Author’s response to reviews

Title: Changes in Mental Health in Compliers and Non-Compliers with Physical Activity Recommendations in Patients with Stress-Related Exhaustion

Authors:
Agneta Lindegård (agneta.lindegard@vgregion.se)
Ingibjörg Jonsdottir (ingibjorg.jonsdottir@vgregion.se)
Mats Börjesson (mats.borjesson@ki.se)
Magnus Lindwall (magnus.lindwall@gu.se)
Markus Gerber (markus.gerber@unibas.ch)

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Author’s response to reviews:

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Changes in Mental Health in Compliers and Non-Compliers with Physical Activity Recommendations in Patients with Stress-Related Exhaustion

Agneta Lindegård, Ingibjörg H. Jonsdottir, Mats Börjesson, Magnus Lindwall and Markus Gerber

BMC Psychiatry

Dear Prof. Gerber,

Your manuscript "Changes in Mental Health in Compliers and Non-Compliers with Physical Activity Recommendations in Patients with Stress-Related Exhaustion" (BPSY-D-15-00008) has been assessed by our reviewers. Based on these reports, and my own assessment as Editor, I am pleased to inform you that it is potentially acceptable for publication in BMC Psychiatry, once you have carried out some essential revisions suggested by our reviewers.

Their reports, together with any other comments, are below. Please also take a moment to check our website at http://bpsy.edmgr.com/l.asp?i=2238&l=7KEEZMU2 for any additional comments that were saved as attachments. Please note that as BMC Psychiatry has a policy of open peer review, you will be able to see the names of the reviewers.
Once you have made the necessary corrections, please submit a revised manuscript online at: http://bpsy.edmgr.com/

Please include a cover letter with a point-by-point response to the comments, describing any additional experiments that were carried out and including a detailed rebuttal of any criticisms or requested revisions that you disagreed with. Please also ensure that all changes to the manuscript are indicated in the text by highlighting or using track changes.

Please also ensure that your revised manuscript conforms to the journal style, which can be found at the Instructions for Authors on the journal homepage.

A decision will be made once we have received your revised manuscript, which we expect by 29 Aug 2015.

We look forward to receiving your revised manuscript and please do not hesitate to contact us if you have any questions.

Best wishes,

Jutta M Wolf, Ph.D.
BMC Psychiatry

Comment:
Editor BMC Psychiatry

Dear Prof. Wolf,

We were very pleased to receive your positive response inviting us to submit a second revision of the above paper to you, for consideration for publication in BMC Psychiatry. We wish to express our gratitude for the time you and the referees spent in reviewing the submitted manuscript and for the constructive suggestions you made.

Below, you find our point-by-point response to the reviewers’ comments. Most importantly, we have shortened the introduction, pointed out that the physical activity component of the MMT differed from the other components in that it was provided to all patients (but that compliance differed considerably among participants), and asked a native-speaker to check the manuscript again for orthographic and stylistic correctness.

Per your request, we are submitting the document electronically. In the edited manuscript, we have marked all changes in green. If we can provide any additional information, or make any additional changes, please do not hesitate to let us know.

Sincerely,
On behalf of the authors
Agneta Lindegård and Markus Gerber

Reviewer's report
Title: Changes in Mental Health in Compliers and Non-Compliers with Physical Activity Recommendations in Patients with Stress-Related Exhaustion

Date: 30 July 2015
Reviewer: Eli E Puterman

Reviewer's report:
Major revision required

I commend the reviewer of taking note of the comments and requests for revisions so carefully, and for a thorough revision. The added detail is much appreciated. Here are some added thoughts on the manuscript:

Response: Thank you for these comments. We are grateful that our efforts are appreciated. You find our answer to your additional comments below.

1) The new paragraphs on the first few pages of the introduction feels hastily written, with a lot of detail but then also not enough. For example, it's only later in the introduction that these meta-analyses only looked at pre-post effects, not longterm effects, and that while all suggest that effects are strong (ES range = XX to XX), across all mental illnesses and community based samples and for depression and anxiety outcomes, the effects are slightly reduced in higher quality studies (ES =). I think these new additions go over board, and hard to consolidate and understand their purpose and strengths.

