

## **Reviewer's report**

**Title:** Effect of Sunlight Exposure on Cognitive Function: a Cross-Sectional Study

**Version:** 1 **Date:** 28 January 2009

**Reviewer:** Antonio Bulbena

### **Reviewer's report:**

This manuscript deals with a very original topic that is tackled using secondary sources data. The Minor essential reviews of this paper are:

a) definition of cognitive impairment that is very shaky despite publications on the Six-item screener to identify cognitive impairment. Confounding variables have been considered from the epidemiological viewpoint but not clinical: for instance, medication and time of assessment (diurnal variation) are known to influence some cognitive performances.

b) Title is misleading. In fact the sunlight exposure has been found related to cognitive performance only among depressed patients, detail that is over sighted. Depression as variable although better described than cognition needs some rewriting, particularly the literature on cognitive impairment in depression. Also it is well known that depressive patients tend to show social withdrawal, and therefore, less light exposure. Authors have to comment that point, which is very clear for a clinician. In that case relationship may be just the oposite: depressives more cognitively impaired tend to show more social withdrawal.

c) Sunlight exposure is different from to lighththerapy. The fact that same day assessment does not show correlation between sunlight and cognition might be related to indirect behaviors rather than direct effect of light.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

### **Declaration of competing interests:**

I declare that I have no competing interests'