Reviewer’s report

Title: The effects of a physical activity counseling program after an exacerbation in COPD: a randomized controlled pilot study.

Version: 8 Date: 18 June 2015

Reviewer: Andrew Wilson

Reviewer's report:

The effects of a physical activity counseling program after an exacerbation in patients with Chronic Obstructive Pulmonary Disease: a randomized controlled pilot study.

This is a randomised controlled pilot trial of the use of a pedometer and telephone counselling following admission to hospital for an exacerbation of chronic obstructive pulmonary disease. The biggest concern is the lack of justification of the sample size.

Major Compulsory Revisions

1) Research question
   The justification for the study is clearly defined and appropriate – admission to hospital for exacerbation of COPD results in a reduction in exercise capacity and formal pulmonary rehabilitation is used but attendance is poor. However referencing the data on post-discharge pulmonary rehabilitation would be useful.

2) Methods
   The study is randomised but generation of the randomisation code and the method of randomisation or allocation of intervention is not defined. It is not stated in the methods that the ratio of randomisation is 1:1. The study cannot be double blind due to the type of intervention but it is not clear which researchers remain blind to the allocation – presumably the statistician. The only difference between the groups is the treatment under intervention. The primary outcome measure is not defined. The outcomes chosen were not justified but were appropriate with perhaps the exception of lung function is unlikely to change following pulmonary rehabilitation. The outcomes chosen were validated, except Flibit Ultra, and the research group have experience in undertaking them. Ethical approval was granted and the study was registered on clinicaltrials.gov (with no modifications in the protocol since submission to clinicaltrials.gov).

3) Patients
   The treatment and control groups are similar at baseline. There is justification of the sample size and no power calculation is provided. It is not clear what a “convenience” sample means. The drop out was small and clearly documented. It is not clear whether the analysis was undertaken on an intention to treat or a per protocol basis – presumably the latter.
4) Intervention
The intervention is not clearly described. It would be better to state that telephone calls took place three times per week rather than “3 weekly”. The duration of the calls, timing of the calls and more detail of the content of the calls should be provided. In addition, usual care in the control group is not well described.

5) Data
The data are analysed appropriately and clearly represented. There were “Captions to figures” but no figure legends so interpretation of the figure was difficult and impossible without reference to the paper. Data on safety were not provided (other than 2 deaths in the intervention group)

Minor Essential Revisions
The introduction and discussions were appropriate. The limitations were described very briefly. The title and abstract are appropriate. The writing style is appropriate with the following errors

Title-Counselling*
120 -intervention*
127- Two and four instead of Two and 4 weeks
124- after the second and fourth week
267- 2 months

**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