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## Original Article

### Evaluation of Various Coping Strategies among Chronic Lower Back Pain Patients Suffering From Various Psychiatric Disorders: A Hospital Based Study

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#### ABSTRACT

**Background:** Chronic Low back pain (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. The most common disorders are somatoform disorders, affective disorders and substance abuse disorders, with major depression as the most common single diagnosis. Hence; we planned the present study to evaluate various coping strategies in patients with CLBP. **Materials & methods:** The clinical study and included evaluation of 50 patients that reported in the Department of Orthopaedics with history of CLBP. Socio-demographic Performa were filled containing the basic information about the patient. Full psychiatric assessment was done in these patients to assess the psychiatric morbidity; severity of pain was assessed by using VAS and disability was assessed using Oswestry low back pain scale. Various coping strategies were recorded in all the patients. All the data were recorded and analyzed by SPSS software. **Results:** A total of 50 patients with diagnosis of CLBP were included in the present study. Out of 50 patients with CLBP, 56 percent (28 patients) exhibited psychiatric illness. Coping strategies associated in patients with psychopathology were found to be avoidance, emotional support, optimism/problem solving and self-control. **Conclusion:** Psychiatric illness is present in significant population of patients affected by CLBP.

**Key words:** Chronic Low back pain, Coping Strategies, Psychiatric Disorders.

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#### INTRODUCTION

Low back pain (LBP) is a common condition that affects large parts of the population, with up to 40% of the general population reporting LBP during last month. Although experienced by the majority, the complaints endure and disable in a minority.<sup>1-3</sup> Chronic LBP (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. In CLBP there is a high degree of comorbidity with reports of additional somatic and psychological symptoms and complaints.<sup>4, 5</sup> Prevalence of comorbid psychiatric disorders is often assessed and considered. In most cases questionnaires, and not diagnostic interviews, are conducted. Studies where diagnostic interviews have been used to assess psychiatric comorbidity in CLBP, show consistently high prevalence varying from 41% to 99%.<sup>6-9</sup> The most common disorders are somatoform disorders, affective disorders and substance abuse disorders, with major depression as the most common

single diagnosis.<sup>10</sup> Hence; we planned the present study to evaluate various coping strategies in patients with CLBP.

#### MATERIALS & METHODS

The clinical study was planned in the department of psychiatry Government S.K. Hospital, Sikar, Rajasthan and included evaluation of 50 patients that reported in the Department of Orthopaedics with history of CLBP. We included those 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 to the Department of Orthopaedics 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
- Patients with any known history of tuberculosis or spinal deformity

**METHODOLOGY**

Socio-demographic Performa were filled containing the basic information about the patient. Full psychiatric assessment was done in these patients to assess the psychiatric morbidity; severity of pain was assessed by using VAS and disability was assessed using Oswestry low back pain scale.<sup>11</sup> Various coping strategies were recorded in all the patients.

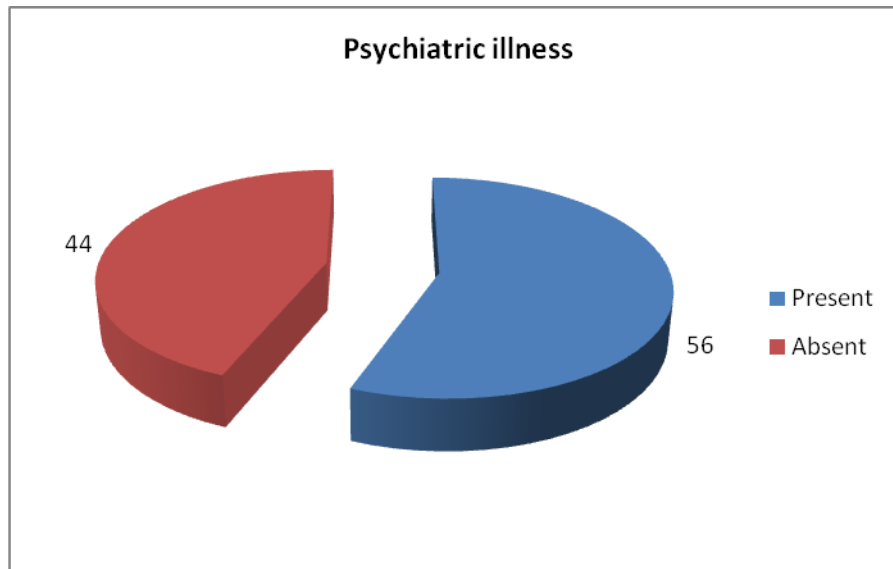
**STATISTICAL ANALYSIS**

All the data were recorded and analyzed 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.

