

## Original Research

### Prevalence of psychiatric illness in patients with chronic low back pain

Dr. Satish Kumar Budania

Assistant professor, Department of Psychiatry, Rajshree Medical Research Institute & Hospital Bareilly, U.P.

#### ABSTRACT:

**Background:** Low back pain (LBP) is one of the most common complaints of patients referred to the clinics. Studies indicated that psychosocial factors have great impact on the patients' complaints and disability. The present study was undertaken to assess the prevalence of psychiatric illness among patients with chronic low back pain. **Materials & methods:** Study was conducted on 300 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 (190 patients). Depression was the most common psychiatric illness among CLBP patients. Generalized anxiety disorder was found to be present in 20 patients. **Conclusion:** Screening of CLBP patients for psychiatric illness is necessary since psychopathology may affect prognosis, outcome and health care utilization. Therefore, early diagnosis and treatment of these disorders may improve the outcome of CLBP.

**Key words:** Chronic low back pain, Psychiatric illness

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**Corresponding author:** Dr. Satish Kumar Budania, Assistant professor, Department of Psychiatry, Rajshree Medical Research Institute & Hospital Bareilly, U.P.

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#### INTRODUCTION

Low back pain (LBP) is one of the most prevalent chronic pain problems among patients. 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.<sup>1</sup> 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>

Studies where diagnostic interviews have been applied to evaluate psychiatric comorbidity in chronic LBP (CLBP) show the high prevalence varying from 41% to 99% consistently. The most common disorders are somatoform disorders, affective disorders, and substance abuse disorders with major depression as the most common single diagnosis. Psychiatric disorders are also significantly more prevalent in those reporting CLBP compared to those without it in the general population. A wide range of different questionnaires has been used to assess psychopathology in CLBP patients by self-report. 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**

This was a cross-sectional case-control study conducted in the department of psychiatry on 300 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
- Severity of LBP to a level which made the patient visit a doctor
- LBP duration of more than 3 months
- LBP being the patient's main and chief complaint.

**Exclusion criteria**

- Patients who were unable to undergo psychiatric evaluation and testing
- Mental retardation
- Presence of major cerebral diseases (such as epilepsy and cerebral vascular accident)
- History of surgery in recent year
- LBP associated with neoplastic, infectious, or inflammatory causes, pregnancy, or spinal trauma

- Radiculopathy or neural compression on MRI.

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. The data obtained were coded and analyzed using SPSS 11.5 Windows (© SPSS Inc., Chicago, IL, USA). The value of significant difference was set at  $P < 0.05$ .

**RESULTS**

In the present, a total of 300 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 84 patients. Generalized anxiety disorder was found to be present in 20 patients.

