

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.492>

EW375

Women that present fibromyalgia have higher levels in all scales of catastrophism

K. Cabas-Hoyos

Universidad Pontificia Bolivariana, Grupo CAVIDA, Montería, Colombia

Fibromyalgia patients value their pain as modern high and they perceive it more as a threat than as a challenge (Ayan, 2011). There is a relative consensus related to catastrophic thoughts that seems to play an important role in the maintenance of chronic pain (Esteve, Ramírez and López, 2001). The objective of the present study was to explore the level of catastrophism in women with and without fibromyalgia. Adult women ($n=39$) with an average of 47 years old (TD: 12.14) and more than 12 years schooling, paired with healthy controls ($n=39$) with similar characteristics. Patients with fibromyalgia were previously diagnosed according to ACR (American College of Rheumatology). This was a cross-sectional study, comparative and quantitative cut. An ANOVA was used to compare both groups. The level of catastrophism was measured through the Pain Catastrophizing Scale (Sullivan, Bishop and Pivick, 1995). Scale composed of 13 questions and three subscales: rumination, magnification and hopelessness. This instrument has been tested in both clinical and non-clinical populations (Osman et al., 2000; Sullivan et al., 1995). Rumination, magnification and hopelessness were trend significantly higher in the women group with Fibromyalgia. [Rumination: $F(1,36)=6.22$; $P=0.00$]; [Magnification: $F(1,36)=17.66$; $P=0.00$]; [Hopelessness: $F(1,36)=6.53$; $P=0.00$]. These results allowed that the total catastrophism level was higher in the women group with Fibromyalgia and that the statistical significance level was reached [$F(1,36)=9.89$; $P=0.00$]. This type of studies will allow to study the pain as a multidimensional entity comprised of physical, cognitive and affective aspects.

Disclosure of interest The author has not supplied his/her declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.493>

EW376

Chronic non-malignant pain (CNMP) and substance use disorders

L. Herrera Duran^{1,*}, I. Falgas², B. Cook³, N. Noyola¹, M. Toro¹, M. Alegria¹

¹ Massachusetts General Hospital, Disparities Research Unit, Boston, USA

² Vall d'Hebrón University Hospital/Universitat Autònoma de Barcelona, Department of Psychiatry and Forensic Medicine, Barcelona, Spain

³ Cambridge Health Alliance and Harvard Medical School, Health Equity Research Lab, Boston, USA

* Corresponding author.

Introduction Chronic non-malignant pain (CNMP) is defined as pain lasting a minimum of three months. In general, chronic pain affects 20% adult worldwide population. Moreover, pain is more common in patients with depression, anxiety, and substance-use disorders and with low socioeconomic status. We aimed to better understand the influence of pain on substance use and treatment use patterns of individuals who experienced clinically recognized pain and have substance use disorder.

Methods Patients with pain disturbances were identified in Electronic Health Records (EHR) through ICD-9 code 338*, medical written diagnoses, or diagnoses of fibromyalgia. A patient was

considered to have a substance use disorder if he received treatment for illicit drug or alcohol abuse or dependence. We combined 2010–2012 (EHR) data from primary care and specialty mental health setting in a Boston healthcare system ($n=131,966$ person-years) and a specialty mental health care setting in Madrid, Spain ($n=43,309$ person-years).

Results We identified that 35.3% of individuals with clinically recognized pain also report substance use disorder, compared to only 10.6% of individuals without clinically recognized pain ($P<0.01$). Those with co-morbid pain and substance use disorder were significantly more likely than their specialty care counterparts without co-morbid pain and substance use disorders to be seen in the emergency room (56.5% vs. 36.6%, respectively, $P<0.01$).

Conclusion The findings suggest that CNMP is associated with an increase risk of substance abuse disorder.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.494>

EW377

Exploring the factorial structure of the revised Fibromyalgia Impact Questionnaire (FIQR) in a Portuguese sample of fibromyalgia patients

A.M. Pinto^{1,2,3,*}, C. Costa², A.T. Pereira³, M. Marques^{3,4}, J.A. Pereira da Silva², A. Macedo^{3,4}

¹ Faculty of Psychology and Educational Sciences of the University of Coimbra, Cognitive and Behavioural Center for Research and Intervention, Coimbra, Portugal

² Faculty of Medicine of the University of Coimbra and Coimbra Hospital and University Centre, Rheumatology University Clinic, Coimbra, Portugal

³ Faculty of Medicine of the University of Coimbra, Psychological Medicine Department, Coimbra, Portugal

⁴ Coimbra Hospital and University Centre, Department of Psychiatry, Coimbra, Portugal

* Corresponding author.

