Reviewer’s report

Title: Prevalence of Metabolic Syndrome in Patients with Schizophrenia, and Metabolic Changes after 3 Months of Treatment with Antipsychotics - Results from a German Observational Study

Version: 1 Date: 12 July 2011

Reviewer: Davy Vancampfort

Reviewer’s report:

Originality:

This paper is one of the first to examine the prevalence of metabolic syndrome (MetS) in schizophrenia patients in Germany. MetS-prevalence at baseline was compared with rates after three months.

Introduction:

In general, the introduction is well written and sufficiently outlines the goals and rationale for the study.

Some discretionary revisions:

1.) Page 3, line nr 9-13: The authors mention that further factors associated with schizophrenia, like unhealthy diet pattern, smoking, and poor living conditions certainly add to the finding that these patients, in particular those on antipsychotics, have a higher risk to develop metabolic syndrome (MetS) than the general population. A number of more recent and relevant papers than the ones presented are available which could be included in order to strengthen your statement:


2.) The authors could also consider that genetic factors should be considered here. See for example: van Winkel, R., Moons, T., Peerbooms, O., et al., 2010b. MTHFR genotype and differential evolution of metabolic parameters after initiation of a second generation antipsychotic: an observational study. Int Clin Psychopharmacol. 2010;25(5):270-276.

3.) In the introduction two aims are presented: the first one was to investigate the prevalence of MetS in schizophrenia patients in Germany, while the second was
to assess prevalence of MetS at month-3 of treatment with different antipsychotic medications. In the methods-section a third objective was however presented: to detect predictors for the development of the MetS. Please add this third aim also in the introduction.

Methods:
In general, the authors seem to use appropriate methods and statistical analyses.

Discretionary revisions include the following:
- 1.) The authors state that candidate covariates entered in the forward selection process were not pre-screened based on the results of univariate analyses, all of them were considered. Tested covariates (both visits) included: age, sex, time since first symptoms, any concomitant somatic diseases (yes/no), any concomitant non-psychiatric medication at baseline (yes/no), Prev-AP cohort (reference category: Prev-None), active smoker (yes/no), CGI-S score at baseline, CRP # 3 mg/l (yes/no), and HbA1c # 6.5% (yes/no). Since you included both in- and outpatients, I suggest to include this difference in setting as well as a co-variate.

2.) Page 6, line 10: Reference 21 seems not a good one to refer to HbA1c as an assessment of long term glucose regulation.

Results:
The data are clearly presented. No additional comments.

Discussion:
The presented findings are well related to earlier research. The mentioned limitations seem appropriate. No additional comments.

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

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests.