Evaluation of Learned Helplessness, Perceived Self-Efficacy and Functional Capacity in Patients with Fibromyalgia and Rheumatoid Arthritis

Sebastian Moyano1, Marina Scolnik1, Facundo Vergara1, Maria Victoria Garcia2, Mirtha Sabelli3, Javier Rosa4 and Enrique R. Soriano5

Background/Purpose: Chronic diseases involve cognitive and emotional aspects of patients. One relevant cognitive factor is the learned helplessness (LH), defined as an inadequate perception of the disease, generating feeling of defenselessness, behaviors of passivity, loss of self-esteem and belief that nothing you do can improve your situation. Another important cognitive factor is perceived self-efficacy (SE), which is defined as the individual's abilities to cope with the disease. It has been reported that patients with higher LH, have more pain and functional disability. On the other hand, patients with high levels of SE have less pain, LH and functional disability. The relationship of these cognitive aspects has not been fully studied in fibromyalgia (FM). Our purpose was to evaluate LH and SE in patients with fibromyalgia and compared them with patients with rheumatoid arthritis (RA), and to assess their association with functional disability and level of perceived pain and fatigue in both groups of patients.

Methods: Consecutive patients, older than 18 years, with diagnosis of RA (2010 ACR/EULAR criteria) and with diagnosis of fibromyalgia (1990 or 2010 ACR criteria) seen at the outpatient rheumatology unit between March 2014 and June 2015, were included. During the inclusion visit the following data were collected: HAQ-A (Health Auto Questionnaire-simplified Argentinean validation); pain (VAS); fatigue (VAS); LH measured with Rheumatology Attitudes Index (RAI) and SE measured by Arthritis Self-auto-efficacy Scale. Descriptive statistics were calculated and compared between both groups. Correlations were calculated between LH and SE and pain, fatigue and HAQ-A, using Pearson tests.

Results: One hundred and fifteen patients with RA and 57 patients with FM were included. Patient's characteristics are shown in table 1. Patients with FM had significantly more pain, more fatigue, more LH, and less SE than RA patients (table 1). There was a significant positive correlation between LH, and pain (RA: r=0.67; p<0.001; FM: 0.59; p<0.001); HAQ-A (RA: r=0.65; p<0.001; FM: r=0.52; p= 0.0004), and fatigue (RA: r=0.54; p<0.001; FM: r=0.49; p= 0.0010); and a negative correlation between SE and pain (RA: r= − 0.47; p<0.001; FM; r= -0.59; p<0.001); HAQ-A (RA: r= -0.47; p<0.001; FM: r= -0.42; p= 0.0112) in both patient's groups.

Conclusion: Patients with FM had more LH, pain and fatigue than RA, and less SE. There was a significant correlation between these psychological assessments and pain, functional capacity and fatigue. LH and SE are potentially modifiable cognitive factors that correlated with functional disability and patients related outcomes. This might have clinical implications.

Table 1

Characteristics	RA (n=115)	FM (n=57)	P value
Female , n (%)	94 (82)	55 (96.5)	0.007
Age, years, mean (DS)	58 (13)	59 (14)	0.727
Time from diagnosis (years), mean (SD)	12 (10)	2 (2.8)	<0.0001
HAQ-A, mean (DS)	0.75 (0.76)	0.73 (0.59)	0.832
Pain (VAS,0-100), Mean (SD)	31 (28)	61 (25)	<0.0001
Fatigue (VAS, 0-100), Mean (SD)	26 (28)	66 (26)	<0.0001
Learned helplessness, Median (IQR)	10.4 (4.8)	14.5 (6.1)	<0.0001
Self-efficacy, Mean (SD)	61 (15.4)	48 (18.6)	<0.0001