



## Central sensitization and chronic pain personality profile: is there new evidence? A case-control study

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**Objective.** To explain and compare the personality profile of patients with knee osteoarthritis (OA), with and without Central Sensitization (CS), and fibromyalgia (FM).

**Setting.** Participants were selected at the Rheumatology Department in two major hospitals in Spain. Participants: Case control study where the sample consists of 15 patients with OA and CS (OA-CS), 31 OA without CS (OA-noCS), 47 FM and 22 controls. We used a systematic and rigorous process that ensure the sample fulfill strictly all the inclusion/exclusion criteria, so the sample is very well delimited. Primary outcome measures: Personality was assessed by the Temperament and Character Inventory of Cloninger.

**Results.** The percentile in Harm-Avoidance dimension for FM group is higher, comparing to OA groups and controls. The most frequent temperamental profile in patients are Cautious, Methodical and Explosive. Patients with FM are more likely to report larger scores in Harm-Avoidance (increase in OR<sub>adj</sub> between 4.2% and 70.2%).

**Conclusions.** Harm-Avoidance seems to be the most important dimension in personality patients, as previously found. We found no differences between OA groups and between sensitized groups, but there are differences between FM and OA-noCS, so Harm-Avoidance might be the key to describe personality rather than the presence of chronic pain, as found in literature before.

**Keywords:** Osteoarthritis; fibromyalgia; central sensitization; personality.