

# Do Fibromyalgia Patients Have A Genetic Predisposition To The Illness?

Robert S. Katz<sup>1</sup>, Sharon Ferbert<sup>2</sup>

<sup>1</sup>Rush University Medical Center, Chicago, IL; <sup>2</sup>Advocates For Funding, Treatment, Education and Research, Chicago, IL

## ABSTRACT

**INTRODUCTION:** Patients with the fibromyalgia syndrome (FMS) may have a genetic predisposition to the illness. This study utilized an on-line survey to inquire about FMS patients' history of symptoms during childhood and their family histories of psychiatric illnesses.

**METHODS:** 430 patients with fibromyalgia responded to an online survey through the organization AFFTER (Advocates for Fibromyalgia Funding, Education, Treatment and Research). Patients were asked whether they had symptoms of fibromyalgia as children. These symptoms included insomnia, sleep disorders, fatigue, perceived laziness, headache, stomach aches, growing pains, muscle pains, joint pains, pelvic pain, numbness and tingling, chemical sensitivities, allergies, chronic illnesses, chronic infections, emotional problems, high anxiety, concentration difficulties, and memory problems. FMS patients and 125 controls were also asked about psychiatric disorders in first-degree relatives, including grandparents, mother, father, siblings, and children.

**RESULTS:** Respondents were predominately middle-aged (ages 45-55), with about 40% involved in on-line support groups. 196 (46%) FMS respondents reported four or more fibromyalgia type symptoms during childhood, 83 (19%) reported two to three FMS type symptoms during childhood, and 47 (11%) reported one symptom of FMS during childhood. 104 (24%) FMS patients had no symptoms of FMS during childhood. Fibromyalgia patients were also significantly more likely than controls to report having a parent with a history of anxiety disorder: mother, 22% vs. 6% ( $p < 0.001$ ); father, 7% vs. 2% ( $p = 0.047$ ).

**CONCLUSIONS:** Fibromyalgia patients frequently experience fibromyalgia type symptoms during childhood. They often noted a triggering event that appeared to initiate the symptoms of fibromyalgia. More anxiety was noted in the parents of FMS patients than controls. Fibromyalgia patients often develop symptoms in childhood and appear to be genetically predisposed to develop the illness.

## INTRODUCTION

Patients with the fibromyalgia syndrome (FMS) may have a genetic predisposition to the illness. Hudson et al in *American J Psychiatry* 1985 and in the *Arch Gen Psychiatry* 2003, Buskila et al in the *Journal of Rheumatology* 1999 and Arnold et al in *Arthritis and Rheumatism* 2004 studied family aggregation in the fibromyalgia syndrome and reported a strong genetic predisposition for FMS. Yunus in *Seminars Arthritis and Rheumatism* (1996), and suggested the existence of a possible gene for fibromyalgia, linked to the HLA region.

This study utilized an on-line survey to inquire about FMS patients' history of symptoms during childhood and their family histories of psychiatric illnesses.