**Table 1:** Prevalence of psychiatric illness

Parameter	Number of patients	Percentage
Psychiatric illness	190	63.3

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

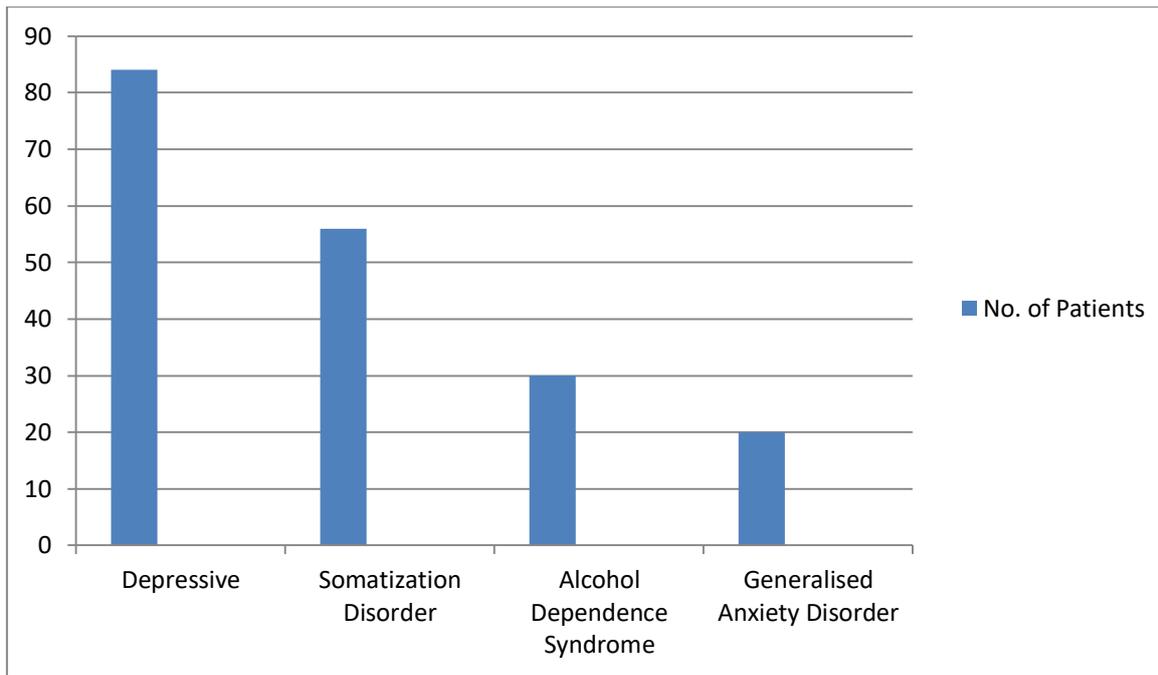
Age of onset (years)	No. of Patients	Percentage
18-34	80	42.11
35-49	72	37.89
More than 50	38	20
Total	190	100

**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	10	5.26
1 to 3	150	78.95
More than 3	30	15.79
Total	190	100

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

Psychiatric Disorder	No. of Patients
Depression	84
Somatization Disorder	56
Alcohol Dependence Syndrome	30
Generalised Anxiety Disorder	20
Total	190



Graph 1: Chronic low back pain patients according to their psychiatric diagnosis

**DISCUSSION**

LBP is a common condition that affects a large portion of the population. Although experienced by the majority, the complaints endure and disable in a minority. CLBP is a condition where biological, psychological, and social factors interact and mutually influence each other, both as causal factors and in maintaining the complaints.<sup>9</sup>

In the present, a total of 300 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.

Some of these dimensions were reported to be more prevalent in CLBP patients in previous studies: A study by Bener et al.<sup>10</sup> which was conducted in 13 primary healthcare centers throughout Qatar showed that somatization and depression disorder were significantly more common in LBP patients when compared to their healthy counterparts.

In a study by Halla et al., depression and stress symptoms but not anxiety were responsible for mediation of the pain-disability relationship.<sup>11</sup>

Von Korff et al (2005) suggested that CLBP 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>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 under-treatment of the associated psychiatric disorder.<sup>10-12</sup>

In the present study, depression was the most common psychiatric illness among CLBP patients found to be present in 84 patients. Generalized anxiety disorder was found to be present in 20 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.

Polatin and colleagues<sup>13</sup> assessed 200 patients with chronic low back pain, of whom 77% met lifetime diagnostic criteria for psychiatric illness, and 59% showed current symptoms. Furthermore, psychosocial risk factors—so-called pain-prone factors—are partly responsible for lengthening the duration of pain syndromes, and associations with life events and lack of coping strategies can also be found.

The mind-body interaction is complex. There is increasing scientific evidence indicating that mind-body interactions are at the root of health and disease. Research has shown that psychological factors play a role in the

onset and course of many chronic disorders, and that psychological, emotional, behavioral, and psychosocial interventions have at least as much proof of effectiveness as many medical treatments

## 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. Therefore, early diagnosis and treatment of these disorders may improve the outcome of CLBP.

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