Reviewer's report

Title: Changes of Hormone Replacement Therapy in Menopausal Women: An Observational Study in Taiwan

Version: 3 Date: 3 July 2006
Reviewer: Virginie RINGA

Reviewer's report:

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

All of the comments have been taken into account, but important questions remain concerning the methodology of the analyses.

As we already said, the two samples of women, 402 who had outpatient visits before and 360 women who had outpatient visits after the publication of the WHI, are not independant. So, to use a CHI 2 test is incorrect to compare these two groups. The comparisons presented in table 2 should concern outpatient visits as unit of analyses, as it is the case for the second part of table 2. In the methodology of this work, a participant women cannot be considered as unit of analysis.

The methods used to study the influence of WHI on the prescription of HRT still need to be clarified. The criteria used to include the variables in the logistic regression are not mentionned (usually variables are selected after a first step of univariate analysis).

Table 3 is difficult to understand:
- The sample size of each group for each variable must be precised.
- Percentages in the second column of table 3 seem to be the proportion of, for the first line, the number of outpatient visits after and before the publication of the WHI. Percentages giving information for the reader are the proportions of outpatient visit with a prescription of MHT in each category.
- It is difficult to understand the meaning of the ORs presented for the interactions.
- Confidence interval for ORs corresponding to medical institution seem very wide.

Considering these problems concerning the methodology of the analyses, it is difficult to give an advice on the sections Discussion and Conclusion.

We are aware of the hard work the authors have made, but they should take an advice from an epidemiological team for methodological help.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

What next?: Reject because scientifically unsound

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited
Statistical review: Yes

Declaration of competing interests:
I declare that I have no competing interests' below.