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# Original Research

# Evaluation of prevalence of psychiatric illness among patients with chronic low back pain

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#### ABSTRACT

Background: Chronic Low Back Pain (CLBP) is one of the well known encountered health hazard affecting worldwide population. A psychiatric disorder is a diagnosis made by a mental health professional of a behavioral or mental pattern that may cause suffering or a poor ability to function in life. Hence; under the light of above mentioned data, the present study was undertaken for assessing the prevalence of psychiatric illness among patients with chronic low back pain. Materials & methods: Study was conducted on 150 patients who were diagnosed to be suffering from CLBP that lasts longer than 12 weeks. Socio-demographic Performa were filled containing the basic information about the patient. Full psychiatric assessment was done in these patients to assess the psychiatric illness. All the data were recorded and analyzed by SPSS software Version 17. Results: Psychiatric illness was found to be present in 63.3 percent of patients (95 patients). Depression was the most common psychiatric illness among CLBP patients found to be present in 42 patients. Generalized anxiety disorder was found to be present in 10 patients. Conclusion: Screening of CLBP patients for psychiatric illness is necessary since psychopathology may affect prognosis, outcome and health care utilization. Key words: Chronic low back pain, Psychiatric illness

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### INTRODUCTION

Chronic Low Back Pain (CLBP) is one of the well known encountered health hazard affecting worldwide population. For a long time, infact since the beginning of the century, the frequency of Chronic Back Pain (CBP) is known to be high in Indian sub-continent. Approximately 80% of all people have back pain at some time in life. Lower Back pain (LBP) is usually defined as pain, muscle tension, or stiffness localised below the costal margin and above the inferior gluteal folds, with or without leg pain (sciatica). The most important symptoms of non-specific low back pain are pain and disability. <sup>2,3</sup>

A psychiatric disorder is a diagnosis made by a mental health professional of a behavioral or mental pattern that may cause suffering or a poor ability to function in life. Such features may be persistent, relapsing and remitting, or occur as a single episode. Many disorders have been described, with signs and symptoms that vary widely between specific disorders.<sup>4-6</sup>

CLBP is a common pain condition; it results in significant personal, social and occupational impairment, role of disability and health care utilization. Epidemiologic studies have found that CLBP is co-morbid with psychiatric disorders, other Chronic Pain(CP) conditions (migraine, arthritis and headache) and with chronic physical conditions.<sup>7,8</sup>

Hence; under the light of above mentioned data, the present study was undertaken for assessing the prevalence of psychiatric illness among patients with chronic low back pain.

## **MATERIALS & METHODS**

The clinical study was conducted in the department of psychiatry and included patients that reported with history of CLBP. Study was conducted on 150 patients who were diagnosed to be suffering from CLBP that lasts longer than 12 weeks. Ethical approval was taken from the institutional ethical committee and written consent was obtained from all the patients after explaining in detail the entire research protocol.

#### **Inclusion criteria**

- Patients with age group of between 18 to 60 years of age
- Patients who reported with CLBP

#### **Exclusion criteria**

- Patients who were unable to undergo psychiatric evaluation and testing
- Patients with mental retardation
- Patients with history of any trauma or traumatic injury

Socio-demographic Performa were filled containing the basic information about the patient. Full psychiatric assessment was done in these patients to assess the psychiatric illness. All the data were recorded and analysed by SPSS software Version 17. Chi-square test was used for the assessment of level of significance. P-value of less than 0.05 was taken as significant.

#### RESULTS

In the present, a total of 150 patients with CLBP were analysed. Among these patients, psychiatric illness was found to be present in 63.3 percent of patients (95 patients). In 42.11 percent of CLBP patients with psychiatric illness, age of onset of psychiatric illness was 18 to 34 years. In 37.89 percent of the patients, age of onset of psychiatric illness was 35 to 49 years. In the present study, among CLBP patients with psychiatric illness, in 78.95 percent of the patients, duration of psychiatric illness was 1 to 3 years. In 15.79 percent of the patients, duration of psychiatric illness was more than 3 years. In the present study, depression was the most common psychiatric illness among CLBP patients found to be present in 42 patients. Generalized anxiety disorder was found to be present in 10 patients.

