

# P4. ASSOCIATION OF SOMATIC SYMPTOM DISORDERS (SSDs) WITH PAIN, DISABILITY AND QUALITY OF LIFE IN PATIENTS WITH CHRONIC LOW BACK PAIN (CLBP). PRILIMINARY FINDINGS.

Petrelis Matthaios<sup>1</sup>, Soultanis Konstantinos<sup>1</sup>,  
Michopoulos Ioannis<sup>1</sup>, Nikolaou Vasileios<sup>1</sup>

1. Medical School, National and Kapodistrian  
University of Athens, Greece



# INTRODUCTION

Many studies have suggested that psychological factors, including anxiety, depression, and SSDs are risk factors of LBP and predictors of poor outcomes, thus shaping the concept of a “biopsychosocial pain syndrome”<sup>1-2</sup>.

## PURPOSE

To investigate changes in pain, disability, anxiety, depression, somatic symptom burden and quality of life among patients with CLBP after the implementation of a physiotherapy regimen, and to examine the association of SSDs with the above parameters.

# MATERIALS AND METHODS:

**A before-and-after trial without control study**

**Patients recruitment:** Using random systematic sampling study

**Treatment:** 10 sessions of conventional physiotherapy program

**Pre- & post-test:** Numerical Pain Scale (NPS), Rolland-Morris (RMQ), EuroQoL 5-dimension 5-level (EQ-5D-5L), Somatic Symptom Scale-8 (SSS-8), Hospital Anxiety and Depression Scale (HADS)

**Data analysis via SPSS 22.0:** Paired t-test, Wilcoxon signed test, McNemar test. Pearson's r between SSS-8 and NPS, RMQ, EQ-5D-5L and HADS.  $P < 0.05$ .

Figure 1 • Flow diagram of the study

# RESULTS

32 subjects (13M:19F), Mean age 57.3 years (16,4), 46.9% overweight and 18.8% obese.

	Pre		Post		P Paired t-test
	Mean score	SD	Mean score	SD	
<b>Pain (NPS)</b>	5,06	2,17	3,46	2,02	<b>0,002</b>
<b>Health status (EQ-5D-5L Index value)</b>	0,68	0,15	0,71	0,18	0,174
<b>Health status (EQ-5D-5L VAS)</b>	69,66	13,54	76,23	15,81	<b>0,023</b>
<b>Depression (HADS-D)</b>	6,53	3,72	6,42	3,21	0,135
<b>Anxiety (HADS-A)</b>	5,41	3,68	5,00	3,19	0,169
<b>Somatic symptom burden (SSS-8)</b>	9,25	4,59	7,81	4,13	<b>0,020</b>
<b>Disability (RMQ)</b>	7,44	4,70	6,31	5,56	<b>0,020</b>

Figure 2 • Changes in NPS, EQ-5D-5L, HADS, SSS-8 and RMQ

# RESULTS

- Level of pain was improved significant (28.1% of patients mentioned severe pain before and 7.7% after the treatment).
- Frequency of having regular exercising more than twice per week remained stable (43.8% and 42.3%).
- Pearson's  $r$  of primary score of SSS-8 and EQ-5D-5L VAS ( $r=-0.46$ ) and changes of SSS-8 and NPS ( $r=0.39$ ).

# CONCLUSIONS

Physiotherapy regimen was shown to be effective in patients with CLBP, by improving pain, disability, SSDs and health status. A somatic symptom burden was moderate correlated with a higher pain intensity and a lower health-related quality of life.

# REFERENCES

1. Fujii T, Oka H, Katsuhira J, et al. Association between somatic symptom burden and health-related quality of life in people with chronic low back pain. PLoS One. 2018;13(2):e0193208.
2. Díaz-Arribas MJ, Kovacs FM, Royuela A, Fernández-Serrano M, Gutiérrez-Fernández L, San Martín-Pariente O, et al. Effectiveness of the Godelieve Denys-Struyf (GDS) Method in People With Low Back Pain: Cluster Randomized Controlled Trial. Physical Therapy [Internet]. 2015 Mar 1;95(3):319–36.

Contact details:

[matpetrelis@hotmail.com](mailto:matpetrelis@hotmail.com)

