

## ASSOCIATION OF DEPRESSION AND CHRONIC LOWER-BACK PAIN

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**Abstract:** In this work we aimed to study the prevalence of major depressive disorder, assess sleep quality, permanent functional disability as well as association of major depressive disorder with permanent disability, quality of life and quality of sleep in patients with chronic lower – back pain.

**Key words:** depression, lower – back pain, quality of life, chronic backache.

### Introduction

Pain is an unpleasant sensory and emotional experience that is always subjective [1]. Backache is the most commonly reported type of pain, followed by headache then knee pain [2]. It is defined as pain and discomfort, localized below the costal margin and above the inferior gluteal folds [2]. It is one of the most common causes of seeking physician visits, and because of high direct and indirect costs it has great medical, social and economic impact for the individual, their family and society at large [2] the pain can be localized in upper, middle or lower(back). Low back pain is a common health problem worldwide and a major cause of disability, affecting performance at work and general well-being [2]. Low back pain is classified on the basis of its duration as acute (12 weeks) [4]

Psychological factors are important in people with chronic low back pain. Research has indicated that depression and chronic low back pain could be interrelated [5-9]. Major depressive disorder is a mood disorder that is characterized by depressed mood for most of the day, nearly every day, as indicated either by a subjective report or by observation and/or loss of interest in a previously pleasurable activity, that have been present during the same 2 week period, but there might be other symptoms as well [10].

### Materials and methods

The study was conducted at the ASMI clinics in the departments of neurology, vertebrology and neurosurgery. In study participated 20 patients. Patients were of both genders, aged more than 30 years and had lower – back pain as a primary complaint, for a period of more than 12 weeks. Patients were interviewed by the principal investigator on various demographic variables such as age, gender, religion, residence, education, socioeconomic status, height, weight and body mass index, treatment for lower back pain, its duration and mode, and the duration of backache.

All patients were interviewed for a diagnosis of major depressive disorder (MDD) using DSM-5 [2] criteria. Every patient was assessed for the severity of depressive symptoms, health-related quality of life, sleep quality, lower-back pain severity and permanent functional disability on the Hamilton Depression Rating Scale [14, 15] which is a 17- item observer-rated scale for assessing the severity of depression; and by the Short Form 36 Health questionnaire [16] that is a multi-purpose short-form health survey with 36 questions. It yields an 8-scale profile of functional health and well-being scores as well as psychometrically based physical and mental health summary measures and a preference based health utility index. They were also assessed with the Pittsburgh Sleep Quality Index (PSQI) [17], a self-rated sleep quality questionnaire and by the Oswestry Low Back Disability Questionnaire [18], which is an important tool that researchers and disability evaluators use to measure permanent functional disability in a patient.

### **Aims of the study**

To study the frequency of major depressive disorder, assess sleep quality, permanent functional disability; association of major depressive disorder with permanent functional disability; quality of life and quality of sleep in patients with chronic lower-back pain; also to study the correlation between permanent functional disability due to lower-back pain and the severity of depressive symptom.

### **Results:**

The frequency of major depressive disorder and poor quality of sleep in patients with chronic lower – back pain was 74 % and 81% respectively. Patients with MDD had poorer quality of sleep, lower quality of life and higher functional disability. Severe functional disability due to lower – back pain was associated with severe depressive symptoms poorer quality of sleep and lower quality of life. The severity of depression is positively correlated with functional disability. Patients with a pain lasting more than 1 year had greater chances of depression.

### **Conclusions:**

Patients with chronic lower – back pain had a high frequency of depression poor quality of sleep and lower quality of life, and higher functional disability.

### **References:**

1. International Association for the Study of Pain. IASP terminology; [Updated 2017 Dec 14; Cited 2018 Jul 26]. Available from: <http://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698>.
2. Vrbanić TS. [Low back pain—from definition to diagnosis]. Reumatizam (journal) 2011;58(2):105-7.
3. Andersson GB et al. Epidemiological features of chronic lowback pain. Lancet.199; 354 (9178): 581-585.

4. Sagheer MA, Khan MF, Sharif S. Association between chronic low back pain, anxiety and depression in patients at a tertiary care centre. *Journal of Pakistan medical association*. 2013; 63(6): 688-690.
5. Shah SH, Kataria LR, Joshi D. Incidence of depression in chronic low-back pain – A hospital based study. *Healthline*. 2011; 2(2): 35-40.
6. Michael O. Egwu and Afolabi O. Olakunle. Relationship of Duration and Intensity of Pain with Depression and Functional Disability Among Patients with Low-Back Pain, *Low Back Pain Pathogenesis and Treatment*, Yoshihito Sakai, IntechOpen, Intechopen. 2012. p. 69-78.
7. Garbi Mde O, Hortense P, Gomez RR, da Silva Tde C, Castanho AC, Sousa FA et al. Pain intensity, disability and depression in individuals with chronic back pain. *Revista Latino Americana Enfermagem*. 2014; 22(4): 569-75.
8. Guclu DG, Guclu O, Ozaner A, Senormanci O, Konkan R et al. The Relationship Between Disability, Quality of Life and Fear-Avoidance Beliefs in Patients with Chronic Low Back Pain. *Turkish Neurosurgery*. 2012; 22(6): 724-31
9. Arlington VA. Diagnostic And Statistical Manual of Mental Disorders (DSM-5). 5th Ed. Washington DC: American Psychiatric Association. 2013. p.160-8.
10. Antunes RS, Macedo BG, Amaral TS, Gomes HA, Pereira LSM, Rocha FL et al. Pain, kinesiphobia and quality of life in chronic low back pain and depression. *Acta Ortopedica Brasileira*. 2013; 21(1): 27-9.