



## IMPACT OF PAIN, DISABILITY AND QUALITY OF LIFE IN PATIENTS WITH LOW BACK PAIN.

### Physiotherapy

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### ABSTRACT

**INTRODUCTION:** Pain in lower back is a common concern, affecting up to 90% of population at some point in their lifetime, up to 50% have more than one episode (William and Shier, 2012). It has been found that annual expenditure on the low back pain range from \$30-70 billion (Driscoll, 2011). The main causative factor that can cause back pain is poor posture while sitting, standing and lifting heavy weights. Other factors that can cause low back pain include spinal disorder and systemic diseases (Cox and Trierk, 1987).

#### NEED OF THE STUDY

1. To investigate the relationship between pain and quality of life in patients with low back pain.
2. To investigate the relationship between pain and disability in patients with low back pain.
3. To investigate the relationship between disability and quality of life in patients with low back pain.

**METHODOLOGY:** 30 patients both males and females, age between 18-50 years, of low back pain were taken. All the patients were assessed for pain, disability in quality of life with Visual analogue scale and Rolland –Morris low back pain disability questionnaire and SF36 respectively.

**RESULT AND ANALYSIS:** After statistical analysis it was found that there was significant correlation between VAS, R-M Low back disability scale and SF-36 ( $p < 0.05$ ).

**CONCLUSION:** High pain intensity, severe disability and great impairment in the physical domain of quality of life were perceived. A strong association was observed between disability and the physical quality of life domain, indicating that disability negatively affects and strongly influence physical quality of life in these patients with chronic low back pain.

### KEYWORDS

Low back pain, Disability, Quality of Life

### INTRODUCTION

Low back pain (LBP) is one of the most common musculoskeletal conditions. In India nearly 60% of people have LBP in some point of their life (Suryapani et al., 1999). It is an extremely common health problem & has been considered as the 5<sup>th</sup> most common cause to visit a clinician. Studies have shown that the incidence of LBP is highest in the 3rd decade of life & its prevalence increases with age until 60–65 age groups and then gradually declines (Shyamal Koley, Suryapani, Gunnar B J Andersson et al., 2008).

Acute low back pain is usually considered to be self-limiting (recovery rate 90% within 6 weeks) but 2-7% of people develop chronic pain. Recurrent and chronic back pain is widely acknowledged to account for a substantial proportion of total workers absenteeism. About half the days lost from work are accounted for by the 85% of other away from work for short periods (<7 days), whilst the other half is accounted for by the 15% who are off work for >1 month, this is reflected in the social costs of back pain. where some 80% of the health care and social costs are for the 10% with chronic pain and disability (Nachemson et al., 2000). Pain measurement and assessment represent a great challenge to people aiming for appropriate control. Pain is considered a complex, multidimensional, individual and subjective perceptive experience that can only be quantified indirectly (Sousa FF, Silva JA. 2005) Patients' pain complaints should be valued.

In this context, the assessment of pain intensity, quality of life and any physical disability pain brings about permits further knowledge on chronic low back pain patients. Hence, measuring these variables can contribute to direct treatment, through the monitoring of pain conditions and the assessment of care outcomes. Therefore, the aim in this research was to assess perceived pain in chronic low back pain patients and compare it with quality of life and physical disability levels.

#### AIMS AND OBJECTIVES:-

1. To investigate the relationship between pain and quality of life in patients with low back pain.
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#### Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the

research purpose with economy in procedure. The research design was correlation in nature. The size of the sample is 30 out of which 15 were males and 15 were females. The method used for this study was the purposive sampling method. It is a non random technique. Exclusion criteria involves the patients with Lack of understanding, any kind of surgery within the last three months, post traumatic conditions (e.g. LBP after an accident). A total of 30 patients were screened according to the selection criteria. The patient's demographic profile and detailed medical history was taken through individual interviewing. All the low back pain patients were assessed for the Pain, Disability and Quality of life. Pain was assessed by visual analogue scale, Disability was assessed by Rolland Morris and Quality of life was assessed by SF 36.

#### RESULTS AND ANALYSIS

**Table: 1.1** Describes correlation between the Visual Analogue Scale and SF 36 in low back pain patients. The r-value is .788 indicating that there is statistically significant Correlation between MNCV and Pain at  $P < 0.05$ .

Correlation	(r) value	(p) value
VAS Vs SF 36	.788	.000

**Table: 1.2** Describes correlation between the Visual Analogue Scale and Rolland Morris Scale in low back pain patients. The r-value is .790 indicating that there is statistically significant Correlation between MNCV and Pain at  $P < 0.05$ .

Correlation	® value	(p) value
VAS Vs RMS	.790	.000

**Table: 1.3** Describes correlation between the Rolland Morris Scale and SF 36 in low back pain patients. The r-value is .839 indicating that there is statistically significant Correlation between MNCV and Pain at  $P < 0.05$ .

Correlation	(r) value	(p) value
RMS Vs SF 36	.839	.000

#### CONCLUSION

The SPSS (version 16) was used for statistical analysis and the following conclusions have been formulated:

1. There is significant correlation between the Visual Analogue Scale and SF 36 in low back pain patients. Thus, there is significant effect of pain on quality of life in low back pain patients.
2. There is significant correlation between the Visual Analogue Scale and Rolland Morris Scale in low back pain patients. Thus, there is significant effect of pain on disability in low back pain patients.
3. There is significant correlation between the Rolland Morris Scale

and SF 36 in low back pain patients. Thus, there is significant effect of pain and disability on quality of life in low back pain patients.

## DISCUSSION

The mean disability level observed in this sample with the help of the Roland-Morris questionnaire was 14.4 points, which represents severe disability (Monteiro et al,2010)in accordance with a research developed in the USA( Wallace AS et al 2009'. In a study undertaken in Slovenia, approximately 50% of the chronic low back pain sample presents moderate to severe disability. (Klemenc-Ketis et al 2011). The degree of disability found in this study is underlined, showing the extent to which chronic low back pain patients cannot perform daily activities normally. The higher pain measured in the last week revealed a mean score of 8.0 points. In another study, it was observed that, when asked about this parameter, 42% of the interviewees demonstrated strong low back pain in the last week, scored between seven and ten, on a scale from zero to ten. (Sherman KJ,et al 2004). The weakness of categorical pain measurement scales is highlighted; first, because the number of categories through which the stimuli are judged is fixed; second, because the method introduces severe bias when considering the range of the categories and the constraint caused to the interviewee by imposing an anchor (upper limit) at the end of the pain continuum (Sousa FF et al 2005). Therefore, the need for further research is emphasized to understand the quality of perceived pain through characteristic descriptors.

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