Reviewer's report

Title: Complementary and alternative medicines (CAMs) and adherence to mental health medications

Version: 2 Date: 21 October 2013

Reviewer: Ursula Werneke

Reviewer's report:

CAM adherence to mental health medications is an important issue for patients, clinicians and CAM practitioners alike. This makes the paper highly clinical relevant. The main strength of the paper is its large sample size, which yields statistical power. However, there are some problems that need addressing.

Major compulsory revisions

1. The categories of mental health problems seem quite broad and psychotic disorders are not included. Within each category, the range of severity is potentially large. For instance, an affective disorder may manifest itself as a mild depressive episode at one end of the spectrum and as a bipolar I disorder at the other. The authors take account of severity to a degree since they control for individuals with or without a manifest diagnosis of a mental health problem. Medication count may again constitute a marker for severity of illness or an expression of conventional medicines not working.

2. In this model, BMI is included as a marker of physical health. But in the realm of mental health problem, an increased BMI could be associated with adherence to psychotropic medication. Many (but not all) are associated with weight gain.

3. Other variables than included in the current model may affect adherence. Such might include ethnicity, social and educational status, family relations and severity and chronicity of mental health problems. Type of CAM may also play a role. Herbal remedies or supplements may impact on adherence to conventional medications in a different way than acupuncture or other non-pharmacological CAMs. Also the potential for interactions and adverse events would differ. That is why it would be helpful statistically to explore how much of the variance the model with the currently included variables actually explains (R2). From the odds ratios, it seems that age and medication count –albeit statistically relevant- may be of limited clinical significance.

Minor essential revisions

4. The paper would benefit from a clearer structure and simplification. The statement that “Classification was unimpressive with a success rate of 62%” needs explanation.

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.