Reviewer's report

**Title:** Diagnosing migraine in research and clinical settings: Development and validation of the Structured Migraine Interview (SMI)

**Version:** 1  **Date:** 27 April 2009

**Reviewer:** Paola Torelli

**Reviewer's report:**

The authors describe a simple and handy tool (Structured Migraine Interview – SMI) designed to assist in establishing a diagnosis of migraine in a clinical population.

1. The aim stated by the authors is not consistent with what is reported in the Results and Discussion sections. On page 4, they write: “... practical screening tool to identify migraine in order to plan treatment and improve the prognosis of both migraine and the comorbid psychiatric conditions”. In fact, the aim of the study is to validate a questionnaire that will enable investigators to make a correct diagnosis in a clinical setting. As regards the correlation between migraine treatment and prognosis, literature data are scarce and there is no evidence that a correct treatment improves migraine prognosis. Moreover, the validation of a diagnostic tool cannot be additionally aimed at improving also the comorbid psychiatric conditions associated with migraine.

   In my opinion, the aim of the study should be stated more clearly and more consistently with what is reported in the Results.

2. In the Results section the authors do not provide any data about the questionnaire’s sensitivity and specificity for migraine with aura and probable migraine. If the tool makes it possible to establish a migraine diagnosis at the one-digit level of the International Classification of Headache Disorders (ICHD-II), there is no need to include in the paper the criteria for migraine with aura and probable migraine, which require diagnosis at the two-digit level of ICHD-II (1.1, 1.2, 1.6). On the other hand, if the tool has been designed and validated for diagnosis at the two-digit level, as seems to be the case from what the authors themselves report in the Methods section, the data should be presented specifically in the Results section.

3. The tool was designed and validated in a number of subjects who were referred to a Headache Clinic and the results of the study demonstrate that the SMI is valid in a clinical setting. I would then leave out from the Discussion and Conclusions any statements regarding the application of the SMI in a research setting: in a survey in clinical or general population it is necessary a face-to-face interview to make the correct diagnosis.

**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.