## METHODS

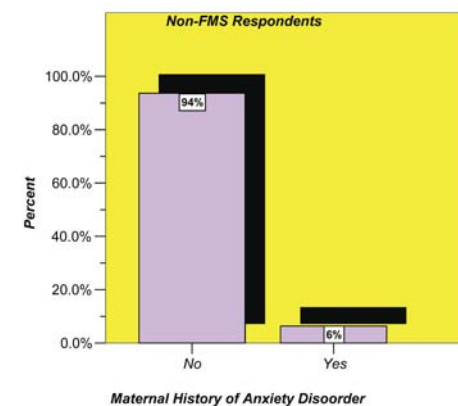
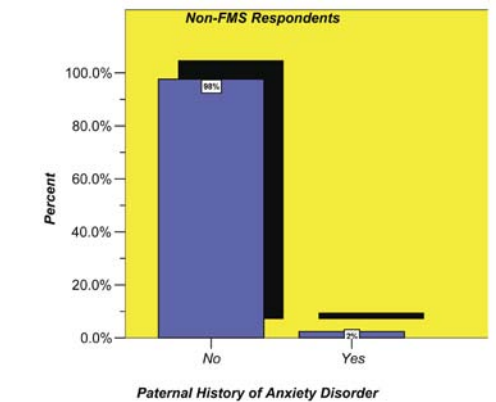
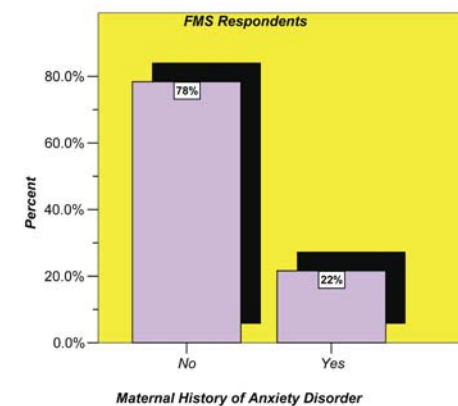
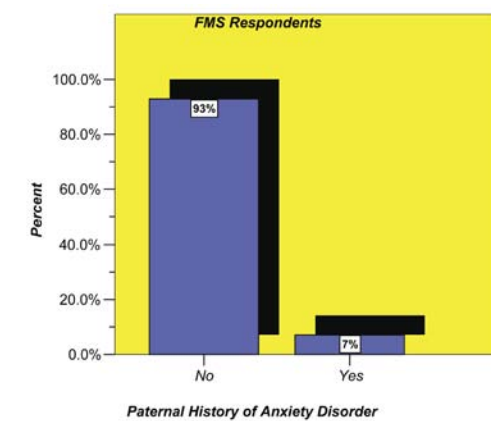
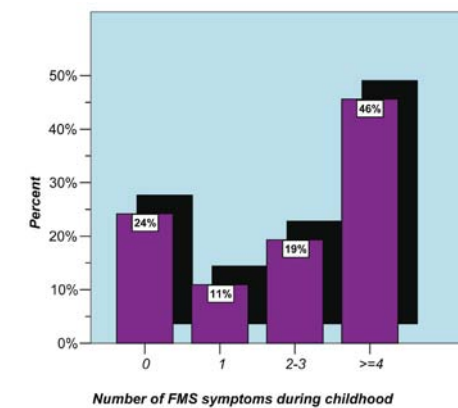
430 women with fibromyalgia and 125 controls responded to an online survey through the organization AFFTER (Advocates for Fibromyalgia Funding, Education, Treatment and Research). Patients were asked whether they had symptoms of fibromyalgia as children. These symptoms included insomnia, sleep disorders, fatigue, perceived laziness, headache, stomachaches, growing pains, muscle pains, joint pains, pelvic pain, numbness and tingling, chemical sensitivities, allergies, chronic illnesses, chronic infections, emotional problems, high anxiety, concentration difficulties, and memory problems. Patients and 125 controls were also asked about psychiatric disorders in first-degree relatives, including grandparents, mother, father, siblings, and children.

## RESULTS

Respondents were predominately middle-aged (ages 45-55), Caucasian (90.5%), with about 40% involved in on-line support groups.

196 (46%) FMS respondents reported four or more fibromyalgia type symptoms during childhood, 83 (19%) reported two to three FMS type symptoms during childhood, and 47 (11%) reported one symptom of FMS during childhood. 104 (24%) FMS patients had no symptoms of FMS during childhood.

Fibromyalgia patients were also significantly more likely than controls to report having a parent with a history of anxiety disorder: mother, 22% vs. 6% ( $p < 0.001$ ); father, 7% vs. 2% ( $p = 0.047$ ).



## CONCLUSIONS

Fibromyalgia patients frequently experience fibromyalgia type symptoms during childhood. They often noted a triggering event that appeared to initiate the symptoms of fibromyalgia.

More anxiety was noted in the parents of FMS than controls. Fibromyalgia patients often develop symptoms in childhood and appear to be genetically predisposed to develop the illness.