Reviewer’s report

Title: Chronic Headache Education and Self-management Study (CHESS) - a mixed method feasibility study to inform the design of a randomised controlled trial

Version: 1 Date: 14 Dec 2018

Reviewer: Shawn M. Kneipp

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Over all, the authors have sufficiently responded to the first round of review comments, and the manuscript is more more organized and detailed as a result. A few select issues remain:

1. Lines 117-118: The rationale provided for the claim "Secondly, we needed to be able to classify headaches that respond best to our type of intervention and inform clinical care (2)" was that "Many people with chronic headache disorders do not have an accurate diagnosis and receive inappropriate treatment of their headaches." The rationale seems incomplete -- the authors are really talking about classifying chronic headaches across various etiology types (migraine, tension, etc.), and do not yet know if this type of headache sufferer will actually respond to the intervention. It may be more accurate to say that there is a need to classify headaches into X Y Z categories, given the intervention was developed for headaches with these features, AND one that could be easily applied in a clinical setting to identify patients with chronic headache to initiate further evaluation and treatment.

2. Lines 137-138: The reasoning here seems to be insufficient around why one would use an electronic diary. The authors state it is to reduce recall bias, and offer 2 citations to support this point. The issue, though, isn't whether the reporting is made on an electronic device or not (relative to paper/pencil) -- the reason that electronic diaries have improved recall is the TIMING of, and the FREQUENCY of reporting improves accuracy. As written, there is no empirical support to suggest simply collecting headache symptom data over the prior 7 days using an electronic device improves recall over any paper/pencil format. If the goal was to improve recall, then the authors would need to reconsider how they are USING the electronic data collection -- are you collecting symptoms at random points? (using ecological momentary assessment approach), are you asking for a daily report, every other day, etc.

3. Finally, just a note about forging ahead with the 2 day intensive, group-based format in what will be a challenging population to recruit due to work and other family/caregiving constraints . . . the feasibility provided quite a bit of data to show that work commitments got in the way of participating in the feasibility trial. It seems there might be another way to engage this group than in-person, long or all day training. Taking a cue from the Chronic Disease Self-Management Program, Lorig and colleagues have modified their group-based intervention to be delivered via internet, and had similar/good outcomes in a slightly younger population that included a higher proportion of working adults (as opposed to retirees). It will be interesting to
see the results of the trial, which seems already underway, in terms of participation. Special
attention to participation and potentially collecting more data around what would make it more
accessible would be useful. For the manuscript, an additional statement or two in the discussion
related to uptake / accessibility, and being mindful of potential additional modifications would
strengthen the manuscript and bring the conclusions more in line with the findings.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further
assessment in your comments to the editors.

I am able to assess the statistics

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