Determination of Psychological Factors Related to Physical Disability in Patients with Chronic Low Back Pain


Abstract

Introduction: Chronic low back pain (CLBP) is one of the most common and challenging manifestations of pain in adults. Meanwhile psychological factors are considered important in development and continuing of physical disability and functional limitations of patients with CLBP. The aim of this research was to determine the psychological factors related to physical disability in patients with CLBP.

Method: The present study having a cross-sectional design and was from type of correlational which 279 (81 men, 198 women) eligible CLBP patients more than 3 months (with the mean age 42.44±11.77 yr) which patients were refered to Specialized and sub-specialized Neurosurgery Clinic of Poorsina Hospital in Rasht were selected by non probability and consecutive sampling. All patients completed questionnaire of demographic and related low back pain information at the beginning and then they were evaluated by Roland–Morris Disability Questionnaire (RDQ), Visual Analog Scale (VAS), Tampa Scale for Kinesiophobia (TSK), coping strategies questionnaire, catastrophizing subscale (CSQ-CAT), Stanford Depression Scale (CES-D 10) and pain self-efficacy scale.

Results: Correlational analyses indicating significant association between physical disability and all predictive factors. The results of stepwise multiple regression analysis showed that psychological factors significantly explained
52% of the variance of physical disability. In the full model higher levels of self-efficacy beliefs, pain intensity, education, and pain-related fear the composite score of values gained from the two scales of catastrophizing and Kinesiophobia, significantly contributed to the prediction of higher levels of physical disability.

**Conclusion:** The findings showed that, regardless of demographic factors, there is a relatively strong relationship between psychological factors and disability. Thus, clinicians must be aware of the powerful effects of self-efficacy, pain-related fear, pain intensity and patient awareness of the health of their spine to reduce disability and managing CLBP patients. Some clinical implications and research guidelines obtained from these results are discussed for prevention and control of physical disability in these patients.

**Keywords:** Chronic low back pain, Psychological factors, Physical disability