

Letters to the Editor

Fear avoidance beliefs and low back pain: “practical reviews” from expert panel discussions versus comprehensive systematic reviews

To the Editor:

A recent “review article,” based on the discussions of an expert panel, states that fear avoidance beliefs (FABs) predict chronic low back pain (LBP) and disability, as well as strongly influence the latter. It also concludes that using only simple educational materials (eg, “The Back Book”) may reduce FABs but neither reduces disability nor improves results of usual care [1]. As a result, the experts propose more complex procedures, such as cognitive behavioral therapy, quota-based exercise, gradual exposure, and functional restoration. The review also calls for a wider translation of FAB research into clinical practice and suggest that LBP patients who are avoiders should be classified as “misinformed avoiders,” “learned pain avoiders,” or “affective avoiders” and that each group should receive a different treatment [1].

It is an established fact that experts’ views tend to be influenced by their own work and beliefs, and that the studies they cite to support their conclusions can represent a skewed selection of the literature [2–5]. As a result, experts’ conclusions do not always reflect a balanced view of the existing evidence, and some authors have suggested that this approach should be substituted by systematic reviews, which use structured methods to gather, analyze, and discuss all the available evidence, minimizing the risk of reaching the biased conclusions [3–5].

In the case of the “practical review” on FABs for LBP [1], review methods were not defined, a comprehensive literature search was not undertaken, the quality of the studies that were cited was not assessed, and measures to assess the risk of bias in the conclusions were not implemented. In fact, only studies that supported the experts’ conclusions were included in this “practical” review. A systematic review would have prompted the authors to also address the evidence that questions their conclusions and show that, although psychological factors are likely to influence recovery from LBP, the list of specific factors that exert such an influence appears to vary from study to study, place to place, and review to review. For instance, in some cultural settings, FABs have consistently shown to not predict or influence patients’ clinical evolution [6–8], have a negligible or nonexistent influence on pain, disability, and quality of

life [6–9], and not mediate the effect triggered by educational programs [9]. Moreover, implementing a very simple educational program based on “The Back Book,” in usual practice within these same settings, does lead to a clinically relevant, persistent, improvement of pain, disability, and quality of life [9,10].

This practical review on FABs once again illustrates that, although expert discussions are useful for consolidating experiences and enriching future studies, whenever possible, sound systematic reviews are required for painting an accurate nonbiased picture of the “state of the art” in a specific field, defining a research agenda and providing a solid basis for encouraging a timely translation of research into clinical practice [2,4,5].

References

- [1] Rainville J, Smeets RJEM, Bendix T, et al. Fear-avoidance beliefs and pain avoidance in low back pain—translating research into clinical practice. *Spine J* 2011;11:895–903.
- [2] Mulrow CD. The medical review article: state of the science. *Ann Intern Med* 1987;106:485–8.
- [3] Antman EM, Lau J, Kupelnick B, et al. A comparison of results of meta-analyses of randomized control trials and recommendations of clinical experts. *Treatments for myocardial infarction. JAMA* 1992;268:240–8.
- [4] Sackett DL, Hayes RJ, Guyatt G, Tugwell P. *Clinical epidemiology: a basic science for clinical medicine*. 2nd ed. Boston, MA: Brown and Company, 1991.
- [5] Sackett DL. Second thoughts. Proposals for the health sciences—I. Compulsory retirement for experts. *J Chronic Dis* 1983;36:545–7.
- [6] Kovacs FM, Muriel A, Abraira V, et al. The influence of fear avoidance beliefs on disability and quality of life is sparse in Spanish low back pain patients. *Spine* 2005;30:E676–82.
- [7] Kovacs F, Abraira V, Cano A, et al. Fear avoidance beliefs do not influence disability and quality of life in Spanish elderly subjects with low back pain. *Spine* 2007;32:2133–8.
- [8] Kovacs F, Abraira V, Santos S, et al. A comparison of two short education programs for improving low back pain-related disability in the elderly. A cluster randomized controlled trial. *Spine* 2007;32:1053–9.
- [9] Kovacs FM, Noguera J, Abraira V, et al. The influence of psychological factors on low back pain-related disability in community-dwelling older persons. *Pain Med* 2008;9:871–80.
- [10] Albadalejo C, Kovacs FM, Royuela A, et al. The efficacy of a short education program and a short physiotherapy program for treating low back pain in primary care. A cluster randomized trial. *Spine* 2010;35:483–96.

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Rainville et al respond

We thank the commentators for their interest in our manuscript [1]. There are many levels of published articles in medical journals, the scientific credibility of which follows an established hierarchy. At the top would be meticulously executed randomized controlled trials and basic science research, and in the middle would be meta-analyses and systematic reviews. Nearer to the bottom would be manuscripts written by experts that more loosely discuss problems, ideas, and insights that researchers have about their field of study. Our article unequivocally belongs to this latter category.

Our article was inspired by the recognition that all back pain sufferers internally conceptualize what is wrong with their back and that these conceptualizations influence clinical status. We shared concerns that our methods for viewing patients' conceptualizations of back pain through the use of terms such as "fear-avoidance" and "kinesiophobia" were confusion, somewhat derogatory, and possibly a hindrance to progress in this area. As such, in our article, we chose to review the concepts underlying "fear-avoidance" in a way intended to soften its psychological edge and proposed some new thoughts that might spur innovations in terms of research and clinical treatment. Clearly, such goals are not consistent with the pragmatism required for a systematic review. Some of our proposals may be wrong, but others may be helpful. In the face of a problem such as back pain for which proven health-care solutions are sorely lacking, we hope our efforts are successful in spurring more thought and discussion.

Reference

- [1] Rainville J, Smeets RJEM, Bendix T, et al. Fear-avoidance beliefs and pain avoidance in low back pain—translating research into clinical practice. *Spine J* 2011;11:895–903.

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