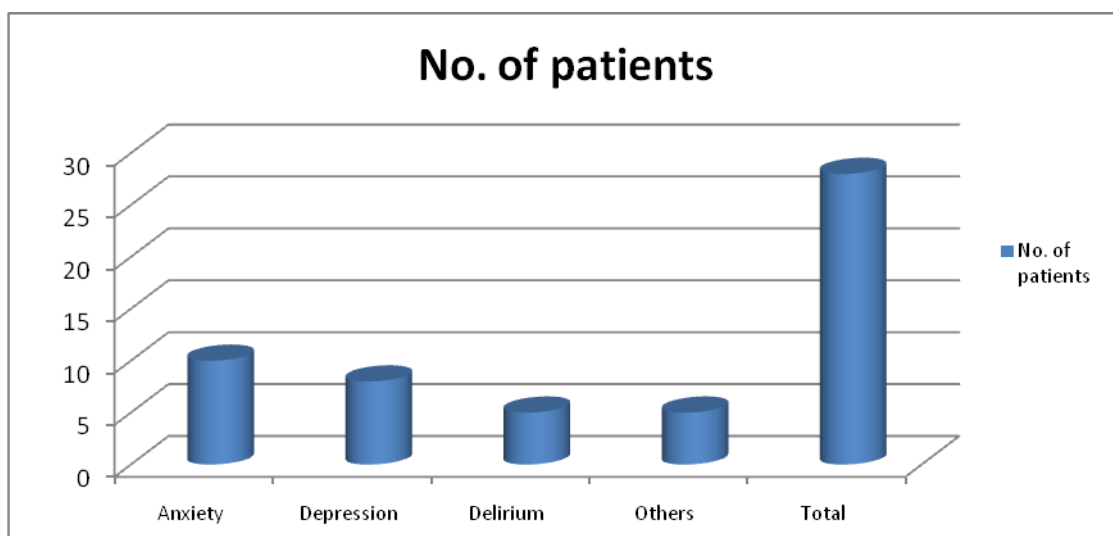
**RESULTS**

A total of 50 patients with diagnosis of CLBP were included in the present study. Out of 50 patients with CLBP, 56 percent (28 patients) exhibited psychiatric illness. Among various psychiatric disorders, anxiety and depression were the predominant disorders present in our study group. Coping strategies associated in patients with psychopathology were found to be avoidance, emotional support, optimism/problem solving and self-control. Mean scores for avoidance and emotional support were found to be 21.56 and 14.15 respectively. Mean scores for optimism/problem solving and self-control were found to be 15.48 and 22.68 respectively.

**Graph 1:** Distribution of subjects according to Psychiatric Comorbidity



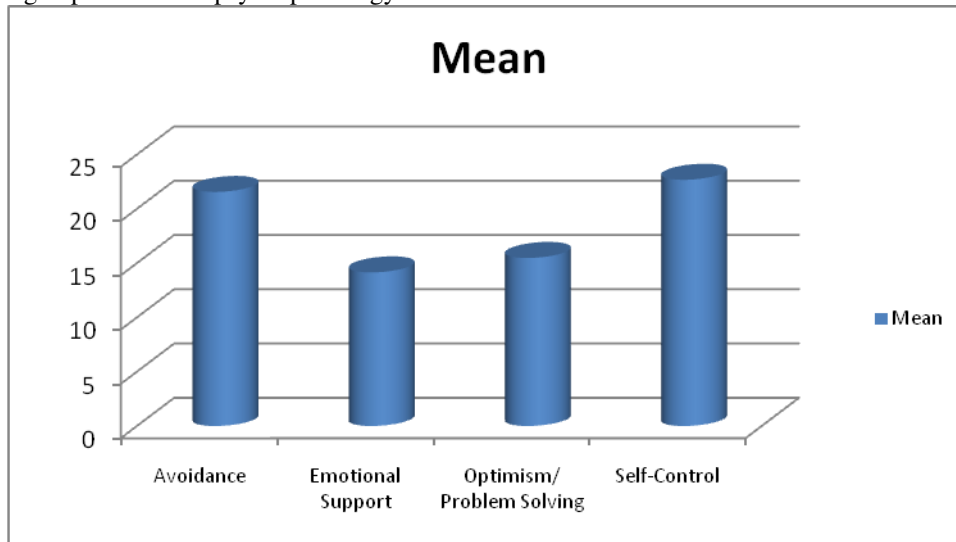
**Graph2:** Prevalence of psychiatric disorders in CLBP patients



