

ASSESSMENT OF VARIOUS PSYCHIATRIC MORBIDITIES AMONG PATIENTS WITH CHRONIC LOWER BACK PAIN

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Abstract

Background: This study was conducted for the assessment of various psychiatric morbidities among patients having chronic lower back pain. **Materials and Methods:** Individuals had been enrolled consecutively from the general orthopaedic clinic who presented with low back pain of at least six months' duration as well as for whom a clinical examination as well as fundamental investigation failed to identify organic as well as medicinal explanations. Clinically abnormal individuals were ruled out, as were those having abnormal blood sugar, serum uric acid, or erythrocyte sedimentation rate, as well as those with abnormal X-rays of the lumbosacral spine. Consent after careful consideration was received. Younger participants (those under 16) were disqualified. **Results:** One hundred people were recruited for the study. As a group, they were predominantly female (70%), married (85%), Hindu (65%), and literate (89%). No significant differences were found between subjects interviewed with respect to age, gender, marital status, education level, or prevalence of spousal alcohol misuse. **Conclusion:** Improving clinical practice depends on doctors being able to identify and treat common mental illnesses in patients with chronic low back pain.

INTRODUCTION

Low back pain is a common health problem globally. The transition of low back pain to chronicity has implications in its morbidity and cost of treatment.^[1] In published reports, the proportion of low back pain that transits to chronicity ranges from 8.7–39%.^[2-3] In USA, a recently published report indicated a rising prevalence of chronic low back pain.^[4] In Nigeria, chronic low back pain accounted for 60–73% of low back pain seen in tertiary health care settings.^[4-6] The disability and morbidity associated with chronic low back pain is an enormous burden when aggravated by concomitant depression.^[7] The strong association between depression and chronic low back pain was well demonstrated in previous published reports.^[8-11] This correlation has been attributed to the common pathway and neurotransmitters in central nervous system for pain and depression.^[11] In a Canadian population, depression is three to four times more in patients with chronic back pain than in general population.^[8]

Depression has implication in the outcome of measures aimed at eradicating low back pain. Thus,

poor outcome is likely when treatment is focused on pain without addressing concomitant depression.^[12,13]

Hence this study was conducted for the assessment of various psychiatric morbidities among patients with chronic lower back pain.

MATERIALS AND METHODS

The present study was conducted in Department of Psychiatry, Maa Vindhyawasini Autonomous State Medical College, Mirzapur, Uttar Pradesh (India) for the assessment of various psychiatric morbidities among patients with chronic lower back pain. Individuals had been enrolled consecutively from the general orthopaedic clinic who presented with low back pain of at least six months' duration as well as for whom a clinical examination as well as fundamental investigation failed to identify organic

as well as medicinal explanations. Clinically abnormal individuals were ruled out, as were those having abnormal blood sugar, serum uric acid, or erythrocyte sedimentation rate, as well as those with abnormal X-rays of the lumbosacral spine. Consent after careful consideration was received. Younger participants (those under 16) had been disqualified. The CIS-R case definition was used to determine the existence of cases. Confidence intervals as well as odds ratios were determined. Adjustments and exclusions of confounders were made using logistic regression. Under the following conditions (estimated prevalence of 50% of depression, estimate of error 10%, confidence limit 95%), a sample size of 100 was determined. Sample size had been determined with reference to available epidemiological data.

RESULTS

One hundred people were recruited for the study. As a group, they were predominantly female (70%), married (85%), Hindu (65%), and literate (89%). No significant differences were found between subjects interviewed with respect to age, gender, marital status, education level, or prevalence of spousal alcohol misuse. Table 2 displays the percentages of cases with each of the several ICD-10 PC diagnoses. Most patients were diagnosed with depression or a mood condition that can be treated with antidepressants (such as adjustment disorder, mixed anxiety and depression, panic disorder, or somatoform presentation).

