

# ASSOCIATION BETWEEN BECK DEPRESSION INVENTORY-II SCORE AND CONFIRMATORY ANSWERS OF THE ROLAND MORRIS DISABILITY QUESTIONNAIRE IN THE SAMPLE OF CHRONIC NON-SPECIFIC LOW BACK PAIN PATIENTS

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## Background and Aims

Chronic non-specific low back pain (LBP) is a major public health problem that adversely affects the functional ability of working men and women. It is conceptualized according to the biopsychosocial model, and it is generally accepted that psychological and psychosocial factors significantly contribute to the burden and experience of chronic non-specific LBP.

## Methods

In our study, we investigated the association between the severity of functional disability and depressive symptoms in the sample of the Croatian working active population with the age distribution from 35 to 65 years with chronic non-specific LBP. The study protocol was approved by the Ethics Committee Sestre milosrdnice University Hospital Center (protocol number 003-06/23-03/003). We performed a cross-sectional study at the University Department of Rheumatology, Physical Medicine, and Rehabilitation from February 2023 to April 2024. Functional disability was measured by the Roland Morris Disability Questionnaire (RMDQ), and depressive symptoms by the Beck Depression Inventory-II (BDI-II). During the routine outpatient visit, included participants completed RMDQ and BDI-II. The analysis of the relationship between the RMDQ answers and the BDI-II total score was performed using the Pearson correlation test and multivariate regression analysis (using the stepwise method).

## Results

The data from the total of 203 recruited patients, divided into categories concerning disability score were analyzed. The mean age of  $48.59 \pm 6.48$  was in the lower and the mean of  $50.65 \pm 7.68$  in the higher disability category. Higher BDI-II total scores were associated with confirmatory answers on the 2nd ( $r=0.277$ ), 3rd ( $r=0.270$ ), 6th ( $r=0.303$ ), 18th ( $r=0.310$ ) and 22nd ( $r=0.455$ ) question of the RMDQ.

## Conclusion

In our sample, the confirmatory answers of RMDQ such as frequent necessity to change position, slow walk pace, need to lie down more often, less sleep and more irritability due to LBP were found to be associated with the higher total BDI-II score.

**Keywords:** low back pain, disability, depression