Reviewer's report

Title: Unintentional non-adherence to chronic prescription medications: how unintentional is it really?

Version: 1 Date: 19 June 2011

Reviewer: Dianne Goeman

Reviewer's report:

1. Is the question posed by the authors well defined?

The authors state two objectives:

1. to study the prevalence and predictors of unintentional non-adherence
2. to explore the inter-relationship between intentional and unintentional non-adherence vis-à-vis patients’ medication beliefs

Objective two would be clearer if the authors removed the term ‘vis-a’vis’ and replaced this with ‘in relation to’.

2. Are the methods appropriate and well described?

The authors reported that the adults with chronic disease that they surveyed were selected using the Harris Interactive Chronic Illness Panel (CIP). Although they state that it is designed to be nationally representative internet-based panel of adults with chronic diseases, it is not clear how the membership of this panel is selected.

Clearly, the survey participants were not representative. As stated by the authors themselves compared to the US adult population the sample was under-represented by adults with an income less than $25,000, those with only high school education or less and were over-represented by Caucasians. Also the authors state that all respondents identified themselves as adherent (persistent) to prescription medications.

3. Are the data sound?

The response rate for the survey was only 29% and as stated above, the sample was clearly biased toward well educated, high income Caucasians. A group who are more likely to be adherent.

There is no discussion in regard to cost of medication and how this may vary depending on the illness and insurance status.

I am surprised that the authors have chosen to investigate non-adherence linking
asthma, hypertension, diabetes, hyperlipidemia, osteoporosis and depression. Reasons for non-adherence are known to vary across illnesses and in the case of asthma severity can be a significant factor to adherence to preventer medication.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?

Given my concerns in regard to sample selection and the study of multiple conditions as one I am not convinced that the evidence provided supports the conclusion made by the authors.

The authors conclude that unintentional non-adherence is not random and is predicted by medication beliefs, chronic disease and socio-demographics. They advise that health care providers should therefore screen for unintentional non-adherence by proactively addressing patients suboptimal medication beliefs before choosing to discontinue therapy. This conclusion does not appear to differ from previously published work and fails to add to the debate.

The authors also fail to address the significant issues of the cost and side effects of medication and that these can only be addressed by ensuring medication is affordable and safe.

6. Are limitations of the work clearly stated?

Some limitations are stated. I would like to see a clearer description of the Harris Interactive Chronic Illness Panel (CIP). Who set it up and for what purpose.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes, although I am surprised that many publications the authors refer to report on illnesses such as HIV, breast cancer and glaucoma. These are outside those listed for investigation in regard to non-adherence eg. Asthma, hypertension, diabetes, hyperlipidemia, osteoporosis or depression. Clearly, adherence issues to medication to treat illnesses which are life-shortening would differ.

8. Do the title and abstract accurately convey what has been found?

The title ‘Unintentional non-adherence to chronic prescription medications: how unintentional is it really?’ conveys what the authors conclude from their research.

I found the abstract difficult to follow. I think the authors should simplify it.
9. Is the writing acceptable?  
OK

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

**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