Introduction The Revised-Fibromyalgia Impact Questionnaire (FIQR), composed by 21 items, is one of the most used tools to measure the impact of fibromyalgia both in clinical and research settings. Although it has demonstrated good psychometric properties (Bennet et al., 2009; Costa et al., 2015), little is known about its factorial structure.

Objective/Aims To explore FIQR's factorial structure and examine its association with several psychological constructs.

Methods Hundred and three women with fibromyalgia (mean age 47.32 ± 10.63) filled in the Portuguese validated versions of the FIQR, Perceived Stress Scale, Perseverative Thinking Questionnaire, Beck Depression Inventory-II and Profile of Mood States. A principal components analysis with varimax rotation was carried out. The number of factors to extract was based on Cattell's scree plot and eigenvalues' magnitude. The associations between FIQR dimensions and psychological constructs were examined via Pearson correlations and multiple linear regressions.

Results Three factors were extracted [$F1/\text{Function}=\text{Items } 1-9$, $\alpha=0.92$; $F2/\text{Symptoms}=\text{Items } 12, 16-21$, $\alpha=0.83$; $F3/\text{Impact}=\text{Items } 10, 11, 13-15$, $\alpha=0.83$] explaining 58.57% of the variance. FIQR symptoms were the best and, nearly in all analyses, the only significant predictor.

Conclusions The factorial structure of the Portuguese version of FIQR partially overlaps with the proposed theoretical domains (Bennet et al., 2009). Similarly to Luciano et al.'s study (2013), factorial analysis also evidenced the multidimensionality of some items. Fibromyalgia symptoms seem to play the most deleterious effect, being associated with poor mental health indicators. Future studies are needed to confirm the factorial structure found, due to sample size, items subjectivity and study's exploratory nature.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.495>

EW378

Unraveling pathways to depression in fibromyalgia, the role of perseverative negative thinking and negative affect

A.M. Pinto^{1,2,3,*}, C. Costa², A.T. Pereira³, M. Marques^{3,4}, J.A. Pereira da Silva², A. Macedo^{3,4}

¹ Faculty of Psychology and Educational Sciences of the University of Coimbra, Cognitive and Behavioural Center for Research and Intervention, Coimbra, Portugal

² Faculty of Medicine of the University of Coimbra and Coimbra Hospital and University Centre, Rheumatology University Clinic, Coimbra, Portugal

³ Faculty of Medicine of the University of Coimbra, Psychological Medicine Department, Coimbra, Portugal

⁴ Coimbra Hospital and University Centre, Department of Psychiatry, Coimbra, Portugal

* Corresponding author.

Introduction Several studies have demonstrated a strong link between fibromyalgia, negative affect (NA) and depression. However, it remains unclear why some fibromyalgia patients get depressed while others do not and, primarily, which mechanisms account for this difference. We hypothesize that, besides clinical features, the engagement in dysfunctional strategies like perseverative negative thinking (PNT) followed by an amplification of NA levels may increase the risk of fibromyalgia patients experiencing depressive symptoms.

Objective/Aims To explore the serial mediator effect of PNT and NA on the relationship between fibromyalgia symptoms and depressive symptoms.

Methods Hundred and three women with fibromyalgia (mean age 47.32 ± 10.63) completed the Portuguese version of the Revised-Fibromyalgia Impact Questionnaire, Perseverative Thinking Questionnaire, Profile of Mood States and Beck Depression Inventory-II. The association between the variables was investigated via Pearson correlations and serial multiple mediation.

