

(506) The complex relationship between pain intensity and physical functioning in fibromyalgia: the mediating role of depression

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Fibromyalgia (FM) is typically associated with the experience of diffuse pain and physical impairment. Depression also commonly co-exists in patients with FM, and it has been correlated with pain intensity and physical functioning. Previous research suggests an association between pain intensity and physical functioning; however, the direct causal relationship between improvements in pain intensity and in functioning is not observed in many FM patients. This may suggest that another factor such as depression is mediating this relationship. The present work examined the possibility of a mediating role of depression in the relationship between pain intensity and functioning over the course of time. 216 patients with FM completed self-report measures of pain intensity, depression, and physical impairment as part of a larger longitudinal study which investigated interventions to increase physical activity among FM patients. Assessments were completed at baseline, 12 weeks, 24 weeks, and 36 weeks. Longitudinal mediational analyses indicated that depression is a statistically significant partial mediator of the relationship between pain intensity and self-reported physical functioning at all four assessment points. To the authors' knowledge, this is the first study to explicitly examine this relationship in a sample of FM patients, as well as the first to do so using a longitudinal design; this may significantly add to our understanding of the complexities behind creating improvements in physical functioning in this population. Clinical implication for these findings include focusing on depression and psychological correlates of depression as first line therapeutic targets in improving physical functioning of patients with FM, and treating co-morbid depression in patients with fibromyalgia earlier in the course of treatment to prevent engagement in and the perpetuation of the cycle of disability. This work was a secondary data analysis from a study funded by the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

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