Reviewer's report

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

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Reviewer: Sally Singh

Reviewer's report:

This is an interesting paper that has examined the impact of a physical activity intervention after an admission for an acute exacerbation of COPD. The paper comes from a group with an outstanding reputation in the field and addresses an important area.

This is a randomised controlled pilot trial of a physical activity counselling programme. The group recruited and allocated 30 patients to either usual care or a physical activity intervention, they found that both groups recovered in all outcome measures, and there was no difference in recovery between the two groups.

Comments

I am not sure this is a pilot trial or a feasibility trial. For a pilot trial the aim is to understand how a fully powered RCT may operate. It would be useful if this is a pilot trial to understand what numbers might need to be recruited to observe a difference in the nominated primary outcome. If it is to assess uptake and acceptability of the intervention it is then a feasibility trial. This needs clarifying in the methods/title/discussion. If it was a pilot study the authors should comment if they propose to continue with the full study because it is more likely to be underpowered if the outcome is physical activity. If it is a feasibility trial the authors need to comment more on the uptake and acceptability of the trial.

Given that the authors anticipated an improvement in the intervention group and this is a pilot study a sample size should be proposed, so the reader can understand how large a study might be required.

The most recent advice on performing the 6MWT suggests that stops (number and time) should be recorded, is this current practice in this centre and if so could it be reported? I assume two walks were completed, it is not clear in the text.

The methods section needs more detail, what was his approach to improve physical activity, xxx steps per day/ per week? How was the target set. How long was each phone call and what was discussed, step targets, barriers to exercise?

In the BMJ last year there was an important paper published by Greening et al has been referenced but not discussed in context of this paper. This paper was
probably the first attempt to provide an alternative approach to conventional pulmonary rehabilitation and should be discussed thoroughly as the sentiment of the paper is exactly the same.

There appears to be some important differences at baseline in some of the outcome measures and lung function, it is not clear if these differences were accounted for in the statistical analysis.

Do you know how many people lived alone, you might imagine that would influence recovery?

Surprisingly some of the baseline measures are higher than I would expect, particularly quadriceps force - can the authors comment on this. It would be helpful to understand the index length of stay.

**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'