Reviewer's report

Title: Agreement of Self-Reported Physician Diagnosis of Migraine with International Classification of Headache Disorders-II Migraine Diagnostic Criteria in a Cross-sectional Study of Pregnant Women

Version: 1 Date: 26 September 2013

Reviewer: Paola Torelli

Reviewer's report:

In a group of 500 pregnant women, the authors assessed the concordance between self-reported physician diagnosis of migraine and the diagnosis of migraine established considering the women's answers to a structured questionnaire based on the diagnostic criteria of the International Classification of Headache Disorders, 2nd edition (ICHD-II).

The greatest limitation of the study is represented by the fact that the self-reported physician diagnosis of migraine was not compared against a Gold Standard using a face-to-face interview, but against a questionnaire-based diagnosis.

Major Compulsory Revisions

1. Concordance should be determined also by estimating the value of Cohen's kappa coefficient (Cohen J. A coefficient of agreement for nominal scales. Education Psychol Measure 1960; 20:37-46.)

2. The diagnostic section of the questionnaire should be attached to the paper.

3. Background

Page 4: The last sentence of the Background section should be rewritten so as to explicitly state the primary objective of the study.

4. Methods

4.1 Page 4: Indicate whether the 500 women in the initial sample were consecutive referrals at the Swedish Medical Center or whether some kind of selection was applied.

4.2 Page 4: Specify the tools that were used to evaluate the disability associated with headaches experienced before and during pregnancy.

4.3 Page 4: Indicate whether the questionnaire used to establish the diagnosis of migraine was previously validated and, in the affirmative, specify (a) the Gold Standard it was tested against; (b) the testing modality; and (c) its sensitivity and specificity values.

4.4 Page 4: Indicate whether the questionnaire was administered by a physician.

4.5 Page 4: Indicate how the presence of a previous physician diagnosis of migraine was determined in the women under study. Was there any specific question in the questionnaire? Was it necessary that the physician diagnosis of
migraine be proved by medical records or was it enough that the diagnosis information be simply reported?

5. Results:

Page 7: The sentence “We confirmed self-reported migraine in 81.6% of women when applying the ICHD-II criteria for migraine (63.1%) and probable migraine (18.5%)” should be changed specifying “ […] criteria for definitive migraine (63.1%) […]”.

6. Discussion:

Page 7: The authors state “Our study finding of a high prevalence (29.8%) […] is consistent with prior literature […]” and to support their statement they mention the 1-year prevalence found in the American Migraine Prevalence and Prevention study. It would be more correct to have data compared considering the studies that evaluated the lifetime prevalence of migraine, because it seems that in this women cohort the past/1-year prevalence was not investigated.

7. Conclusions:

Page 9-10: The sentence “Our findings demonstrate the feasibility of using questionnaire-based migraine assessment according to full ICHD-II criteria in epidemiological studies of pregnant women” is not correct. The validity of the questionnaire was not studied in this population. It can only be stated that there was a certain degree of agreement, which should be quantified, between self-reported physician diagnosis of migraine and the diagnosis of migraine based on the questionnaire according to the ICHD-II criteria.

Minor Essential Revisions

Throughout the text, please replace ICD-II with ICHD-II.

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