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BACKGROUND AND AIMS

The main aim of the present study was to evaluate both pain catastrophizing and pain beliefs, as well as the prevalence of anxiety/depressive symptoms and alexithymia in a group of patients with Fibromyalgia (FM). As a secondary goal, we investigated if the presence of alexithymic traits could be associated with both pain appraisal (pain catastrophizing and pain beliefs) and anxiety/depressive symptoms in this clinical population.

METHODS

Forty-one women with FM made up the final sample and completed the following measures: (1) Numeric Rating Scale (NRS) for pain intensity; (2) Pain Catastrophizing Scale (PCS); (3) Pain Beliefs and Perceptions Inventory (PBaPI); (4) Hospital Anxiety and Depression Scale (HADS); and (5) Toronto Alexithymia Scale (TAS-20).

RESULTS

The data on the demographic, pain-related, and psychological variables of FM patients are presented in **Table 1**. With regard to the evaluation of pain appraisal, FM patients reported the highest scores for the PBaPI 'Self-Blame' subscale and the PCS 'Rumination' subscale. Furthermore, FM patients showed a high prevalence of both anxiety/depressive symptoms and alexithymia. As far as the secondary objective of the study was concerned, comparisons between alexithymic and non-alexithymic patients with FM revealed the presence of statistically significant differences on PCS total score (mean \pm SD: 34.1 ± 9.8 vs. 25.3 ± 10.8 , $t(39) = -2.35$, $p = .024$, $d = 0.84$), PCS 'Rumination' (mean \pm SD: 15.6 ± 3.7 vs. 11.2 ± 5.3 , $t(39) = -2.50$, $p = .017$, $d = 0.95$), and HADS-A (mean \pm SD: 11.4 ± 3.6 vs. 7.9 ± 3.3 , $t(39) = -2.80$, $p = .008$, $d = 0.95$), with the former reporting higher scores on all those measures compared to non-alexithymic patients (**Figure 1**).

Table 1. Demographic, pain-related, and psychological data of patients with Fibromyalgia ($N = 41$).

	Mean (SD)	n (%)	Range
Age	50.8 (10.2)		23-69
Years of education	12.4 (3.8)		5-18
Duration of illness (years)	10.9 (9.0)		1-39
Pain			
NRS Pain	6.8 (2.0)		0-10
PBaPI Time	0.9 (0.6)		-0.2/+1.9
PBaPI Mystery	0.4 (1.0)		-2/+2
PBaPI Self-blame	1.0 (1.2)		-2/+2
PCS Total score	27.4 (11.1)		9-52
PCS Helplessness	12.2 (5.6)		0-24
PCS Rumination	12.4 (5.2)		0-20
PCS Magnification	3.2 (2.3)		0-8
Psychological Distress			
HADS-A	8.9 (3.8)		1-17
HADS-A score ≥ 8		24 (59)	
HADS-D	9.5 (4.4)		2-20
HADS-D score ≥ 8		27 (66)	
Alexithymia			
TAS-20 Total score	51.5 (14.1)		23-82
Alexithymic (≥ 61)		11 (27)	
Non-alexithymic		30 (73)	

NRS = Numeric Rating Scale; PBaPI = Pain Belief and Perceptions Inventory; PCS = Pain Catastrophizing Scale; HADS-A and HADS-D = Anxiety and Depression subscales of the Hospital Anxiety and Depression Scale; TAS-20 = Twenty-item Toronto Alexithymia Scale.

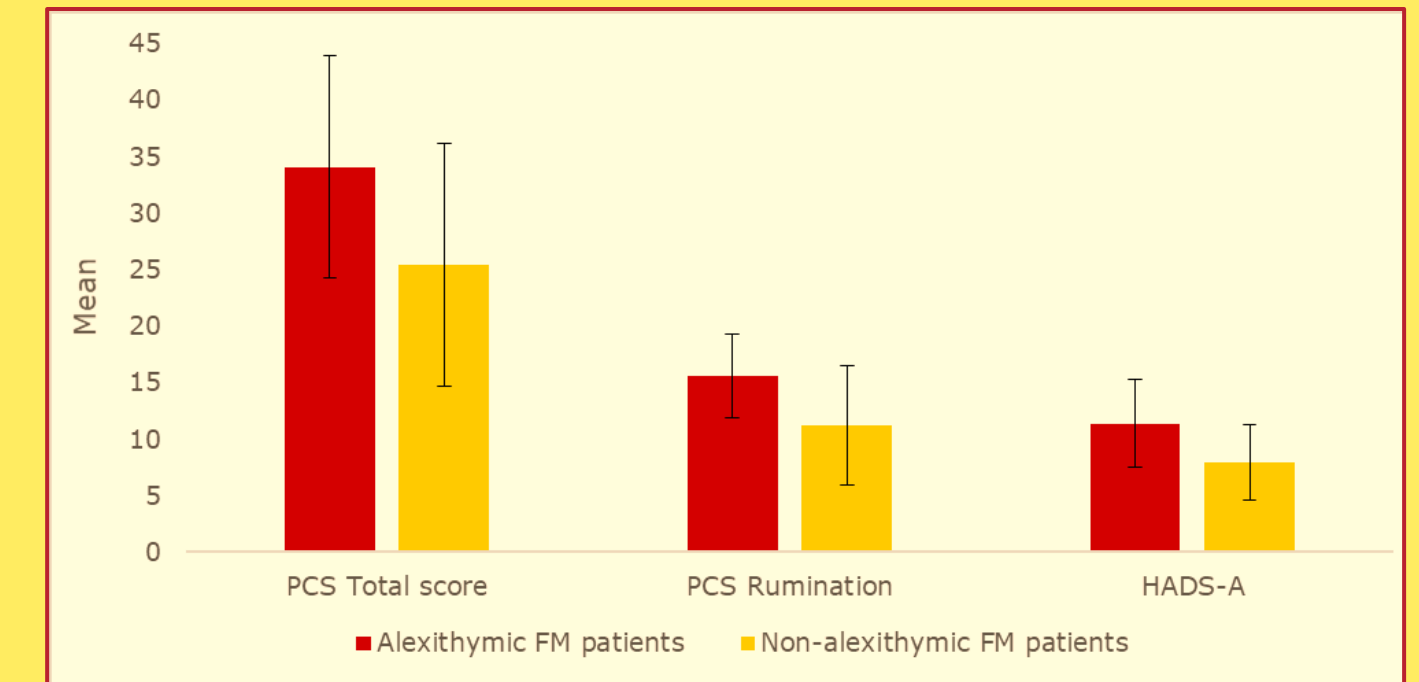


Figure 1. Pain catastrophizing (PCS) total and 'Rumination' scores and anxiety (HADS-A) scores for alexithymic vs. non-alexithymic patients with Fibromyalgia (FM).

CONCLUSIONS

The current findings showed a high prevalence of both anxiety/depressive symptoms and alexithymia in patients with FM, as well as high levels of self-blame for the pain they experienced and of catastrophizing (especially rumination). Furthermore, the current results revealed that alexithymic patients reported higher levels of pain catastrophizing and anxiety symptoms with respect to non-alexithymic ones. These results highlight the importance of a multidisciplinary approach, which takes into account both physical and psychological components in the treatment of FM.