Author's response to reviews

Title: Effects of behavioural exercise therapy on the effectiveness of a multidisciplinary rehabilitation for chronic non-specific low back pain: Study protocol for a randomised controlled trial

Authors:

Jana Hofmann (jana.hofmann@sport.uni-erlangen.de)
Stefan Peters (stefan.peters@sport.uni-erlangen.de)
Wolfgang Geidl (wolfgang.geidl@sport.uni-erlangen.de)
Christian Hentschke (christian.hentschke@sport.uni-erlangen.de)
Klaus Pfeifer (klaus.pfeifer@sport.uni-erlangen.de)

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Author's response to reviews: see over
Author's covering letter for initial submission

Title: Effects of behavioural exercise therapy on the effectiveness of a multidisciplinary rehabilitation for chronic non-specific low back pain: Study protocol for a randomised controlled trial

Authors:

Version: 1 Date: 30 January 2013

Comments: see over
Dear Editorial Team,

Please find enclosed our manuscript, "Effects of behavioural exercise therapy on the effectiveness of a multidisciplinary rehabilitation for chronic non-specific low back pain: Study protocol for a randomised controlled trial" by Jana Hofmann et al., which we would like to submit for publication as a study protocol in *BMC Musculoskeletal Disorders*.

Exercise therapy alone or embedded into a multidisciplinary rehabilitation is a widely used intervention strategy in the treatment of patients with non-specific chronic low back pain. These intervention modalities have been studied intensively in the past and have shown only small effects on pain and function. Psychosocial factors play a pivotal role in the development of chronic low back pain and related disability. However, in clinical practice, standard exercise therapy is based mainly on a biomedical approach to improve physical fitness. There is a lack of theory-based exercise therapy programs embedding psychosocial perspectives. We have developed a behavioural exercise therapy for individuals with non-specific chronic low back pain which specifically addresses a) psychosocial determinants of the process of chronification in low back pain and b) determinants of health behaviour change, thereby fostering self-management and long-term adherence to a physically active lifestyle.

‘Behavioural Medical Rehabilitation’ (BMR) is an intensified multidisciplinary inpatient rehabilitation program with standard exercise therapy that is available in Germany. Furthermore, short-term effectiveness of this rehabilitation program has been proven, but the impact of a behavioural exercise therapy for improvement of the long-term effectiveness is unclear. In this report we describe a study protocol for a randomised controlled trial to examine the effects of a behavioural exercise therapy on the effectiveness of a BMR. For this purpose, the BMR with behavioural exercise therapy is compared to the same rehabilitation program with standard exercise therapy in the management of patients with disabling chronic low back pain.

To our knowledge, this is the first randomised controlled trial to examine the effects of behavioural exercise therapy for the overall treatment success of a BMR in the routine healthcare management of patients with chronic low back pain.
This study is funded by the German Pension Insurance Association (Deutsche Rentenversicherung Bund), within the Research funding for care-oriented research “Chronic disease and Patient-orientation” in module two of the second funding phase.

*BMC Musculoskeletal Disorders* considers articles on aspects of the management of musculoskeletal and associated disorders. Non-specific chronic low back pain is a cost-intensive musculoskeletal disease and enormously burdensome for those affected. We believe our study protocol would appeal to the readership of BMC Musculoskeletal Disorders.

As potential peer reviewers for our manuscript we would like to recommend:

− Reviewer: Prof. Dr. Michael Pfingsten, Dpt. of Anesthesiology, Pain Clinic, University of Göttingen, Robert-Koch-Str. 40, D-37075 Göttingen, Germany. Email: michael.pfingsten@med.uni-goettingen.de

− Reviewer: Prof. Dr. Thomas Kohlmann, Institut for Community Medicine, University of Greifswald, Walther Rathenau 48, D-17489 Greifswald, Germany. E-mail: thomas.kohlmann@uni-greifswald.de

− Reviewer: Professor Michael Nicholas, Pain Management Research Institute, University of Sydney, St Leonards, New South Wales 2065, Australia. E-mail: michael.nicholas@sydney.edu.au

− Reviewer: PD Dr. Anne F. Mannion, PhD, Spine Center Division, Department of Research and Development, Schulthess Klinik, Lengghalde 2, 8008 Zurich, Switzerland. E-mail: anne.mannion@kws.ch

We confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. We further declare to have no competing interests.

All authors have approved the manuscript and agree with its submission to BMC Musculoskeletal Disorders.

Please address all correspondence to: Prof. Dr. Klaus Pfeifer, E-mail klaus.pfeifer@sport.uni-erlangen.de, Institute of Sport Science and Sport, Friedrich-Alexander-University Erlangen-Nürnberg, Gebbertstr. 123b, D-91058 Erlangen.

We look forward to hearing from you at your earliest convenience.

Sincerely,

[Signature]

Prof. Dr. Klaus Pfeifer