



Letter to the editor

Alexithymia and sense of coherence: Does their impact on fibromyalgia suggest new targets for therapy?



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Fibromyalgia (FM) is a chronic syndrome characterized by lasting and diffuse chronic musculoskeletal pain, it affects 4% of the population worldwide with 5:1 female/male ratio. The widespread incidence of FM, its high potential to cause disability and the lack of effective treatments make FM a considerable public health issue [1].

The etiology of FM reportedly stems from increased sensitivity of the central nervous system to several stimuli, which is also known as “central sensitization”. Nevertheless its pathogenic mechanisms at the neurotransmitter, inflammatory and immunological levels are still unknown [1]. In people with FM, negative emotions, early trauma, victimization, and emotional and relational conflicts tend to magnify the perception of pain. Being able to cope with stressful emotions is essential for pain management [1,2]. People with FM have a higher prevalence of alexithymia, which may worsen their adjustment to the illness and impair pain management [3].

Another factor that may influence the impact of FM is sense of coherence. This construct deals with the ability to understand, manage and attach meaning to life events. A low sense of coherence could worsen the psychological impact of life events. Sense of coherence might act as a potential determinant of wellbeing and of adaptive coping with the illness in people with FM [4].

The specific aim of this study was to verify whether high alexithymia and low sense of coherence are associated with severe impact of the illness, severe pain and poor quality of life (QoL) in women with FM. A case-control pilot study was conducted on 50 consecutive women with FM aged 50.5 ± 10.8 , who were evaluated by the Rheumatologic Service of the University Hospital of Cagliari, Italy. All patients were asked to complete the 20-item Toronto Alexithymia Scale (TAS-20), the 13-item Sense of Coherence Scale (SOC), the Short Form Health Survey (SF-12), and the Fibromyalgia Impact Questionnaire (FIQ) to assess alexithymia, sense of coherence, quality of life, impact of FM and pain severity [5–8].

The study protocol was compliant with the Helsinki Declaration and had been approved by the Ethical Committee of Sardinia, Italy.

The values for “severe FM impact” (FIQ ≥ 59), or “severe pain” (FIQ item “pain” ≥ 7.5), or “poor QoL” (SF12 ≤ 24) were set to identify “Cases” in the case-control design. The subjects who did not score as “Cases” served as Controls.

Table 1 shows the frequencies of each factor examined to test the associations in “Cases” and “Controls” respectively. “Severe FM impact” (FIQ ≥ 59) was reported by 26/50 (52%; mean age \pm sd = 52.5 ± 11.1); “severe pain” (FIQ item “pain” ≥ 7.5) by 27/50 (54%; mean age \pm sd = 52 ± 11.1), and “poor QoL” (SF12 ≤ 24) was reported by 17/50 (34%; mean age \pm sd = 50.1 ± 10.8). Both “high alexithymia” and “low sense of coherence” were significantly associated to severe FM impact ($p < 0.05$), severe pain ($p < 0.05$; $p < 0.01$), and poor QoL ($p < 0.05$; $p < 0.01$). No significant difference was observed between “Cases” and “Controls” on socio-demographic and clinical variables such as educational level, marital status, occupation, months elapsed since the FM diagnosis, psychiatric comorbidity, and other medical conditions (see Supplementary material).

This report is the first study in the literature exploring the link between high alexithymia and low sense of coherence with severe pain perception, poor QoL and worse impact of the illness in women with FM have traditionally been considered to be stable.

Longitudinal studies may better illuminate the cause-effect sequence in the association of FM severity with high alexithymia and low sense of coherence. Given the inconsistent benefits seen in treatment studies in FM thus far, we think that the role of alexithymia and sense of coherence should not be dismissed. Future studies might test whether improvement on alexithymia and sense of coherence by means of adequate psychological interventions might improve the severity of FM and its impact on the QoL.

Although alexithymia and sense of coherence were traditionally assumed as stable personality traits rather than state-dependent conditions, several kinds of psychological interventions have been found to modify them [9,10]. Thus far, psychotherapeutic interventions in FM have largely been cognitive behavioral programs that have focused on reducing reinforcement of alarm related to painful stimuli. Improving alexithymia and sense of coherence might be a useful complementary target. If effective, this approach would be greatly beneficial to people suffering from FM [1].

Our findings are limited by the small sample size, which impacts the power of the study. However, this pilot study could contribute to implementing future research and providing a rationale for the development of psychological interventions specifically targeted at improving

Table 1

Association between high alexithymia and low sense of coherence with severe FM impact, severe pain and poor quality of life.

Associated factors	Descriptors of “cases” and “controls”	N (%) in cases	N (%) in controls	N (%) in the overall sample	χ^2	p	OR	CI 95%
High alexithymia (TAS-20 \geq 61)	Severe FM impact (FIQ \geq 59)	10 (77%)	3 (23%)	13/50 (26%)	4.372	0.037	4.375	1.032–18.556
Low sense of coherence (SOC \leq 55 ^a)		12 (75%)	4 (25%)	16/50 (32%)	4.987	0.026	4.286	1.143–16.071
High alexithymia (TAS-20 \geq 61)	Severe pain (FIQ item pain score \geq 7.5)	11 (85%)	2 (15%)	13/50 (26%)	5.109	0.024	5.806	1.128–29.892
Low sense of coherence (SOC \leq 55 ^b)		14 (87.5%)	2 (12.5%)	16/50 (32%)	7.414	0.006	7.875	1.547–40.091
High alexithymia (TAS-20 \geq 61)	Poor quality of life (SF12 \leq 24 ^b)	8 (61.5%)	5 (38.5%)	13/50 (26%)	5.937	0.019	4.978	1.295–19.130
Low sense of coherence (SOC \leq 55 ^b)		10 (62.5%)	6 (37.5%)	16/50 (26%)	8.517	0.005	6.429	1.735–23.819

FM = Fibromyalgia; FIQ = Fibromyalgia Impact Questionnaire; TAS-20 = Toronto Alexithymia Scale-20 item; SOC = Sense of Coherence Scale; SF-12: Short Form Health Survey – 12 item.

^a 33.3 percentile.

^b 25 percentile.

alexithymia and sense of coherence in people with FM.

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