Table 1: Gender-wise distribution of subjects

Gender	Number of subjects	Percentage
Males	30	30%
Females	70	70%
Total	100	100%

Table 2: The frequency of International Classification of Diseases 10 -Primary Care (ICD-10 PC) diagnoses

ICD-10 PC category	Number of subjects
Depression	53
Adjustment disorder	09
Mixed anxiety depression	09
Generalised depression	08
Panic disorder	05
Conversion disorder	03
No psychiatric diagnosis	13
Total	100

DISCUSSION

Chronic pain (CP) is a global problem that can permeate all aspects of life.^[14-16] It affects the whole person, his/her physical health, psychological well-being, and psychosocial problems, and it brings with it a future filled with depression, melancholy, hopelessness, loneliness, a loss of identity, and a low quality of life. Globally, it is estimated that one in five adults in Europe suffer from chronic or recurrent pain, and that each year, one in ten adults worldwide are diagnosed with chronic pain.^[17-19] For more than twenty years, the International Association for the Study of Pain (IASP) defined CP as pain that persists beyond normal tissue healing time, which is assumed to be three months and as an aversive sensory and emotional experience that is typically caused by, or resembling that caused by, actual or potential tissue injury.^[20,21] Until May 2019, diagnoses of CP were not systematically represented in the International Classification of Diseases (ICD-10). This has changed with the adoption of the ICD-11 by the World Health Organization (WHO), and the ICD-11 was the first version to include CP. Therefore, CP is now regarded as not so much a symptom of disease, but as a disease in itself. Classifications of CP are based on current scientific evidence and a biopsychosocial model. CP can cause maladaptive

cognition and behaviours that, in turn, can worsen daily function, increase psychological stress, and even prolong the pain itself.^[22] Fatigue, irritability, sleep, and decreased appetite disorders are somatic symptoms that often accompany CP. In CP, emotional, motivational, cognitive, and psychosocial factors may be more intense than nociceptive pain alone.^[23]

In this study, one hundred people were recruited for the study. As a group, they were predominantly female (70%), married (85%), Hindu (65%), and literate (89%). No significant differences were found between subjects interviewed with respect to age, gender, marital status, education level, or prevalence of spousal alcohol misuse. Most patients were diagnosed with depression or a mood condition that can be treated with antidepressants (such as adjustment disorder, mixed anxiety and depression, panic disorder, or somatoform presentation). In a similar study conducted by Khan et al, authors evaluated psychiatric morbidity among patients with chronic low back pain. One hundred twenty-seven patients of chronic low back pain patients were assessed 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 their 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 background 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 conclude 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.^[24] Singhal, K et al examined the prevalence of anxiety, depression, disability, alexithymia, insomnia, and sleep quality in patients having chronic low back pain (LBP) and study their association with the severity of pain and any disability arising from it. Mean ODI score was 31.54% (95% CI, 26.09–36.99); mean VAS score was 6.08 (95% CI, 5.35–6.81). Insomnia of varying severity was found in 29 patients. Sleep quality was reported as good by 23 patients. One patient had alexithymia. 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.^[25]

CONCLUSION

Improving clinical practice depends on doctors being able to identify and treat common mental illnesses in patients with chronic low back pain.

REFERENCES

1. Anderson GBJ. Epidemiological features of chronic low back pain. *Lancet*. 1999;354:581–585.
2. Coste J, Delecoeuillerie G, Cohen de Lara A, Le Parc JM, P Gurcay E, Bal A, Eksioglu E, Hasturk AE, et al. Acute low back pain clinical course and prognostic factors. *Disabil Rehabil*. 2009;31(10):840–845.
3. Thomas E, Silman AJ, Croft PR, Papageorgiou AC, Jayson MI, Macfarlane GJ, Jones GT, Johnson RE, Wiles NJ, Chaddock C, et al. Predicting persistent disabling low back pain in general practice: prospective cohort study. *Br J Gen Pract*. 2006;56(526):334–341.
4. Freburger JK, Holmes GM, Agans RP, Jackman AM, Darter JD, Wallace AS, et al. The rising prevalence of chronic low back pain. *Arch Intern Med*. 2009;169(3):251–258.