Response: Thank you for your feedback. Following your advice, we have deleted some information. In the revised manuscript, we think that sufficient information is given to reveal the gaps in the literature, relevant to understand the purpose and novelty of the present study. These gaps are:

• The existing RCTs assess only short-term effects.

• Compliance and long-term effects have been neglected, although they proved important in a follow-up study (Hoffman et al., 2011)

• Little is known about the sustainability of intervention effects. More information is needed concerning patients’ exercise participation following the completion of therapeutic treatment.

• Very few studies have focused on patients with severe burnout symptoms.
• No studies have examined whether it is possible to accomplish improvements in mental health by promoting physical activity as a part of MMT in a clinical setting (although such studies have a high degree of external validity).

Some of the information is also needed to interpret our findings, showing that our results are in line with previous research.

• Effects of physical activity interventions are stronger on depression than on anxiety.

• The effects of trial interventions that meet the ACSM guidelines for aerobic exercise do not differ from those that do not meet these standards.

2) I still do not get a sense that a thorough examination was performed whether the active agent was the physical activity or attendance at the clinic, for all pieces or for the sleep piece only. Do you have data on how often they attended the clinic? Data on how often they saw the doctors? for how long? did they attend the sleep disturbance group sessions or not? did their employers attend? what about their family members? The MMT is so diverse but these components are not tested, that my worry is that while you do many comparisons between the different compliance groups, you cannot really say it's exercise or PA without these tests. Also, while I agree that the MMT is important for clinical practice, is it not also important for clinical practice to do a thorough analysis about the active components of an MMT?

Response: We fully agree that a thorough analysis about the active component of a MMT is important for clinical practice. Nevertheless, we would like to highlight again that it is not the purpose of this study to compare different treatment components of the MMT (which all stopped after 12 months of treatment), but to find out how compliance with PA recommendations after completion of the MMT is associated with the sustainability of the previously achieved (positive) effects of the MMT. Based on your feedback, we have therefore added further information pointing out that …

• only patients with sleep disturbances were offered treatment to improve sleep, and only patients with depression where offered antidepressants.

• the frequency of visits and length of the visits to different health personal was similar for all patients (and that therefore, no groups with clearly distinct patterns of attendance and/or compliance could be identified)

• the aim of this study was not to compare different components of the MMT because this is not feasible due the nature of MMT, which is designed to adapt to the specific case of every patient, and hence does not group patients according to a single, measurable treatment protocol.

• no conclusion can be made with regard to which component is the most effective one (particularly as all groups improved similarly in terms of mental health during the first 12 months).
The physical activity component differed from the other components of the MMT in the sense that physical activity was recommended to all patients, but that compliance with these recommendations was fully based on patients’ choice. As a result, the compliance with the physical activity recommendations six months after the end of the 12-months treatment differed considerably between patients, thus enabling an isolated examination of this factor. As mentioned in our first revision, we did not find any differences between the three groups with regard to several important background variables (e.g. sex, age, antidepressant use, sick leave status, physical comorbidities, and changes in occupations, job loss, retirement during the study period). Finally, we would like to emphasize that our procedure resembles the one used by Hoffman et al. (2011) who also used exercise participation after the end of the treatment to predict depression symptoms at the 1-year follow-up. Similarly to our study, they focused on one specific factor, without being able to control for all other potential factors that might have had an influence on participants’ levels of depression at follow-up. In the limitations sections, we have emphasized that other (uncontrolled) factors may have had an impact on patients’ compliance with PA recommendations.

Reviewer's report
Title: Changes in Mental Health in Compliers and Non-Compliers with Physical Activity Recommendations in Patients with Stress-Related Exhaustion

Version: 2
Date: 30 July 2015
Reviewer: Gioia Mura

Reviewer's report:
Accept after discretionary revisions

Needs some language corrections before being published

Response: Thank you. We have asked a native-speaking colleague to perform another language check.