

EVALUATION OF PREVALENCE OF CHRONIC LOW BACK PAIN AND ITS ASSOCIATED PSYCHIATRIC MORBIDITY AMONG PATIENTS REPORTING TO TERTIARY CARE CENTER

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Abstract

Background: The present study was conducted for evaluating the prevalence of chronic low back pain and its associated psychiatric morbidity among patients reporting to tertiary care center. **Materials and Methods:** A total of 200 subjects who reported for medical check up were enrolled. Complete demographic details of all the patients were obtained. Among these 200 patients, segregation of the patients with CLBP was done. Appropriate hematological, biochemical and radiological examination was done in all the patients with CLBP. The psychiatric evaluation was done among all the patients with CLBP. ICD 10 Classification of Mental and Behavioural Disorder-Diagnostic Criteria for Research (DCR) was used for evaluation of psychiatric morbidity among CLBP patients. **Result:** A total of 200 patients were screened in the present study. CLBP was present in 68 patients. Hence; overall prevalence of CLBP was 34 percent in the present study. Overall, psychiatric morbidity was seen in 25 patients. Hence; overall incidence of psychiatric morbidity among CLBP patients was 36.76 percent. Among them, anxiety, depression, bipolar disorder and adjustment disorder was seen in 10 patients, 8 patients, 5 patients and 2 patients respectively. **Conclusion:** Chronic low back pain affects a significant proportion of patient population and is associated with considerable psychiatric morbidity.

INTRODUCTION

Low back pain (LBP) is a public and occupational health problem that is a major professional, economic and social burden. Up to 84% of the general population will experience an episode of LBP during its life time, and recurrence rates are high. Chronic low back pain (CLBP) is a public and occupational health problem that is a major professional, economic and social burden.^[1,2] These patients have back pain secondary to a wide variety of mechanical and nonmechanical disorders. The mechanical disorders associated with chronic low back pain include osteoarthritis and lumbar spinal stenosis; the nonmechanical disorders include infectious, neoplastic, rheumatologic, endocrinologic, vascular, and gynecologic.^[3,4] Psychological and social factors have been known to be associated with low back

pain. CLBP affects the physical, emotional and social functioning of the affected individual. The imposed biophysical limitations impair physical functioning and adversely affect the general health and reconditioning. The adverse psychological and social impact on patient's health leads to clinically diagnosed or self-reported psychological morbidities.^[5,6] Hence; the present study was conducted for evaluating the prevalence of chronic low back pain and its associated psychiatric morbidity among patients reporting to tertiary care center.

MATERIALS AND METHODS

The present study was conducted for evaluating the prevalence of chronic low back pain and its associated psychiatric morbidity among patients

reporting to tertiary care center. A total of 200 subjects who reported for medical check up were enrolled. Complete demographic details of all the patients were obtained. Among these 200 patients, segregation of the patients with CLBP was done. Appropriate hematological, biochemical and radiological examination was done in all the patients with CLBP. The psychiatric evaluation was done among all the patients with CLBP. ICD 10 Classification of Mental and Behavioural Disorder-Diagnostic Criteria for Research (DCR) was used for evaluation of psychiatric morbidity among CLBP patients.⁶ All the results were recorded in Microsoft excel sheet followed by statistical analysis using SPSS software. Chi-square test was used for evaluation of level of significance.

RESULTS

A total of 200 patients were screened in the present study. CLBP was present in 68 patients. Hence; overall prevalence of CLBP was 34 percent in the present study. Majority of the patients with CLBP belonged to the age group of more than 45 years. Out of 68 patients, 42 patients were males while the remaining were females. Overall, psychiatric morbidity was seen in 25 patients. Hence; overall incidence of psychiatric morbidity among CLBP patients was 36.76 percent. Among them, anxiety, depression, bipolar disorder and adjustment disorder was seen in 10 patients, 8 patients, 5 patients and 2 patients respectively. Non-significant results were obtained while correlating occurrence of psychiatric morbidity with age and gender.

