

Commentary

## Psychological approaches are effective for fibromyalgia: Remaining issues and challenges

Using meta-analytic strategies, the review by Glombiewski et al. [5] (in this issue) on treatments for fibromyalgia provided conclusive evidence for the efficacy of psychological interventions in managing this enigmatic pain problem. Specifically, the authors reported that psychological treatments yielded significant reductions in pain, sleep problems, depression, functional status, and catastrophizing. Prior reviews had yielded divergent results, some showing substantial efficacy for cognitive behavioral therapy (CBT) and related approaches [6,7] with others reporting disappointing results [8,9]. The discrepancies in prior reviews, noted by the authors, could have resulted from a variety of factors, including different study samples, varying definitions of psychological treatment, and other methodological issues. The conflicting nature of these prior reviews has created confusion about the appropriateness of psychological treatments for fibromyalgia and what exactly should be done to alleviate the pain and suffering attendant to this chronic condition.

The Glombiewski et al. paper [5], employing definitive, standardized criteria in their review, has made a significant contribution to clarifying the confusing literature on fibromyalgia. The authors clearly defined study outcomes, treatments, and indices of methodological quality in their analyses, all of which improve over earlier scholarly contributions. The authors' conclusions also add significantly to the literature on the psychological treatment of other chronic pain conditions, converging with the results of other meta-analytic reviews in rheumatoid arthritis and osteoarthritis [1,3].

As in all reviews, however, the Glombiewski et al. paper raised a number of questions that only additional research could meaningfully address. One issue is the weak methodological quality of many of the studies reviewed. The treatment literature on fibromyalgia, unfortunately, is notable for its lack of adequate controls, limited follow-up, inconsistencies in defining clinical outcomes, and confusion over rationally integrating treatment approaches with key symptoms. These methodological limitations have raised questions about the efficacy of potentially effective treatments and their systematic use in clinical practice. To many clinicians, fibromyalgia represents a mysterious and insoluble clinical problem. This conundrum reflects not only the lack of clear guidelines for treatment and management but also the myriad complaints that many patients present to their physicians, psychologists, or behavioral medicine specialists. Indeed, for these reasons, many clinicians avoid treating fibromyalgia patients.

The review also raises questions about the mechanisms of action of psychological treatments. While this is a central issue for all intervention research, because of the confusing mix of symptoms and functional problems afflicting the fibromyalgia patient, it is particularly salient for this population. Now that psychological treatments have proven efficacy, the identification of mechanisms of action would suggest the potential viability and efficacy of other treatment approaches and would shed light on the very nature of this clinical problem. For example, the review demonstrated that psychological treatments reduced not only pain but also sleep, mood disturbance, and functional limitations. The effects of psychological treatment on such a broad array of outcomes raise the possibility that these outcomes are functionally or causally linked to one another. As an example, are reductions in pain following CBT the main catalyst for improvements in sleep and mood, or is it possible that by treating sleep and/or mood improvements in pain would follow?

Further data on mechanisms should also help illuminate the very nature of this disorder. Initially, fibromyalgia was conceptualized as a unique form of sleep disturbance, characterized by the intrusion of alpha waves into deep sleep, leading to daily pain and fatigue. However, the prevailing view is that fibromyalgia is a type of centrally mediated chronic pain problem, involving aberrant pain processing and hyperalgesia [2], which may have negative effects on both physical and emotional functioning. In fact, it is now substantiated that while all fibromyalgia patients report chronic pain, not all of them have sleep disturbance, mood disturbance, or the same types of behavioral impairments. Uncertainties about the nature of fibromyalgia will resolve in time as investigators embrace theoretical models that can guide the development of their treatment interventions and the manner in which these diverse outcomes are hypothesized to be related. Currently, we do not understand the mediating factors explaining the efficacy of psychological or behavioral treatment strategies. We only know that these treatments can be helpful.

In my opinion to understand the nature of fibromyalgia and how patients should be treated, it is important to continue to study the individual variability in this population. This, of course, is central to conceptualizing the adjustment of patients with other better defined chronic pain conditions, such as rheumatoid arthritis, osteoarthritis, and ankylosing spondylitis, all of which are characterized by significant variability in pain, mood disturbance, and functional limitations. Until we know more about the etiology of fibromyalgia, the approach to studying this condition should not be any different. For example, some patients with fibromyalgia may need more assistance with pain

than with sleep and mood, while others may show the opposite pattern. When Engel [4] developed the biopsychosocial model, the major point that he promoted was that this framework was superior to reductionistic, biomedical approaches that focused exclusively on disease. Instead, this perspective placed the emphasis on capturing the individual variability and complexity in health, and, by doing so, made the patient the focal point for clinical diagnosis and treatment. This approach is the dominant paradigm for understanding health outcomes, and has been so for the last twenty years. In the future, when research better defines the nature of fibromyalgia and identifies the efficacious treatments, this framework will continue to prevail and yield the most heuristic management approaches. This approach will continue to be fundamental to all clinical work involving chronic pain conditions. In summary, the paper by Glombiewski et al. articulated very clearly the question of whether psychological treatments are effective for fibromyalgia. This knowledge provides important fundamental guidelines for pain management professionals for the treatment of fibromyalgia, and clarity for patients afflicted with the pain and other disabling symptoms of this condition. Patients should feel more certain about the approaches that would work for them. Better controlled research that addresses treatment mechanisms will lead to the development of rational treatment approaches and innovative management strategies.

#### Conflict of interest

The author has no conflict of interest related to this commentary.

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