

## Self-reported back and/or leg pain in young and middle-aged Greek adults. Does pain location and intensity affect life-functioning factors?

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**BACKGROUND.** Given the high incidence of low back pain (LBP) internationally, there is still debate on the impact of pain intensity and location (including back-associated leg pain) on perceived disability and life-functioning factors in younger or middle-aged adults, where occupation is of primary importance. Additionally, there is limited research in how these factors affect the Greek population.

**PURPOSE.** To explore the impact of pain intensity and location on perceived disability, psychosocial and quality of life (QoL) parameters in working adults between 20-50 years of age within Greece.

**METHODS.** Consecutive patients 20-50 years referred for physiotherapy from secondary care from three hospital settings were asked to participate in the study. In cases of previous spinal surgery, serious medical problems, pregnancy, unemployment and communication difficulties (verbal or written) subjects were excluded. A form encompassing sociodemographic, pain intensity and location parameters, as well as three self-reported measures (disease-specific, psychosocial and generic one) were utilised. Pain intensity in a visual analogue scale (VAS) with 3 levels (average, 'best pain' and 'worst pain') for leg and back pain separately, and pain location areas (back, back and/or buttock, back and/or leg above the knee and back and/or leg below the knee) were utilised. The questionnaires (validated in Greece) were the Roland-Morris Disability Questionnaire (RMDQ) for disability, the Hospital Anxiety and Depression Scale (HADS) for reporting anxiety and depression, and the SF-12 Health Survey for general health and QoL issues. Three experienced and trained in the procedure physiotherapists administered the questionnaires and conducted the assessment. Spearman's rho correlation coefficients were utilised for statistical analysis given the data profile.

**RESULTS.** Out of 137 patients initially referred, 116 (54 men, 62 women with mean age: 38,45±11,0, range: 20-50) fulfilled selection criteria and were finally recruited. Amongst them, 70% (n=80) suffered back-associated leg pain (59 reporting below knee pain) with a high recurrence rate of 56,9% and 23,3% on back and leg, respectively. Mean disability, psychosocial and general health scores were 8,64±6,2 (RMDQ), 5,18±4,1 and 4,33±3,7 (HADS anxiety and depression, respectively), and 38,2±9,7 and 46,5±9,5 (SF-12 physical and mental scores, respectively). LBP intensity both on leg and back were statistically associated with perceived disability (r ranging from 0,401-0,480, p<0,001), depression (r ranging from 0,402-0,491, p<0,001), and physical component of SF-12 (r ranging from 0,481-0,522,

$p < 0,001$ ). There were no associations between pain intensity and anxiety or mental functioning. Pain location was associated with SF-12 physical ( $r = 0,402$ ,  $p < 0,001$ ). Pain intensity on the leg yielded the strongest associations on all measures utilised.

**CONCLUSIONS.** Given this study's results, pain intensity appears to be associated with perceived disability, depression and physical functioning across a sample of younger working middle-aged Greek LBP and/or leg sufferers. Pain location appears to affect only physical functioning of the sample. However, leg pain intensity appears to be the more 'situation-driven' factor affecting disability, functioning and mood-depressive signs.

**IMPLICATIONS.** Pain intensity parameters in patients with back-associated leg pain must be separately assessed and probably dealt with, as they seem to have stronger associations with perceived disability, physical functioning and depression.

**KEY WORDS.** LBP, back-associated leg pain, pain location.

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