Reviewer's report

Title: Homeopathy for mental fatigue: lessons from a randomized, triple blind, placebo-controlled cross-over clinical trial

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Reviewer: Jonathan Davidson

Reviewer's report:

The authors have largely responded to previous comments. There is one point which calls for further attention however.

The finding that both active and placebo contained the same amount of Kali phos raises an interesting and important point. If as the authors say, the point of the study was to assess the effect of potentization (succussion) then it is a unique report since I am unaware of trials which have controlled for dilution (or quantity of substance) while assessing the effect of succussion. (Did the authors plan for the amount of Kali to be the same in both treatments?) This makes the study even more impactful and I think the title and conclusions should reflect this. Something like "Effect of homeopathic succussion on mental fatigue etc...."

While understanding this goes beyond the purpose of the paper, in the discussion it is worth making the point that minute amounts of medicine (picograms for pherins for example) are pharmacologically active - picograms would be 10-9 dilutions of mg, which is in the homeopathic range. Therefore a "potentized" medicine can still work pharmacologically. As a result I suggest it would help of the authors give the amount of Kali phos in standard doses (picograms, nanograms or whatever), relative to the mother tincture. This would help to build a communication bridge between the homeopathic and non-homeopathic audiences. I think it would also make homeopathic dose expression a bit more easily interpretable by the general readership who is accustomed to thinking in pharmacological terms.

One more point - at least two reports (Chikramane et al - Homeopathy 2010; 99: 231-242 and Kerr HD & Saryan LA - Clinical Toxicology 1986; 24: 451-459) have demonstrated that homeopathic doses which supposedly contained no original material actually had measurable drug. Thus an acknowledgement that this could have been an issue is worth making. What was the dose of Kali phos in the atomic absorption spectroscopy mentioned on page 12?

Level of interest: An article of importance in its field

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 I have no competing interests.