Reviewer's report

Title: Incentive Motivation Processing in First-Episode Psychosis

Version: 1 Date: 1 November 2007

Reviewer: BENEDICTO CRESPO-FACORRO

Reviewer's report:

General

The authors studied incentive motivation and several other cognitive domains in a group of 18 first episode psychotic patients and 19 controls. They found that a greater percentage of patients showed a specific deficit in incentive motivation whereas other cognitive functions remain unaffected.

A number of major concerns and comments, which are outlined below, need to be addressed by the authors before considering the manuscript for publication in BMC psychiatry.

Major Compulsory Revisions

• Sample size and selection: The authors explored their hypothesis in a sample of 18 patients (although in the text (page 5) is say that 12 of the 19 patients). It is definitively a small sample for cognitive studies. May the author provide the statistical power of this sample to detect small differences between groups?

It is unclear why the authors included affective and non-affective psychosis. It is widely accepted nowadays that bipolar and schizophrenia differs in the profile of cognitive deficits.

• Another relevant confounder may be the fact that 12 patients were taking antipsychotics. Due to the differential effects of antipsychotics in cognition, a detailed description of concomitant medications, types and doses of antipsychotic is warranted. It is unclear that the rest of patients (N=6) were drug-naïve or drug free. This issue is relevant owing by the fact that these are acutely ill patients. It has been stated that valid and reliable cognitive evaluation in first episode would not be conducted before week 12. I also suggest including some additional information regarding the comparison between treated and untreated patients.

• It is unclear whether the authors present their results as the proportion of participant in each group with cognitive impairments. The authors should make clear their rationale for using this statistical approach.

• Do the authors assess drug history or drug (caffeine, alcohol, cannabis, ....) consumption during the day of evaluation? Would they expect that differences between female and male in this cognitive test?
• The fact that first-episode psychotic patients did not show cognitive
deterioration in attention, executive and spatial working memory is unexpected.
The authors may discussed why they did not find cognitive deficits in contrast to
previous literature describing moderate-marked (1.5-2 SD below) deficits.

What next?: Unable to decide on acceptance or rejection until the authors have
responded to the major compulsory revisions

Level of interest: An article of limited interest

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.