# Fibromyalgia and Somatic Symptom Disorder: Two Sides of the Same Coin?

## *Fibromialgia e Perturbação de Sintomas Somáticos: Duas Faces da Mesma Moeda?*

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## RESUMO

A fibromialgia afeta cerca de 1,78% da população mundial, sendo reconhecida e estudada desde o século XVI. Apesar disso, a etiopatogenia da fibromialgia ainda é desconhecida. Consequentemente, ainda existe um debate sobre se a fibromialgia deveria ser considerada dentro da categoria de perturbações de somatização, como uma síndrome central de sensibilização à dor, ou mesmo como uma doença dos nervos periféricos. Consideramos que esta é uma questão relevante, uma vez que tem impacto na referenciação destes doentes para os diferentes profissionais de saúde, o tipo de avaliação que é realizada e as abordagens terapêuticas que lhes são propostas.

Vários aspetos apontam para semelhanças entre a fibromialgia e a perturbação de sintomas somáticos: ambos os diagnósticos compartilham alta comorbidade com várias perturbações psiquiátricas, história de trauma na infância, presença de alexitimia e outros traços de personalidade, estilos de vinculação inseguros e comorbidade com as chamadas síndromes de dor crónica sobrepostas. Portanto, levantamos a hipótese de que a fibromialgia possa ser conceptualizada como uma perturbação de sintomas somáticos. No entanto, o debate contínua, uma vez que ainda escasseia evidência científica a favor ou contra esta perspetiva. Mais estudos são necessários para desvendar a etiopatogenia destes dois diagnósticos.

PALAVRAS-CHAVE: Dor Crónica; Fibromialgia; Perturbações Somatoformes

## ABSTRACT

Fibromyalgia affects about 1.78% of the population worldwide and has been recognized and studied since the 16th century. Despite that, the etiopathogenesis of fibromyalgia is still unknown. Consequently, there is still an

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ongoing debate whether fibromyalgia should be considered within the category of somatization disorders, or as a central pain sensitization syndrome, or even as a peripheral nerve disease. We consider that this is a relevant issue, since it impacts the referral of these patients to the different healthcare professionals, the type of assessment that is provided and the therapeutic approaches that are proposed to them.

Several aspects point to similarities between fibromyalgia and somatic symptom disorder: both diagnoses share high comorbidity with several psychiatric disorders, a history of childhood trauma, the presence of alexithymia and other personality traits, insecure attachment styles and comorbidity with the so-called chronic overlapping pain conditions. Therefore, we hypothesize that fibromyalgia can be conceptualized as a somatic symptom disorder. However, the debate continues, since there is still a lack of scientific evidence supporting either in favor or against this perspective. More studies are needed to unveil the etiopathogenesis behind these two diagnoses.

**KEYWORDS:** Chronic Pain; Fibromyalgia; Somatoform Disorders

Fibromyalgia affects about 1.78% of the population worldwide.[1] Despite still presenting many questions to be solved, fibromyalgia first began to be recognized and studied in the 16th century. In 1592, French physician Guillaume de Baillou introduced the term rheumatism[2] to describe musculoskeletal pain that did not originate from an injury. This was a broad term that would include fibromyalgia as well as arthritis and many other illnesses. In 1869, American neurologist George William Beard coined the term neurasthenia[3] to describe widespread pain associated with fatigue and psychological disturbances. In 1904, the British neurologist Sir William Gowers introduced the term fibrositis,[4] describing symptoms that were already similar to the modern criteria for fibromyalgia: spontaneous pain; pressure sensitivity; fatigue; sleep disorders; cold sensitivity; aggravation of symptoms by overuse of muscles.

The term fibromyalgia[5] was first introduced in 1976. In 1977, Smythe and Moldofsky introduced the idea of tender points as a measure of decreased pain threshold,[6] something they thought clearly separated fibromyalgia from other disorders. With the publication of the 2011 American College of Rheumatology criteria,[7] the definition of fibromyalgia moved from a predominantly chronic pain disorder to a multi-symptom disorder and eliminated the tender point exam as a requirement for diagnosis.

