Reviewer's report

Title: Pharmacotherapy of elderly patients in everyday anthroposophic medical practice: a prospective, multicenter observational study

Version: 1 Date: 15 March 2010

Reviewer: Prasad Nishtala

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Major Compulsory Revisions

Statistical Analysis

A multivariate logistic regression model (LR) is a useful statistical model to determine predictors for medication use. Did the authors conduct a univariate analysis?

How were the variables selected to be incorporated into the LR model?

The description of conducting a multivariate LR analysis is not an adequate explanation of the statistical analysis employed. More detail is required (Goodness-of-fit and collinerality diagnostics)

I presume a univariate analysis MUST have been conducted. I would like to know if a bonferroni correction was done.

Further did the authors conduct interaction effects with age* diagnosis, i.e. for each of the diagnosis

Minor Essential Revisions

The authors make the case for the public health importance of the topic and I concur. I agree the evidence for using conventional pharmacotherapy is lacking in older people. Is there any strong evidence for using CAM in this vulnerable population?

Page 6, Line 13, 29 –“physicians had practiced for at least five years in primary care in addition to completing training in anthroposophic medicine.”

A control group of physicians without training in anthroposophic medicine would have made this study more robust. I think this is a limitation.

It is interesting to note CAM medications were prescribed in patients with cancer and dementia, whilst conventional medications accounted for the majority in patients with cardiovascular and metabolic disorders? Could the authors offer an explanation for this trend?
Table 2: AOR for Mood and affective disorders was not significant. This is not consistent with statement made in Page 15, Line 4—“This also applies to depression as visiting an anthroposophic GP has shown specific benefits in terms of quality of life for patients suffering from depression.” Is this a general statement or relates to findings from this study. Please provide more clarity.

The authors rightly point out coding inaccuracies cannot be ruled out entirely. However, it would be useful to know who carried out the coding and if an inter-rater reliability was conducted. How reliable is the data?

I’m pleased to see the authors have listed non recording of patient self-medication with CAM remedies or over-the-counter (OTC) drugs as a limitation. I think this an important limitation? This may partly explain why only 36% of patients in this study took more than 5 medications whilst that reported in the literature differ significantly.

-Page 18, Para 3

I’m surprised to note antidepressants amitriptyline (19.3% of all antidepressants) and doxepin (7.5%) are still being employed in primary care to treat depression in older people. I’m particularly concerned with the peripheral and CNS anticholinergic adverse effects. It would be interesting to see how many were co-prescribed hypericum? I know it's hard but this data would be a valuable insight to this study?

I agree the evidence was acetyl cholinesterase inhibitors in dementia are not strong either. However, the readers would benefit to know how many patients were co-prescribed ginkgo biloba with AcHEI.

Discretionary Revisions

Page 5, Para2, replace general practitioners with physicians

Page 7, Para 3, Line 8, Please abbreviate adjusted odds ratio as AOR

Page 14, Line 3, replace ‘GPs’ with physicians to be consistent with rest of the manuscript.

Page 18, Para 2, Another interesting observation- Ginkgo biloba was the most frequently prescribed anti-dementia drug over all (68.6% of all anti-dementia drugs). I refer to the Cochrane review Birks J, Grimley Evans J. Ginkgo biloba for cognitive impairment and dementia. Cochrane Database of Systematic Reviews 2009, Issue 1. Art. No.: CD003120. DOI: 10.1002/14651858.CD003120.pub3.-There is no convincing evidence that Ginkgo biloba is efficacious for dementia and cognitive impairment.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.