

# Analysis of Prevalence of Chronic Back Pain in Daily Wage Workers: An Institutional Based Study

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## ABSTRACT

**Background:** Low back pain is a considerable health problem in all developed countries and is most commonly treated in primary healthcare settings. Hence; the present study was conducted for assessing the prevalence of chronic back pain in Daily wage workers.

**Materials & Methods:** Total of 150 daily wage workers were enrolled. Complete demographic details of all the patients were obtained. Through clinical and medical examination of all the patients was done. Detailed history was taken. The chronic back pain among the study participants was assessed by the standardized Nordic questionnaire for the analysis of musculoskeletal symptoms. Risk factors of chronic low back pain were evaluated.

**Results:** Prevalence of chronic back pain was 67.33 percent. Out of these 101 subjects, 83 were males and 18 were females. History of chronic back pain was more than 2 years in majority of the patients. Out of these 101 patients with presence of chronic low back pain, 63 patients were working for more than 8 hours per day. In majority of the patients, the job required overstretching or repetitive bending.

**Conclusion:** From the above results, the authors conclude that majority of the daily wage workers working for more than 8 hours per day are affected by chronic back pain.

**Key words:** Daily Wages, Chronic Back Pain.


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## INTRODUCTION

Low back pain is a considerable health problem in all developed countries and is most commonly treated in primary healthcare settings. It 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. The diagnostic and therapeutic management of patients with low back pain has long been characterised by considerable variation within and between countries among general practitioners, medical specialists, and other healthcare professionals.<sup>1-3</sup>

Chronic low back pain (CLBP) is a chronic pain syndrome in the lower back region, lasting for at least 3 months. CLBP represents

the second leading cause of disability worldwide being a major welfare and economic problem. The prevalence of CLBP in adults has increased more than 100% in the last decade and continues to increase dramatically in the aging population, affecting both men and women in all ethnic groups, with a significant impact on functional capacity and occupational activities. It can also be influenced by psychological factors, such as stress, depression and/or anxiety.<sup>4-6</sup>

Daily wage working is a physically demanding job. It involves forceful movements and working in awkward body positions which in turn contribute to Musculo-skeletal disorders.<sup>6-8</sup> Hence; the present study was conducted for assessing the prevalence of chronic back pain in Daily wage workers.

## MATERIALS & METHODS

The present study was conducted with the aim of assessing the prevalence of chronic back pain in daily wage workers. A total of 150 daily wage workers were enrolled. Complete demographic details of all the patients were obtained. Through clinical and medical examination of all the patients was done. Detailed history was taken. The chronic back pain among the study participants was assessed by the standardized Nordic questionnaire for the analysis of musculoskeletal symptoms. Risk factors of chronic low back pain were evaluated. All the results were recorded in Microsoft excel sheet and were analysed by SPSS software.

## RESULTS

A total of 150 daily wage workers were evaluated. Chronic back pain was present in 101 workers. Hence, the prevalence of chronic back pain was 67.33 percent. Out of these 101 subjects, 83 were males and 18 were females. History of chronic back pain was more than 2 years in majority of the patients. Out of these 101 patients with presence of chronic low back pain, 63 patients were working for more than 8 hours per day. Alcohol drinking and cigarette smoking habit was found to be present in 56 patients and 76 patients respectively. In majority of the patients, the job required overstretching or repetitive bending.

**Table 1: Prevalence of Chronic back pain**

Prevalence of Chronic back pain	Value
Number	101
Percentage	67.33

**Table 2: Gender-wise distribution of patients with chronic back pain**

Gender	Number	Percentage
Males	83	82.18
Females	18	17.82

**Table 3: Distribution of patients with chronic back pain according to duration**

Duration of chronic back pain	Number	Percentage
Less than 1 year	8	7.92
1 to 2 years	40	39.60
More than 2 years	53	52.48

## DISCUSSION

CLBP symptoms can derive from many potential anatomic sources, such as nerve roots, muscle, fascial structures, bones, joints, intervertebral discs (IVDs), and organs within the abdominal cavity. Moreover, symptoms can also spawn from aberrant neurological pain processing causing neuropathic CLBP. The diagnostic evaluation of patients with CLBP can be very challenging and requires complex clinical decision-making. Nevertheless, the identification of the source of the pain is of fundamental importance in determining the therapeutic approach. Furthermore, during the clinical evaluation, a clinician has to consider that CLBP can also be influenced by psychological factors, such as stress, depression, and/or anxiety. History should also include substance use exposure, detailed health history, work, habits, and psychosocial factor.<sup>8-11</sup> Hence; the present study was conducted for assessing the prevalence of chronic back pain in Daily wage workers.

A total of 150 daily wage workers were evaluated. Chronic back pain was present in 101 workers. Hence, the prevalence of chronic back pain was 67.33 percent. Out of these 101 subjects, 83 were males and 18 were females. Wami SD et al investigated the prevalence and identify determinants of low back pain among hotel industries' housekeepers. A high proportion of workers in their study reported they had low back pain.<sup>10</sup>

In the present study, history of chronic back pain was more than 2 years in majority of the patients. Out of these 101 patients with presence of chronic low back pain, 63 patients were working for more than 8 hours per day. Alcohol drinking and cigarette smoking habit was found to be present in 56 patients and 76 patients respectively. In majority of the patients, the job required overstretching or repetitive bending. Haiou Yang et al estimated prevalence of low back pain, to investigate associations between low back pain and a set of emerging workplace risk factors and to identify worker groups with an increased vulnerability for low back pain in the US. The data used for this study came from the 2010 National Health Interview Survey (NHIS), which was designed to collect data on health conditions and related risk factors obtained from the US civilian population. The variance estimation method was used to compute weighted data for prevalence of low back pain. Multivariable logistic regression analyses stratified by sex and age were performed to determine the odds ratios (ORs) and the 95% Confidence Interval (CI) for low back pain. The examined work-related psychosocial risk factors included work-family imbalance, exposure to a hostile work environment and job insecurity. Work hours, occupation and other work organizational factors (non-standard work arrangements and alternative shifts) were also examined. The prevalence rate of self-reported low

back pain in previous three months among workers in the U.S. was 25.7% in 2010. Female or older workers were at increased risk of experiencing low back pain. We found significant associations between low back pain and a set of psychosocial factors, including work-family imbalance (OR 1.27, CI 1.15–1.41), exposure to hostile work (OR 1.39, CI 1.25–1.55), and job insecurity (OR 1.44, CI 1.24–1.67), while controlling for demographic characteristics and other health related factors. Older workers who had non-standard work arrangements were more likely to report low back pain. Females who worked 41–45 hours per week and younger workers who worked over 60 hours per week had an increased risk for low back pain. Workers from several occupation groups, including, male healthcare practitioners, female and younger healthcare support workers, and female farming, fishing and forestry workers had an increased risk of low back pain. Their study linked low back pain to work-family imbalance, exposure to a hostile work environment, job insecurity, long work hours and certain occupation groups.<sup>11</sup>

## CONCLUSION

From the above results, the authors conclude that majority of the daily wage workers working for more than 8 hours per day are affected by chronic back pain.

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