Fibromyalgia syndrome is currently defined, according to the ICD-11, within the category of MG30.0 Chronic widespread pain,[8] that corresponds to a diffuse pain in at least 4 of 5 body regions, associated with significant emotional distress (anxiety, anger/frustration or depressed mood) or functional disability (interference in daily life activities and reduced participation in social roles).

The etiopathogenesis of fibromyalgia is still unknown.[9] Consequently, there is still an ongoing debate whether fibromyalgia should be considered within the category of somatization disorders, or as a central pain sensitization syndrome, or even as a peripheral nerve disease. We consider this to be a relevant issue, since it impacts the referral of these patients to the different healthcare professionals, the type of assessment that is provided and the therapies that are proposed to them. One of our concerns regarding the management of patients with fibromyalgia is the continued prescription of opioids and nonsteroidal anti-inflammatory drugs (NSAIDs) for the treatment of fibromyalgia pain, despite the proven lack of efficacy of these drugs, supported by scientific evidence.[10, 11]

Somatization disorders were first described by Paul Briquet in 1859, who reported several patients that complained about multiple symptoms from different organs, that persisted despite multiple consultations, hospitalizations, and investigations.[12] While sensorimotor functional neurological symptoms were part of the original syndrome, pain was a core symptom. The term somatoform disorder[13] was first introduced in DSM-III for "a group of disorders characterized by physical symptoms, not explained by organic factors". Afterwards, in DSM-IV-SD, certain somatoform disorders such as somatization disorder, somatoform pain disorder, and undifferentiated somatoform disorder, were then re-conceptualized in DSM-5 into one condition - somatic symptom disorder.[14] The diagnostic criteria removed the need for physical symptoms to be "medically unexplained", and instead emphasized a cognitive-behavioral (psychological) formulation whereby individuals were deemed to engage with bodily symptoms (>6 months duration) using unhelpful thought patterns, behavioral strategies and/or emotional responses. Alternatively, the ICD-10 included diagnoses like somatization disorder, undifferentiated somatoform disorder, somatoform autonomic dysfunction and persistent somatoform pain disorder. The ICD-11 groups these clinical entities into the category

6C20 Bodily distress disorder,[15] that includes the following features: the presence of bodily symptoms that are distressing to the individual; excessive attention is directed toward the symptoms; excessive attention to the bodily symptoms persists despite appropriate clinical examination and investigations or appropriate reassurance by health care providers; bodily symptoms are persistent; the bodily symptoms and related distress and preoccupation result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning.

Several aspects point to similarities between fibromyalgia and somatic symptom disorder (SSD). Primarily, like SSD, fibromyalgia also meets the criteria of a disorder instead of a disease since it does not have a defined etiology and pathophysiology.

Furthermore, both diagnoses share high comorbidity with psychiatric disorders and psychological stressors. The work of Gardoki-Souto *et al.*[16] highlights the complex comorbidity of fibromyalgia patients with psychiatric disorders, such as anxiety disorders, depressive disorders, and post-traumatic stress disorder, along with high prevalence of suicidal behavior and sleep alterations. Additionally, it emphasizes the importance of psychological trauma, especially childhood trauma, in the onset and maintenance of pain in fibromyalgia. Regarding somatic symptom disorder, studies[17] showed high prevalence of major depression, anxiety disorders, and phobic disorders. SSD has also been linked to trauma, including sexual trauma, either in childhood and adulthood, in both men and women.[18,19]

Another point in common seems to be alexithymia,[20] which is characterized by an impaired ability to be aware of, explicitly identify, and describe one's feelings. Alexithymia was first described in patients seeking treatment for psychosomatic symptoms. A significant portion of patients experiencing somatic symptoms such as pain or fatigue also describe being in a state of personal distress but have a striking inability to clearly articulate their feelings to clinicians. A study conducted by Venugopalan *et al.*[21] revealed a prevalence of alexithymia of 62.8% among patients with SSD. Several studies also reported a high prevalence of alexithymia among patients with fibromyalgia,[22] that varied from 48% to 64%, suggesting a correlation of these findings to negative childhood experiences such as traumatic events and inadequate parental bonding. Besides alexithymia, there are also other personality traits that seem to overlap between patients with fibromyalgia and patients with SSD. Among the components of the Cloninger's model, both fibromyalgia and SSD patients present with poor self-directedness along with high self-transcendence and harm avoidance.[23, 24]