Results The estimated model was significant [$F(3,86) = 57.318$, $P < .001$] explaining 66.66% of depressive symptoms variance. The total effect of fibromyalgia symptoms on depressive symptoms was of .4998 ($SE = 0.0795$, $P < 0.001$; $CI > 0.3417$ and < 0.6578), with a significant direct effect of 0.1911 ($SE = 0.0653$; $CI > 0.0614$ and < 0.3209). The total indirect effects were of 0.3086 ($SE = 0.0619$; $CI > 0.2033$ and < 0.4458). Three significant specific indirect effects were found.

Conclusion The effect of fibromyalgia symptoms on depressive symptoms is partially operated through cognitive interference/unproductiveness, which in turn influences NA levels. Such findings highlight the crucial role of these constructs in the relationship between fibromyalgia symptoms and depressive symptoms and the urge to address them when treating individuals reporting greater fibromyalgia symptoms.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.496>

EW379

A cross-sectional analysis of the relationships of FAM components and their effects on quality of life in Chinese patients with chronic musculoskeletal pain

W. Wong^{1,*}, H. Lim², P. Chen³, S. Wong⁴, Y. Chow⁴, J. Lam⁵, R. Fielding⁶

¹ Hong Kong Institute of Education, Dept of Special Education & Counseling, Hong Kong, China

² United Christian Hospital, Dept of Anesthesiology & Operating Services, Hong Kong, China

³ Alice Ho Miu Ling Nethersole Hospital, Dept of Anesthesiology & Operating Services, Hong Kong, China

⁴ Queen Mary Hospital, Dept of Anesthesiology & Operating Services, Hong Kong, China

⁵ Hong Kong Institute of Education, Dept of Psychological Studies, Hong Kong, China

⁶ University of Hong Kong, School of Public Health, Hong Kong, China

* Corresponding author.

Introduction A body of evidence has accrued supporting the Fear-Avoidance Model (FAM) of chronic pain which postulated the mediating role of pain-related fear in the relationships between pain catastrophizing and pain anxiety in affecting pain-related outcomes. Yet, relatively little data points to the extent to which the FAM be extended to understand chronic pain in Chinese population and its impact on quality of life (QoL).

Objective This study explored the relationships between FAM components and their effects on QoL in a Chinese sample.

Methods A total of 401 Chinese patients with chronic musculoskeletal pain completed measures of three core FAM components (pain catastrophizing, pain-related fear, and pain anxiety) and QoL. Cross-sectional structural equation modeling (SEM) assessed the goodness of fit of the FAM for two QoL outcomes, Physical (Model 1) and Mental (Model 2). In both models, pain catastrophizing was hypothesized to underpin pain-related fear, thereby influencing pain anxiety and subsequently QoL outcomes.

Results Results of SEM evidenced adequate data-model fit ($CFI^3 0.90$) for the two models tested (Model 1: $CFI = 0.93$; Model 2: $CFI = 0.94$). Specifically, pain catastrophizing significantly predicted pain-related fear (Model 1: $stdb = 0.90$; Model 2: $stdb = 0.91$), which in turn significantly predicted pain anxiety (Model 1: $stdb = 0.92$; Model 2: $stdb = 0.929$) and QoL outcomes in a negative direction (Model 1: $stdb = -0.391$; Model 2: $stdb = -0.651$) (all $P < 0.001$) (Table 1, Fig. 1).

Conclusion Our data substantiated the existing FAM literature and offered evidence for the cross-cultural validity of the FAM in the Chinese population with chronic pain.

Table 1 Results of SEM testing the FAM for two QoL outcomes.

Model	S-B χ^2	df	P value	CFI	NNFI	RMSEA	90% CI	SRMR
Model 1: QoL-Physical	147.70	33	<0.001	0.93	0.90	0.10	0.09, 0.12	0.05
Model 2: QoL-Mental	141.50	33	<0.001	0.94	0.91	0.10	0.08, 0.18	0.05

Note: The FAM hypothesized that pain catastrophizing is the predictor of pain-related fear, which influenced pain anxiety and subsequently pain adjustment outcomes. QoL-Physical was indexed the SF-12 physical component score; QoL-Mental was indexed by the SF-12 mental component score. S-B χ^2 = Satorra & Bentler scaled chi-square statistics; df = degrees of freedom; CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation; CI = confidence interval; SRMR = standardized root mean square residual.