

Assessment of Chronic Low Back Pain in Socioeconomically Deprived Population: A Major Global Burden

Sumyyah Hasina Sana

MD Scholar, Regional Research Institute of Unani Medicine, Srinagar, CCRUM, Ministry of AYUSH, Govt. Of India, Jammu & Kashmir, India

Abstract: Chronic Low back pain (CLBP) is the leading cause of Disability Adjusted Loss Of Years (DALYS) globally ^[1]. It is the most prevalent musculoskeletal condition in the developed nations. Majority of Unani scholars have described low back pain (*Waja al zahr*) under the broad heading of *Waja al mafasil*. In Unani system of Medicine *Waja al zahr* is described as a disease in which pain arises from internal and external muscles, ligaments surrounding the lumbar and lumbosacral region ^[2]. The present study was carried out to assess the percentage of patients complaining of CLBP among socioeconomically deprived population of a village Ganstan of Bandipora Kashmir. The study participants were 326 patients. Amongst the study participants 218 were males and 108 were females. 78.88% were working in the fields of agriculture followed by 15.95% house wives. Male gender, occupations related to labourers working in fields, weavers among certain participants were the most important determinants. Different response strategies are needed to practice that are pervasive in low income countries for minimising and prevention of disability due to CLBP.

Keywords: Chronic Low back pain (CLBP), *Waja al zahr*, population, socioeconomically deprived

1. Introduction

CLBP represents one of the major causes of disability worldwide ^[3]. CLBP is defined as a pain that persists for more than 3 months, or longer than the expected healing period; it represents one of the most common and costly musculoskeletal problems in modern society. CLBP is experienced by 70-80% of adults at sometime in their lives ^{[4][5]}.

Low back pain without a known cause is referred to as non-specific low back pain and guidelines recommend use of a biophysical model to inform assessment and management in view of associations between behavioural, psychological, and social factors and the further persistence of pain and disability ^{[6][7][8]}. Since Hippocratic era, *Hifzane Sehat* (preservation of health) and *Ilajul Amraz* (restoration of health) with glorifying history of serving humanity was the main focus of *Unani system of Medicine*. LBP is highly prevalent and is associated with pain, functional impairment, long term incapacity, work absenteeism and high utilization of healthcare ^{[3][9]}. LBP is costly, amounting to an estimated \$88 billion in the United States in 2013, with medical services comprising a considerable proportion of the incurred expenditure ^[10]. Chronic pain is the most important symptom of CLBP. Therefore, it is very important to determine how to improve it. The Visual Analog Scale (VAS) and the Numerical Rating Scale (NRS) are the most used scales to define this symptom, but some studies also use the Oswestry scale, the Quebec scale and the Mc Gill Pain Questionnaire. Chronic low back pain is a common problem in primary care. A history and physical examination should place patients into one of several categories: non-specific low back pain; back pain associated with radiculopathy or spinal stenosis; back pain referred from a non-spinal source; or back pain associated with another specific spinal cause ^[1].

Most of the renowned unani physicians described the causes of *waja al zahr*. According to Ibne sina, *waja al zahr* arises from internal and external muscles, ligaments surrounding the lumbar and lumbosacral region due to *fasaad in mizaj* (sue mizaj). This *fasaad in mizaj* is due to surplus burudat (Coldness) and accumulation of raw phlegm (*kham balgham*). He further stated that pain may also arise due to accumulation of *ghaleez riyah* in the lumbar and lumbosacral region. Zakaria Razi, in his book *Al Hawi*, described that the abnormal chyme formation produces abnormal humours, particularly abnormal phlegm, which then gets accumulated in the joints of the body, thus causing swelling, tenderness and pain ^{[2][11]}.

2. Materials and Methods

This study was carried out in a village Ganstan Sonawari of Bandipora district of J&K. All the patients with chief complaint of CLBP were informed about the objectives of the study. All the study participants were given a self structured questionnaire to which consisted information like demographic details including age, gender, occupation etc and details about the low back pain like timing of onset of pain, aggravating factors, relieving factors, and character of pain. The questionnaire also included personal history of sleep, any addictions.

3. Results

In the present study total 326 patients with low back pain were participants. Of these 218 (66.87%) were males and 108 (33.13%) were females. Male gender was an important demographic parameter for CLBP.

In the present study, majority of the study participants were from the age-group of 31-40 years that 104 (31.90%) followed by 21-30 years (27.61%). 40 subjects were above 60 years and only 1 were less than 20 years of age. The

proportion of low back pain was increasing with age especially found to be higher in middle age-groups.

Majority of the study participants were working in agricultural fields/labourers 232 (71.88%), followed by house wives 52 (15.95%). Others included carpenters, masons.

In the present study pain was experienced mainly during activity (40.49%) or after rest (19.02%). 174 (53.37%) study participants preferred to rest to relieve CLBP while 110 (33.74%) study participants used some analgesic medication for relief. In majority of the study participants (84.05%) aching type of pain was felt.

4. Discussion and Conclusion

Despite the plethora of treatments and healthcare resources devoted to LBP; back-related disability and population burden have increased. During the past three decades, changes have been made to key recommendations in national clinical practice guidelines. Greater emphasis is now placed on self management, physical and psychological therapies, and some forms of complementary medicine and less emphasis on pharmacological and surgical treatments. Guidelines encourage active treatments that address psychosocial factors and focus on improvement in function. The changed understanding of how best to manage LBP is shown in three current guidelines, from Denmark, the USA^{[7][8]}, and the UK. The reduced emphasis on pharmacological care is shown by the US guideline^[7], which recommends non-pharmacological care as the first treatment option and reserves pharmacological care for patients for whom non-pharmacological care has not worked. These guidelines endorse the use of exercise and a range of other non-pharmacological therapies, alone and in combination, such as massage, acupuncture, spinal manipulation, Tai Chi, and yoga. Despite generally consistent guideline recommendations around the world, clear evidence exists of substantial gaps between evidence and practice that are pervasive in low income, middle-income, and high-income countries. Different response strategies are needed that prevent and minimise disability and promote participation in physical and social activities. Many clinical practice guidelines recommend similar approaches for the assessment and management of LBP. Recommendations include use of a bio-psychosocial framework to guide management with initial non-pharmacological treatment, including education that supports self-management and resumption of normal activities and exercise, and psychological programmes for those with persistent symptoms.

The literature on the epidemiology of low back pain is accumulating, but for the most part, studies are restricted to high-income countries, therefore little is known about the epidemiology of CLBP in the rest of the world.

There is a need to identify effective, promising, or emerging solutions that could offer new directions, but that need greater attention and further research to determine if they are appropriate for large-scale implementation. These potential solutions include focussed strategies to implement best practice, the redesign of clinical pathways, integrated health

and occupational interventions to reduce work disability changes in consumption and disability claims policies, and public health and prevention strategies.

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