



Impact of Pain, Disability and Quality of Life in Patients With Low Back Pain

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ABSTRACT

Background and Purpose:- 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 life¹. 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 decline². The exact cause cannot be identified in 85–95% of cases. It arises from any one of a number of anatomical structures including bones, intervertebral discs, joints, ligaments, muscles, neural structures and blood vessels. Chronic low back pain is a highly prevalent and costly musculoskeletal problem in economically advanced societies nowadays. It can cause long-term disability, absenteeism from work and frequent health service use³. Therefore, low back pain is considered a public health problem of clinical, social and economic importance, which affects the population without distinction and requires effective management. Adequate management of pain experiences is only possible if this subjective phenomenon and directly related factors are assessed and measured.

Material & Method: 50 subjects, both males and females, having age between 18–45 years, who were diagnosed with low back pain were included in the study. All the subjects 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.

Result & Conclusion: Statistical analysis describes significant correlation between the Visual Analogue Scale and SF 36 in low back pain patients, VAS and Rolland Morris Scale, and Rolland Morris Scale with SF 36 also shows statistically significant correlation in low back pain patients. Thus, there is significant effect of pain on quality of life in low back pain patients.

KEYWORDS : Low back pain, Rolland Morris Scale, SF 36, Pain

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 life⁴. It is an extremely common health problem & has been considered as the 5th 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 declines⁵. It has been found that annual expenditure on the low back pain range from \$30–70 billion⁶. It is determined that the risk of back pain is twice as high once a history of the condition has been established¹⁰. Almost all industrial jobs require a standing posture, especially when workers handle heavy equipment and products, reach for materials and goods, and push and pull excessive loads. These jobs are nearly impossible to do in a sitting posture¹² pointed out that workers are exposed to prolonged standing if they spend over 50% of the total working hours during a full work shift in a standing posture¹³. Prolonged standing transfers the weight of upper body parts to lower parts and results in lower back pain. 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 people 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 disability²⁰.

Aims and Objectives: This study was planned to investigate the relationship between

1. pain and quality of life in patients with low back pain.
2. pain and disability in patients with low back pain.
3. disability and quality of life in patients with low back pain.

Material and Methods: 50 subjects, both males and females,

having age between 18–45 years, who were diagnosed with low back pain were included in the study whereas subjects having cognitive disorders, lack of understanding, any kind of surgery within the last three months, posttraumatic conditions and cancer-related pain and difficulties to understand the requested tasks were excluded from the study. The patient's demographic profile and detailed medical history was taken through individual interviewing. All the subjects 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 Data Analysis:

Statistical analysis was done by using SPSS 16 shows all three parameters of back pain significant correlation between the Visual Analogue Scale, SF 36 and Rolland Morris Scale.

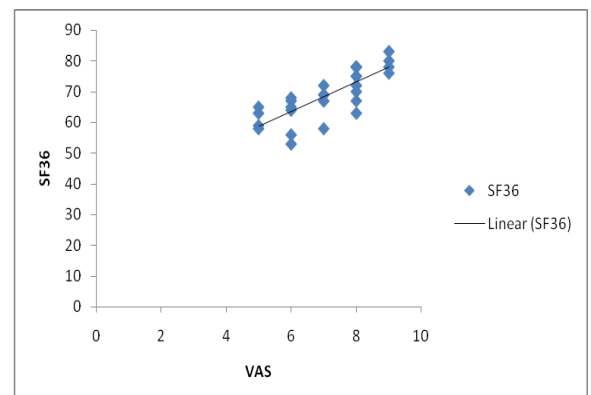


Fig: 1.1 Graphical display of Correlation between Visual Analogue Scale and SF 36 in low back pain patients.

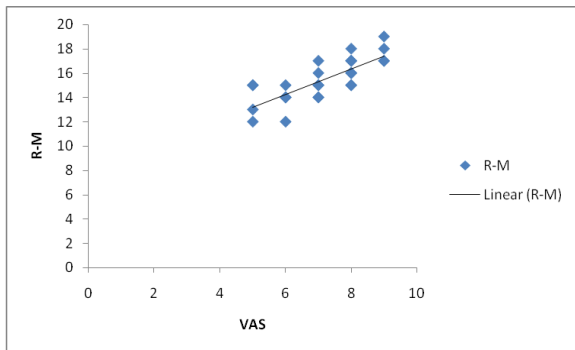


Fig: 1.2 Graphical display of Correlation between Visual Analogue Scale and Rolland Morris Scale in low back pain patients.

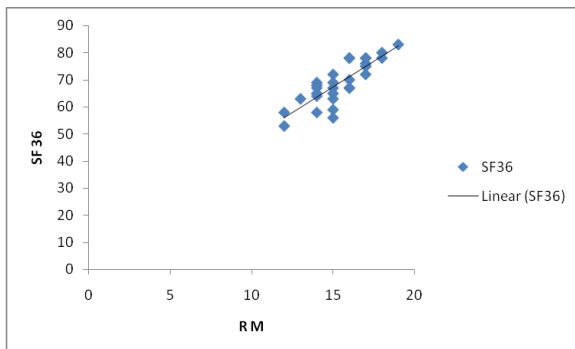


Fig: 1.3 Graphical display of Correlation between Rolland Morris Scale and SF 36 in low back pain patients.

Discussion:

In a study undertaken in Slovenia, approximately 50% of the chronic low back pain sample presents moderate to severe disability²¹. 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. 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 ten²². 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 continuum²³. The most affected QoL domain found in this study was the physical, in accordance with other studies²⁴. The physical QoL domain comprises questions related to pain, discomfort, energy, fatigue, sleep and rest, revealing the extent to which these factors are negatively influenced in chronic low back pain patients.

A strong association was observed between disability and the physical domain of QoL, in accordance with studies in Slovenia²⁵ and the Netherlands²⁶. In a study undertaken in Sweden, on the other hand, a moderate association between these variables was found²⁷. Thus, the physical domain of QoL seems to be the most strongly related with the disability level, indicating that high levels of disability could bring about a worse QoL.

Study limitations include the lack of non-probabilistic sampling and of a control group for comparison. In this study, the perceived pain of chronic low back pain patients was assessed and compared with quality of life and physical disability levels. This permits knowledge on the relations between the attributes under analysis, highlighting how important it is for nurses to appropriately assess patients in pain and to take into account all attributes related to this phenomenon.

Conclusion:-

There is significant correlation between the Visual Analogue Scale with SF 36, Visual Analogue Scale with Rolland Morris Scale and Rol-

land Morris Scale with 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.

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