

COVID-19 Information[Public health information \(CDC\)](#)[Research information \(NIH\)](#)[SARS-CoV-2 data \(NCBI\)](#)[Prevention and treatment information \(HHS\)](#)[Español](#)

FULL TEXT LINKS

WILEY Full Text Article

> [Pain Pract.](#) 2017 Feb;17(2):166-175. doi: 10.1111/papr.12440. Epub 2016 Mar 15.

Establishing Clinically Relevant Severity Levels for the Central Sensitization Inventory

Randy Neblett ¹, Meredith M Hartzell ¹, Tom G Mayer ², Howard Cohen ³, Robert J Gatchel ⁴

Affiliations

PMID: 26989894 DOI: [10.1111/papr.12440](https://doi.org/10.1111/papr.12440)**FOLLOW NCBI**

Follow NLM

National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894

[Copyright](#)[FOIA](#)[Privacy](#)[Help](#)[Accessibility](#)[Careers](#)

NLM NIH HHS USA.gov

Abstract

Objectives: The aim of this study was to create and validate severity levels for the central sensitization inventory (CSI), a valid and reliable patient-reported outcome instrument designed to identify patients whose presenting symptoms may be related to a central sensitivity syndrome (CSS; eg, fibromyalgia, chronic fatigue syndrome, irritable bowel syndrome), with a proposed common etiology of central sensitization (CS).

Methods: Based on CSI score means and standard deviations from previously published subject samples, the following CSI severity levels were established: subclinical = 0 to 29; mild = 30 to 39; moderate = 40 to 49; severe = 50 to 59; and extreme = 60 to 100. The concurrent validity of the CSI severity levels was then confirmed in a separate chronic pain patient sample (58% with a CSS diagnosis and 42% without) by demonstrating associations between CSI scores and (1) the number of physician-diagnosed CSSs; (2) CSI score distributions in both CSS and non-CSS patient samples; (3) patient-reported history of CSSs; and (4) patient-reported psychosocial measures, which are known to be associated with CSSs.

Results: Compared to the non-CSS patient subsample, the score distribution of the CSS patient subsample was skewed toward the higher severity ranges. CSI mean scores moved into higher severity levels as the number of individual CSS diagnoses increased. Patients who scored in the extreme CSI severity level were more likely to report previous diagnoses of fibromyalgia, chronic fatigue syndrome, temporomandibular joint disorder, tension/migraine headaches, and anxiety or panic attacks ($P < 0.01$). CSI severity levels were also associated with patient-reported depressive symptoms, perceived disability, sleep disturbance, and pain intensity ($P \leq 0.02$).

Conclusion: This study provides support for these CSI severity levels as a guideline for healthcare providers and researchers in interpreting CSI scores and evaluating treatment responsiveness.

Keywords: central sensitivity syndrome; central sensitization; central sensitization inventory; chronic pain.

© 2016 World Institute of Pain.

Related information

MedGen

LinkOut – more resources

Full Text Sources

[Ovid Technologies, Inc.](#)

[Wiley](#)

Other Literature Sources

[scite Smart Citations](#)

Medical

[MedlinePlus Health Information](#)