



## Topic Brief: Sensory Processing Disorders and Fibromyalgia

**Date:** 3/31/2021

**Nomination Number:** 0948

**Purpose:** This document summarizes the information addressing a nomination submitted on March 27, 2021 through the Effective Health Care Website. This information was used to inform the Evidence-based Practice Center (EPC) Program decisions about whether to produce an evidence report on the topic, and if so, what type of evidence report would be most suitable.

**Issue:** The nominator hypothesizes a relationship between childhood sensory processing disorder and adulthood fibromyalgia, and seeks more information about this potential relationship.

**Program Decision:** The EPC program synthesizes and appraises existing evidence, and does not support primary research. As such, this nomination does not meet the criteria for appropriateness.

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### Assessment Methods

We assessed nomination for priority for a systematic review or other AHRQ EHC report with a hierarchical process using established selection criteria. Assessment of each criteria determined the need to evaluate the next one.

1. Determine the *appropriateness* of the nominated topic for inclusion in the EHC program.
2. Establish the overall *importance* of a potential topic as representing a health or healthcare issue in the United States.
3. Determine the *desirability of new evidence review* by examining whether a new systematic review or other AHRQ product would be duplicative.
4. Assess the *potential impact* a new systematic review or other AHRQ product.
5. Assess whether the *current state of the evidence* allows for a systematic review or other AHRQ product (feasibility).
6. Determine the *potential value* of a new systematic review or other AHRQ product.

### Background

- Fibromyalgia is a condition with unknown cause or cure that is characterized by widespread pain, sleep disruption, fatigue, and emotional/mental distress.<sup>1</sup>
- The nominator hypothesized a relationship between fibromyalgia and sensory processing disorders. We found only one study evaluating this potential relationship. The study authors suggest that sensory processing is intact in fibromyalgia patients.<sup>2</sup> A single study, however, provides insufficient evidence upon which to base global conclusions, and more research is needed.

- Psychological trauma has been evaluated as a potential precipitating factor for fibromyalgia. We found one systematic review that reports a potential relationship between psychological trauma and fibromyalgia onset, but with low certainty of evidence.<sup>3</sup>
- While there is no cure for fibromyalgia currently, palliative therapies are available. Nonpharmacological therapies, particularly exercise, are recommended as a first response. Therapies tailored to the individual patient are recommended,<sup>4</sup> although evidence on the relationship between specific pairings of treatments with subgroups may be lacking.<sup>5</sup> When initial treatment approaches are insufficient, additional therapies may include psychological therapies, pharmacotherapy, and multimodal rehabilitation programs.<sup>4</sup> Duloxetine is one analgesic pharmacological treatment that has shown some effectiveness in fibromyalgia patients.<sup>6</sup>

## References

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**Conflict of Interest:** None of the investigators have any affiliations or financial involvement that conflicts with the material presented in this report.

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