Reviewer’s report

**Title:** The relationship between obesity and neurocognitive function in Chinese patients with schizophrenia

**Version:** 1  **Date:** 8 January 2013

**Reviewer:** Hiroshi Kunugi

**Reviewer’s report:**

This study examined the possible relationship between obesity and cognitive performance in 896 Chinese patients with schizophrenia. The authors found that a higher BMI was associated with significant lower scores in WMS-R Visual Reproduction, WAIS-R Digit Symbol and composite z scores. Obesity patients with schizophrenia had significantly lower scores compared to normal weight patients in Trail Making Test B, WMS-R Visual Reproduction, WAIS Digit Symbol and composite z scores. The sample size is large enough and the findings are interesting and potentially important.

**Comments:**

**Major Compulsory Revisions**

1. The authors should describe the dose of antipsychotics (chlorpromazine equivalent) which should have been taken into consideration in the analysis.

2. The presented scores of cognitive tests seem to be raw scores which were not adjusted for age. The authors should describe more about how scores of cognitive functions were obtained and adjust the scores for age in the statistical analysis.

3. The 4 groups (underweight, normal, overweight, and obesity) significantly differed in sex distribution. So the authors should present data men and women separately particularly for cognitive functions which were found to be associated with BMI.

**Minor Essential Revisions**

1. To be understandable to readers who read only the abstract, the authors must describe in the abstract what was meant by the “composite z score”.

2. The authors should describe how diagnosis was made (i.e., diagnosis made by clinician or psychologist; use of structured interview, etc).

3. The authors should present more information on the subjects. a) Were they inpatients or outpatients? If a substantial proportion of the subjects were inpatients or had a history of hospitalization, it might be intriguing to analyze the effect of hospitalization on BMI. b) How many patients were smokers? Smoking is relevant to BMI and cognitive function; therefore, smoking should be taken into account in the analysis. c) The authors should describe why individuals with BMI>=45 were excluded.
**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

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