There are also similarities between fibromyalgia and SSD patients when it comes to attachment style. Patients with fibromyalgia presented a higher prevalence for both the anxious/preoccupied attachment style (associated with low self-esteem, higher need of approval, and fear of rejection) and the avoidant/dismissing attachment style (characterized by greater discomfort in intimacy).[25] Similar results were found for patients with SSD, that showed a high sensitivity to social rejection[26], and additionally presented a high prevalence of either the avoidant/dismissing style (associated with increased hospital admissions) and the anxious/preoccupied attachment style (linked to increased General Practitioner contacts).[27]

Another point that brings fibromyalgia and SSD together is the fact that both diagnoses often have their criteria met when comorbid with a variety of chronic pain conditions, that were recently termed as Chronic Overlapping Pain Conditions (COPCs). This group of diseases include, not only fibromyalgia itself, but also: vulvodynia, temporomandibular disorder, chronic fatigue syndrome, irritable bowel syndrome, interstitial cystitis/painful bladder syndrome, chronic tension--type headache, chronic migraine headache, and chronic low back pain[28]. For example, according to Yunus[29], fibromyalgia syndrome was diagnosed among 23–36% of patients with tension headache, 13–51% with temporomandibular disorder, 20–65% with irritable bowel syndrome, 16-80% with chronic fatigue syndrome and 12-22% of patients with interstitial cystitis. On the other hand, according to the work of de Siqueira *et al.*[30], facial pain and headache were associated with both fibromyalgia and somatoform symptoms. In this study, the prevalence of functional diseases was 63.8%, much higher than expected, and fibromyalgia was highly prevalent in this group. A study by Nguyen *et al.*,[31] regarding the relationship between vulvodynia and another chronic pain conditions, revealed a comorbid established diagnosis of fibromyalgia in 24.2% of cases. Accordingly, in a recently published systematic review and meta-analysis by Dagostin *et al.*,[32] women with vulvodynia evidenced higher somatization scores when compared with controls. These data may indicate that these pathologies share a common substrate linked to somatization.

Several authors emphasize the importance of psychosocial stressors in the initiation and maintenance of fibromyalgia symptoms. For example, the recently published FITSS (Fibromyalgia: Imbalance of Threat and Soothing Systems) model[33] hypothesizes that fibromyalgia patients present with a sensitized and hyperactive threat system and a hypoactive soothing system. Therefore, fibromyalgia can be alleviated by strategies that reduce the perception of threat (such

as trauma processing, exposure techniques, emotional awareness, and behavioral engagement) and reinforce soothing abilities (including safeness perception and affiliative behaviors, such as compassion, self-care, mindfulness, valued living, social support and connectedness, and affective touch).

Some authors express their opinion against the classification of fibromyalgia as a somatic symptom disorder. Indeed, one study conducted by Häuser *et al.*[34] revealed that only 26% of fibromyalgia patients met the criteria for a somatic symptom disorder. However, evidence supporting this point of view is limited.

Given the arguments presented above, we hypothesize that fibromyalgia could be conceptualized as a somatic symptom disorder. However, the debate continues, since there is still a lack of scientific evidence supporting either in favor or against this perspective. More studies are needed to unveil the etiopathogenesis behind these two diagnoses. One of the reasons why this hypothesis has not yet received the proper attention by the scientific literature is perhaps because mental disorders still face a fair amount of stigma by healthcare professionals.

Finally, regardless of the diagnostic category in which fibromyalgia is included, we consider it is important to educate healthcare professionals not to prescribe opioids and NSAIDs to treat fibromyalgia pain and instead promote patient education, exercise, and psychological therapies as a first line of treatment. Duloxetine, milnacipran, pregabalin, and amitriptyline are potentially effective medications for fibromyalgia.[35] The initial assessment should also include the screening of comorbid psychiatric disorders since they play a significant role in the clinical picture.

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## DECLARAÇÃO DE CONTRIBUIÇÃO /CONTRIBUTORSHIP STATEMENT

**TA:** Conceção, escrita e aprovação final

**MS, MB e SM:** Escrita aprovação final

**TA:** Design, writing and final approval

**MS, MB and SM:** Writing and final approval

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