5. Omoke NI, Amaragbulam PI. Low back pain as seen in orthopaedic clinics of a Nigerian Teaching Hospital. *Niger J Clin Pract*. 2016;19:212–217.
6. Eyichukwu GO, Ogugua PC. Epidemiology of low back pain in Enugu, Nigeria. *Niger J Orthop Trauma*. 2012;11:28–35.
7. Tsuji T, Matsudaira K, Sato H, Vietri J. The impact of depression among chronic low back pain patients in Japan. *BMC Musculoskeletal Disorder*. 2016;17:1–9. 447.
8. Currie SR, Wang J. Chronic back pain and major depression in the general Canadian population. *Pain*. 2004;107(1–2):54–60.
9. Atkinson HJ, Slater MA, Patterson TL, Grant I, Garfin SR. Prevalence, onset and risk of psychiatrist disorders in men with chronic low back pain: a controlled study. *Pain*. 1991;45:111–121.
10. Deardorff WW. Depression and chronic back pain. [October 14, 2016].
11. Bair MJ, Robinson RL, Katon W, Kroenke K. Depression and pain co morbidity: a literature review. *Arch Intern Med*. 2003;163:2433–2445.
12. Love AW. Depression in chronic low back pain patients: diagnostic efficiency of three self-report questionnaires. *J Clin Psychol*. 1987;43(1):84–89.
13. Sinikallio S, Aalto T, Airaksinen O, Herno A, Kroger H, Savolainen S, et al. Depression is associated with poorer outcome of lumbar stenosis surgery. *Eur Spine*. 2007;16:905–912.
14. Steingrimsdóttir Ó.A., Landmark T., Macfarlane G.J., Nielsen C.S. Defining chronic pain in epidemiological studies: A systematic review and meta-analysis. *Pain*. 2017;158:2092–2107.
15. Tøye F., Seers K., Hannink E., Barker K. A mega-ethnography of eleven qualitative evidence syntheses exploring the experience of living with chronic non-malignant pain. *BMC Med. Res. Methodol*. 2017;17:116.
16. Ojala T., Häkkinen A., Karppinen J., Sipilä K., Suutama T., Piirainen A. Chronic pain affects the whole person—A phenomenological study. *Disabil Rehabil*. 2015;37:363–371.
17. Breivik H., Collett B., Ventafridda V., Cohen R., Gallacher D. Survey of chronic pain in Europe: Prevalence, impact on daily life, and treatment. *Eur. J Pain*. 2006;10:287.
18. Canney M., McNicolas T., Scarlett A., Briggs R. Health and Wellbeing: Active Ageing for Older Adults in Ireland. Trinity College Dublin; Dublin, Ireland: 2017. Prevalence and Impact of Chronic Debilitatind Disorders; pp. 152–190.
19. Goldberg D., Summer M. Pain as a Global Public Health Priority. *BMC Public Health*. 2011;11:770.
20. IASP Classification of Chronic Pain. [(accessed on 25 January 2022)].
21. IASP IASP’s Proposed New Definition of Pain. 2019.
22. Moseley G.L., Vlaeyen J.W.S. Beyond nociception: The imprecision hypothesis of chronic pain. *Pain*. 2015;156:35–38.
23. Sturgeon J.A. Psychological therapies for the management of chronic pain. *Psychol. Res. Behav*. 2014;7:115–124.
24. Khan AW, Khan HA, Wani ZA et. al. Psychiatric morbidity among chronic low back ache pateints in conflict zone of Kashmir. *Int J Health Sci Res*. 2014; 4(1):149-154.
25. Singhal, K., Muliya, K. P., Pakhare, A. P., Behera, P., & Santoshi, J. A. (2021). Do Patients of Chronic Low Back Pain have Psychological Comorbidities?. *Avicenna journal of medicine*, 11(3), 145–151. <https://doi.org/10.1055/s-0041-1734385>.