Table 1: Prevalence of psychiatric morbidity among CLBP patients

Variable	Number	Percentage
Psychiatric morbidity present	25	36.76
Psychiatric morbidity absent	43	63.24
Total	68	100

Table 2: Types of psychiatric morbidity among CLBP patients

Psychotic morbidity	Number	Percentage
Anxiety	10	14.71
Depression	8	11.76
Bipolar disorder	5	7.35
Adjustment disorder	2	2.94
Total	25	36.76

Table 3: Correlation of psychiatric morbidity with age and gender

Psychiatric morbidity correlation	Pearson's correlation	p-value
Age	-1.256	0.441
Gender	-1.841	0.523

DISCUSSION

Chronic low back pain (cLBP) is common and can result in significant functional impairment and poor quality of life. Globally, cLBP affects more than one-fifth of adults in Western countries, affects female subjects more than male subjects, and is most common among individuals aged 40 to 80 years. Chronic low back pain is a leading cause of disability, and the total costs associated with cLBP exceed 100 billion dollars per year in the United States alone, with the great majority related to loss in wages and productivity.^[7,8] Psychosocial risk factors have been studied in patients of CLBA with studies showing varying results. Major depression is thought to be four times greater in people with chronic back pain than in the general population. Patients who come to seek treatment at pain clinics, the prevalence rates are still higher with 32 to 82 percent of patients show some type of depression or depressive problem, with an average of 62 percent.^[8-10] Hence; the present study was conducted for evaluating the prevalence of chronic low back pain and its associated psychiatric morbidity among patients reporting to tertiary care center.

A total of 200 patients were screened in the present study. CLBP was present in 68 patients. Hence; overall prevalence of CLBP was 34 percent in the present study. Majority of the patients with CLBP belonged to the age group of more than 45 years. Out of 68 patients, 42 patients were males while the remaining were females. Overall, psychiatric morbidity was seen in 25 patients. Hence; overall incidence of psychiatric morbidity among CLBP patients was 36.76 percent. In a previous study conducted by Singhal K et al, authors examined the prevalence of anxiety, depression, disability, alexithymia, insomnia, and sleep quality in patients having chronic low back pain (CLBP). There was significant association between the level of disability and depression, anxiety, insomnia, and sleep quality. The severity of pain had significant association with insomnia but the association with anxiety, depression, alexithymia, and sleep quality was not significant. Patients with chronic LBP do have associated psychological comorbidities of varying extent.^[11]

In the present study, among them, anxiety, depression, bipolar disorder and adjustment disorder was seen in 10 patients, 8 patients, 5 patients and 2 patients respectively. Non-significant results were

obtained while correlating occurrence of psychiatric morbidity with age and gender. In a similar study conducted by Rajmohan et al, authors estimated the prevalence of psychiatric disorders, and its association with perception of pain and functional status in chronic patients in palliative care. The psychiatric morbidity was 67% with depression and adjustment disorders being the major diagnosis. There was a significant association between psychiatric morbidity pain variables ($P = 0.000$). Psychiatric morbidity significantly impaired activity, mood, working, walk, sleep, relationship, and enjoyment. There was no association between aetiology of pain, type of cancer, treatment for primary condition and treatment for pain and psychiatric morbidity. The functional status of cancer patients was also poorer in patients with psychiatric morbidity. There is a high prevalence of psychiatric illness in chronic pain patients of any aetiology.^[12] Although a strong association between depression and chronic low back pain has been well demonstrated in previous published reports, data on the risk factors that predisposes a patient with chronic low back pain to concomitant depression is very scanty. Currie and Wang reported that the rate of major depression increased in a linear fashion with greater pain severity.^[13-15]

CONCLUSION

Chronic low back pain affects a significant proportion of patient population and is associated with considerable psychiatric morbidity.

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