Table 1: Prevalence of psychiatric illness

Parameter	Number of patients	Percentage
Psychiatric illness	95	63.3

Table 2: Distribution of patients with chronic low back pain according to the age of onset of psychiatric illness

Age of onset (years)	No. of Patients	Percentage
18-34	40	42.11
35-49	36	37.89
More than 50	19	20
Total	95	100

Table 3: Distribution of patients with chronic low back pain according to the duration of psychiatric Disorder

Duration of disorder (years)	No. of Patients	Percentage
Less than 1	5	5.26
1 to 3	75	78.95
More than 3	15	15.79
Total	95	100

Table 4: Distribution of patients with chronic low back pain according to their psychiatric diagnosis

Psychiatric Disorder	No. of Patients	Percentage
Depressive	42	44.21
Somatization Disorder	28	29.47
Alcohol Dependence Syndrome	15	15.79
Generalised Anxiety Disorder	10	10.53
Total	95	100

#### DISCUSSION

Psychological factors become challenging issues for an interventional pain practitioner. There is a preponderance of evidence of association of CP and mental disorders. However, there has been a long-standing struggle between the preponderance of an organic basis for CP vs. preponderance of a psychosocial basis. Activity intolerance is a problem which is often reported by patients with CLBP. As a result of their back pain, they perceive a disabling reduction of their level of physical activity. Fear of movement/ (re)injury has been reported to be strongly associated with activity limitations, often stronger than pain severity. 9-11

In the present, a total of 150 patients with CLBP were analysed. Among these patients, psychiatric illness was found to be present in 63.3 percent of patients (95 patients). In 42.11 percent of CLBP patients with psychiatric illness, age of onset of psychiatric illness was 18 to 34 years. In 37.89 percent of the patients, age of onset of psychiatric illness was 35 to 49 years. Von Korff et al (2005) suggested that CBP is also significantly associated with mood, anxiety (except agoraphobia without panic) and alcohol abuse and dependence disorders. As observed by Tsang et al (2008), various CP conditions (headache, back or neck pain, arthritis or joint pain) are associated with depression-anxiety spectrum disorders both in developed and developing countries.<sup>5, 12</sup> In the present study, among CLBP patients with psychiatric illness, in 78.95 percent of the patients, duration of psychiatric illness was 1 to 3 years. In 15.79 percent of the patients, duration of psychiatric illness was more than 3 years. Recent epidemiological data have shown a strong association between generalized anxiety disorder and pain conditions, while only a few studies have shown higher odds of alcohol use disorders among individuals suffering from pain disorders. This association has important clinical implications because patients with psychiatric disorders often present to their primary care provider with pain as the initial reason for seeking treatment, and the lack of awareness of the association may lead to the under-diagnosis and undertreatment of the associated psychiatric disorder. 10-12

In the present study, depression was the most common psychiatric illness among CLBP patients found to be present in 42 patients. Generalized anxiety disorder was found to be present in 10 patients. Studies involving patients with CLBP have shown that coexisting psychiatric disorders are associated with disability and poorer treatment outcomes and, similarly, the presence of pain in patients with major depressive disorder (MDD) is associated with poorer outcomes, increased overall treatment costs, impaired productivity and poor quality of life.8- 10Review of literature regarding psychopathological comorbidity of CLBP has documented increased prevalence of depression, anxiety, substance abuse, somatisation and personality disorders in cases of CLBP compared to the general population. Depression and anxiety have been associated with magnification of medical symptoms whereas emotional distress has been connected to physical symptoms by means of autonomic arousal, vigilance and misinterpretation of somatic amplification. Less effective treatment outcome has also been shown to be related to untreated depression. 13, 14

#### **CONCLUSION**

Under the light of above obtained results, the authors conclude that screening of CLBP patients for psychiatric illness is necessary since psychopathology may affect prognosis, outcome and health care utilization.

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