**Table 1:** Coping in patients with psychopathology

Factors	N	Mean
Avoidance	28	21.56
Emotional Support	28	14.15
Optimism/ Problem Solving	28	15.48
Self-Control	28	22.68

**Graph 3:** Coping in patients with psychopathology



**DISCUSSION**

In the present study, we observed that psychiatric illness was present in 56 percent of the patients with CLBP. Turner JA et al assessed the strategies for coping with chronic low back pain patients. Seventy-four chronic low back pain patients in a study assessing the effectiveness of group outpatient cognitive-behavioral and operant behavioral treatment completed the Coping Strategy Questionnaire (CSQ) and measures of pain, depression, and functional disability pre- and post-treatment. The previously reported factor structure of the CSQ was generally replicated, and significant associations were found between use of ignoring and reinterpretation strategies and downtime, between use of attention diversion strategies and pain intensity, and between tendency to catastrophize and physical and psychosocial impairment. Both treatments resulted in significant changes in types of coping strategies used to deal with pain. Increased use of praying and hoping strategies was significantly related to decreases in pain intensity. Decreased catastrophizing was also significantly related to decreases in pain intensity, as well as to decreases in physical and psychosocial impairment.<sup>12</sup> Khan AW et al assessed 127 patients of chronic low back pain patients for current psychiatric syndromes using MINI Plus (Mini Neuro Psychiatric Interview) scoring. The diagnoses included a wide range of psychiatric disorder. The main psychiatric morbidity in our study was somatoform disorder in 48 (38%) patients. Depression was the second most common diagnosis in our population with about 30% (n=39) of people suffering from depressive disorder. The third subgroup was of PTSD (post-traumatic stress disorder) which was about 10 % (n=12) of the total

number of patients. This number assumes significance in the back ground of manmade conflict. High incidences of PTSD have been found in population studies in conflict zones and this was reflected here also. Somatic pains are known to be excessive in these types of patients and may actually represent a cry for help. The authors concluded that the results imply that screening chronic low back pain patients for psychiatric comorbidity in secondary care is important since psychopathology may have serious consequences for prognosis, outcome and health care utilization.<sup>13</sup> Reme SE et al assessed the prevalence of psychiatric comorbidity in a population of CLBP patients, using a psychiatric diagnostic interview. 565 patients sick listed between 2 and 10months for unpecific LBP were included in the study. All were recruited as part of an ongoing trial in secondary care, and were assessed with the Mini-International Neuropsychiatric Interview (MINI), which is a short structured diagnostic interview for DSM-IV and ICD-10 psychiatric disorders. The prevalence of current psychiatric disorders was 31%. The diagnoses included 19 Axis I disorders, with the most common being somatoform disorders (18%) and anxiety disorders (12%). Major depressive disorders were reported in 4%. There were no gender differences in prevalence of psychiatric disorders. In a large population of CLBP patients, 31% fulfilled the criteria for at least one current psychiatric disorder when measured with a diagnostic interview. The diagnoses included a wide range of psychiatric disorders, with the most common being somatoform disorders (18%) and anxiety disorders (12%). The results implied that screening CLBP patients for psychiatric comorbidity in secondary care is important

since psychopathology may have serious consequences for prognosis, outcome and health care utilization.<sup>14</sup>

## CONCLUSION

From the above results, the authors concluded that psychiatric illness is present in significant population of patients affected by CLBP. However; we recommend future studies for better exploration of this field of psychiatry.

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