Reviewer's report

Title: Determinants of the range of drugs prescribed in general practice: a cross-sectional analysis

Version: 1 Date: 4 January 2007

Reviewer: Paul Emile Marie P.E.M. Muijrers

Reviewer's report:

General
This is a well written article on an interesting subject. The methodology is sound and well executed. The analysis is adequate and the interpretation is in general reasonable.

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

Background:
Some of the references are dated. The literature search could be more comprehensive, and more recent literature could have been included.
-Mentioning, and a reference concerning the DU90% index is missing.
The DU90% method relates the quality of prescribing to the number of different drugs that are responsible for 90% of the drug use, the DU90% index. The method assumes that good prescribing is correlated with a relatively limited choice from the available range of drugs [Bergman U, Popa C, Tomson Y, Wettermark B, Einarson TR, Aberg H, Sjoqvist F. Drug utilization 90%--a simple method for assessing the quality of drug prescribing. Eur J Clin Pharmacol. 1998;54(2):113-8].
-There have been a number of previous studies which focused on the prescribing patterns of GPs. Drug prescription patterns differ considerably among individual general practitioners. Previous research has been aimed at determining factors which may account for these differences. These factors can be divided into five categories: General person-specific and practice-specific characteristics, pharmaceutical aspects, the effect of guidelines, the effect of information and education (postgraduate training, pharmacist, pharmaceutical industry) and the influence of the patient. (With respect to the person-specific and practice-specific characteristics, there are a number of indications in various countries that indicate that high-volume prescribing is positively associated with male doctors, running a large practice or a solo practice, working in dispensing practices, not being a GP trainer and running a practice in a deprived area).

Hypotheses:
Some of the references are dated. The literature search could be more comprehensive, and more recent literature could have been included.
‘Data for dispensing practices might also contain drugs that were prescribed by hospital consultants, which would result in a broader range’, This is not relevant, because data for non-dispensing practices might also concern drugs that were prescribed (or initiated) by hospital consultants.

Discussion:
In the discussion section, more attention should be given to the relevance of ‘the concept of the range of drugs prescribed’ as an alternative to more commonly used measurements, such as the total number of prescriptions, the DU-90% index and other prescribing indicators.

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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)

Hypotheses:
‘Pharmaco-therapeutic consultations (FTO)’ or more commonly, Pharmaco-Therapeutic Audit Meeting (PTAM).

Results:
As the correlation coefficients between the explanatory variables are moderate, these can be jointly used in a multivariate analysis. For this reason, table 3 may be redundant.
Discretionary Revisions (which the author can choose to ignore)

**What next?:** Accept after minor essential revisions

**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