore table 2 has no information about p values other than whether they are less than 0.05 - so more detail is needed here, either as the actual p values or at least stars to show different significance levels.

2) Similarly Confidence intervals are sometimes included in the text but again not consistently

3) Table 3 has an inconsistent number of decimal places for the p values

4) Results are presented as both unadjusted ORs and adjusted Hazard ratios - this is potentially confusing to the reader as they will look to compare coefficients although these are not easily comparable. Perhaps unadjusted hazard ratios using the frailty model could be presented instead - alongside the adjusted HRs in table 3

5) The chart in figure 1 is very confusing and poorly labelled i.e. % when figures are actually proportions, and the labels for the lines are very unclear - couldn't these follow the same order as the lines themselves? As it is this chart does not add anything to the presentation of the results and should either be removed or re-worked in a much more comprehensible format.

Discussion

Returning to the first point (above) I felt there could have been a bit more in the discussion on the validity of using GP diagnosis to determine cases of psychosis - there have been attempts to validate this (e.g. see Nazareth et al's above article)

Also potentially attrition due to mortality could be a problem in a study such as this - perhaps there could be a bit more about how this unobserved factor may have influenced the results?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published
**Statistical review:** No, the manuscript does not need to be seen by a statistician.