

# The Interrelationship Between Disability and Psychological Distress in Chronic Nonspecific Low Back Pain Among Adults of Working Age Population

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# **24<sup>th</sup> European Congress of Physical and Rehabilitation Medicine ESPRM**

and

**9<sup>th</sup> Congress of Slovenian Society for  
Physical and Rehabilitation Medicine**

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# **PROCEEDINGS**



# The Interrelationship Between Disability and Psychological Distress in Chronic Nonspecific Low Back Pain Among Adults of Working Age Population

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**BACKGROUND:** Chronic nonspecific low back pain (CNLBP) is conceptualized on the biopsychosocial model and is generally accepted that the experience of CNLBP could significantly contribute to psychological distress. The BDI-II (Beck Depression Inventory-II) is well-known for its reliability and validity in assessing symptoms of depression in various clinical and non-clinical populations. As it can reliably discriminate between chronic pain patients with and without symptoms of clinical depression it is used to assess depression in chronic pain. RMDQ (Roland Morris Disability Questionnaire) has content and construct validity and reflects the concepts of mobility in activities of daily living.

**AIM:** To investigate the interrelationship between the result of the BDI-II and the overall result of functional disability measured with RMDQ among adults of the working-age population with CNLBP regarding age, sex, BMI, length of work and its duration.

**METHOD:** In this cross sectional study patients with CNLBP completed 24-item RMDQ and 21-item BDI-II. Conducting this study was approved by the Ethical Committee of University Hospital Center “Sestre milosrdnice” in February 2023 identified by code number 003-06/23-03/003. Written informed consent was obtained from patients who fulfilled the criteria to participate in the study.

**RESULTS:** We analyzed 64 patients’ data (10 men and 54 women). Men were older than women (49.55 vs 44.80 years;  $P=0.01$ ). The influence of age (mean  $48.81 \pm 5.47$ ), length of working expectancy (mean  $25.64 \pm 7.73$ ), body mass index (mean  $26.52 \pm 4.55$ ), duration of CNLBP in months (mean 96 [26-180]), and the interrelationship between the total score of RMDQ (without disability, mild, moderate, and severe disability), as non-dependent variables, and the total score of BDI-II, was analyzed by logistic regression. The interrelationship between depression (assessed with BDI-II) and disability (assessed with RMDQ) was stronger for women than for men ( $p=0.08$ ). There is a tendency that higher results in RMDQ will assume higher results in BDI-II ( $p<0,115$ ). No significant interrelationship was indicated among other variables and perceived depression and disability due to CNLBP. Overall, the reported strength of the interrelationship between measures of psychosocial distress and measures of self-reported disability cannot precisely predict which group within BDI-II a patient with a disability would match.

**DISCUSSION AND CONCLUSION:** : In our sample, there was a tendency that higher results in total RMDQ score will assume higher results in total BDI-II score, especially in women, although overall the significance wasn’t demonstrated. A bigger sample size and more detailed analysis among constituents in both questionnaires are needed, which could lead to different treatment approaches in patients with CNLBP.

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