Reviewer's report

Title: The feasibility and acceptability of an early intervention in primary care to prevent Chronic Fatigue Syndrome (CFS) in adults: randomised controlled trial

Version: 0 Date: 03 Jul 2019

Reviewer: John Edwards

Reviewer's report:

Thank you for the opportunity to read your manuscript, which I believe tries to tackle an important problem for patients, clinicians, and the health service.

I have the following observations to make, in a spirit of constructive engagement.

Major
The Consort statement refers to Additional files 1-5. I can only trace Additional file 1. Can you clarify whether the other such files exist or amend please.

Introduction
- the first two sentences of the introduction seem not to provide a reference for the assertions. I have looked at reference 1 and cannot readily find the details contained within it, so maybe I have either missed it or there are other supporting sources?
- line 79, consider giving the odds ratio (with 95% confidence interval) rather than the percentages of people fatigued in each arm at control. Also (line 80) the secondary outcomes seem not to have reached statistical significance (or even close to it), so I have reservations about your argument that "outcomes favoured the intervention" - a signal is the best that can be taken from those secondary measures.

Methods
- line 99; the fact that you have chosen different sampling frames with a spread of aggregated population socioeconomic scores does not "[ensure] a representative sample of patients" and so this needs to be reworded
- line 102; your cited reference does not seem to argue that a tenth of GP consultations record a primary complaint of fatigue. The opening sentence of that reference actually references another article from 1990 when it states that "Over 10% of patients attending primary care clinics describe at least one month of substantial fatigue" but the nature of the complaint (as primary or other) is not stated.
- line 104; "Either short or long term fatigue was reported in 35% of the population, with usual medical management in primary care 70-75% patients report that their fatigue persists at a year (1)" - I suspect that there is a punctuation mark missing between "care" and "70" but also I have not found this information in the NICE guideline - again, I may simply have missed it but would be grateful if you would check.
- line 105; your statement that "it would be feasible to recruit 100 patients in 12 months" based on the list size assumption given is not self evident to me - you have gone on to demonstrate
problems with recruitment and so I think this needs rephrasing (also, what was the pooled list size of the practices recruited?)
- line 112; do you mean ≥4 on the Chalder scale?
- line 124; the exact Read codes and terms specified should be given
- line 126 and 136; there seem to be two paragraphs in which a sample of 100 patients is referred to. Do both paragraphs refer to the same sample? Also, (line 138) a consecutive sample of 100 patients does not seem to me to fulfil the criteria for random selection. The fact that you have used a sample from only one practice makes conclusions hard to generalise since coding practices differ between organisations. Was the practice chosen at random or purposively?
- line 157; the EI group may have continued to receive all the component of usual care as well as EI but it seems inappropriate to argue that the intervention group "continued to receive usual care".
- line 160; your intervention comprised a book, a single face-to-face treatment session, and three follow up sessions yet you say the "intervention was given...within two weeks of randomisation" - do you mean the first two elements only?
- line 162; when you say that the Bristol service "follows NICE guidelines", so you mean the assessment and treatment is guided by and often consistent with the guidelines? As phrased, it could create the impression of an inflexible service delivering only what guidelines recommend (which is of course not the purpose of guidelines).

Results
The number of instances of patients consulting with a relevant fatigue code recorded is specified but the denominator is not so clear. This impacts on your conclusion that the 1711 consultations in the study period is consistent with other studies. Can more information be provided?
- lines 283-289 and Table 3; as you highlight in the abstract, this study was not powered to support statistical analysis of differences in outcomes. It therefore seems incongruous to use descriptive epidemiology to show comparisons between groups in outcomes. I consider this should be removed and numerical results focus on study and recruitment processes rather than outcomes.
- line 295; I have not followed where these 190 patients have come from. Please can you clarify.
- line 302 and subsequent; reporting of qualitative findings. This reporting style does not seem to me explicitly to follow a clear thematic analysis approach (see line 212 "systematically assigned codes and analysed thematically to identify themes..." Would it be possible to clarify the reporting?

Conclusions
- line 551; I do not believe that the entirety of the first sentence is justified by your results. If these are conclusions that others have drawn, this should be clearly stated and referenced. Otherwise, the conclusions should tie in directly to the results.
Minor

General issues
- there is inconsistent use of capitalisation for terms that are not proper nouns nor typically, in non-abbreviated form at least, subject to capitalisation.
- punctuation in lists is inconsistent with missing commas, as well as more than one item connected to its predecessor by "and".
- there seems to be at least one occurrence of a Harvard style reference (NICE 2007) in a manuscript that otherwise uses Vancouver style. A critical proofread would help.
- similarly, the plural form of GP occurs both as GP's and GPs. I think the latter is correct but a form should be adhered to throughout.

Methods
- line 96; I think the CRN has changed its name again so this should be updated and any abbreviations given in full
- line 118; I think there is a missing punctuation mark between "sheet)" and ..&gt;"the"
- line 190; "principals" should in this case be "principles", I think.

Results
- Table 2; the final 2 rows presumably refer to the number of days in which productivity was affected but this requires inference and should be clarified
- line 496; you report one intervention and one comparator arm so this should I think be rephrased.

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