Reviewer's report

Title: Corticosteroid prescribing in palliative care settings: a retrospective analysis in New Zealand

Version: 1 Date: 21 June 2013

Reviewer: Anna Spathis

Reviewer's report:

This is a large case-note review considering an important topic. Corticosteroids are widely prescribed in palliative care, without a clear evidence base to support this practice. However, I am concerned that this review does not advance current knowledge in this field to warrant publication in its current form. The main finding is that approximately two third of patients in these hospices are prescribed steroids, but it is clear from the first paragraph in the discussion that this has already been established.

Other findings are not of particular interest because of the inherent limitations of the study. For example:

1) The results relating to the indication for prescription are limited by the fact the categories are not mutually exclusive (e.g. soft tissue infiltration can also include cerebral tumours, capsular stretching by liver metastases and so on, e.g. use for pain is defined as a non-specific indication and yet relates to most of the other categories too).

2) The data relating to steroid stopping does not define 'stopping abruptly', and does not apparently consider whether the stopping related to the patient dying or being moribund (it is not usual practice to convert to the parenteral route in the last days of life).

3) Recording of adverse effects is, as correctly stated in the results, impossible to interpret because of poor documentation.

4) Data was collected four years ago, and I agree with the authors' concern that practice may have changed since then.

As well as these fundamental concerns, major compulsory revisions that would be needed before the paper could be considered for publication include:

1) Statements need to be amended that are not apparently supported by the data. For example a) in the abstract results, 'Adverse effects tended to be undifferentiated from the dying process', does not seem to relate to data in the main text of the paper, and b) in the abstract and main conclusion, the need for reappraisal or reconsideration of their use in palliative care is not well supported by the data presented.

2) 'International best practice' needs to be defined. This is referred to in several places (e.g. end of introduction) but it is not clear what it is.
3) There are inconsistent statements about the method of hospice selection eg early in the methods 'a balance of rural and urban hospices', and later in the methods 'for ease of access'.

4) In the last two paragraphs of the results, there is no explanation for why phenytoin and zopiclone are being considered, and the relevance of this whole section is unclear. The statement about the different proportion of patients prescribed NSAIDs also appears to be relevant.

5) The bar charts are hard to interpret as 'n' is not clearly defined eg in figure 2, does it relate to the number of patients in the hospice, or the number of patients on steroids, or the number of patients on steroids for non-specific indications?

Minor but essential revisions should include a number of statements that are unclear or wrong. Examples include the last sentence of the 'sample size' section; the statement that abrupt cessation of steroids 'may lead to adrenal suppression'; and the phrase with the statistical analysis section 'the clustering of data where patients had more than one record'.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**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.