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Original Case Study

# A PROSPECTIVE STUDY ON THE ASSESSMENT OF IMPACT OF PATIENT COUNSELLING ON QUALITY OF LIFE OF LOW BACK PAIN PATIENTS IN A TERTIARY CARE HOSPITAL

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#### ABSTRACT

A hospital based prospective observational study entitled as "A prospective study on the assessment of impact of patient counselling on quality of life of low back pain patients in a tertiary care hospital" was done over a period of six months. The aim of the study was to assess the impact of patient counselling on quality of life of low back pain patients. Total 158 cases of patients were collected from the orthopaedic outpatient department. Qualities of life of low back patients were assessed before and after patient counselling using oswestry disability index questionnaire. Patient counselling was done by orally and also by providing leaflets to the patients. The data was statistically analysed through statistical package for the social science (SPSS). It was concluded on the basis of collected results. The conclusion showed that low back pain was found to be more in females than males. While comparing the quality of life of low back pain patients before and after patient counselling, severe disability was observed in patients before counselling and the quality of life of low back pain patients was found to be improved after patient counselling

## 1. Introduction

Low back pain is a symptomatic and a self-limiting condition which includes pain, muscle tension or stiffness, and is localized between the shoulder blades and the folds of the buttocks, with or without spreading to the legs (sciatica). Back pain is the second most common reason for visiting a physician. Low back pain is usually defined as the duration of an episode, which persists for less than 6 weeks; sub-acute low back pain which persists between 6 and 12 weeks; chronic low back pain which persists for 12 weeks or more . The management of low back pain depends on cause of pain and it can be non-surgical or surgical treatment and medication therapy[1].

Self-reported disability in adolescents with LBP varies from 18% to 94%. However most adolescents reporting LBP show minor functional impairment and little impact on health related quality of life (HRQOL). Consultation rates are approximately 25% and mainly concern patients with more intense or longer lasting pain. Adults with chronic pain, who seek specialized medical care, show poorer HRQOL. There are no studies evaluating HRQOL in adolescents seeking specialized care for LBP. We recently confirmed the scant effect of LBP on HRQOL of adolescents in general population by using standardized HRQOL instruments[2].

# 2. Materials and method

The study was conducted for a period of 6 months in 158 low back pain patients came to orthopaedic department after

getting clearance of institutional ethics committee in Cosmopolitan hospital, Trivandrum (Kerala). The study included the patients diagnosed with low back pain who are willing to participate in the study. The study excluded patients who are not willing to participate in the study. The objective of our study is to assess the impact of patient counselling on quality of life of low back pain patients.

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A written informed consent was taken in prescribed format from the parents of patients diagnosed with low back pain. All information relevant to the study was collected from the case records. The demographic characters, clinical features and other details were documented in the performa. The quality of life of low back pain patients were assessed before and after patient counselling using oswestry disability index questionnaire. The collected data where recorded in Microsoft excel sheet and workload is entered as numeric code. For the analysis we had used SPSS (Statistical Package for Social Science) software.

### 3. Results

On the basis of the study conducted in orthopaedic department of a tertiary care hospital for a period of 6 months, the following results were obtained. There were 158 patients who met the inclusion criteria of our study.

## Gender distribution of low back pain patients

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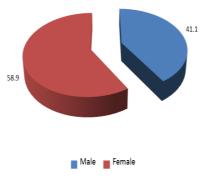
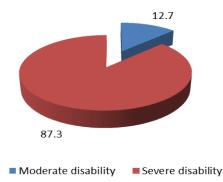


Figure No. 1. Distribution according to sex

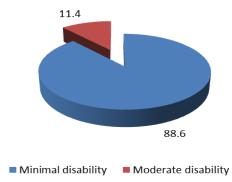
Out of 158 patients enrolled in the study 65 (41.11%) patients were males and 93(58.9%) were females. It suggest that majority of patients were females compared to males.

### Quality of life of patients with low back pain



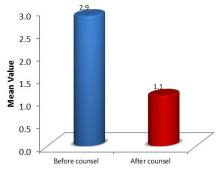
**Figure No. 2.** Graph showing the percentage quality of life of low back pain patients before counselling.

The above graph represents the percentage quality of life of low back pain patients before counselling. This shows that 138 (87.3%) patients have severe disability and 20 (12.7%) patients had moderate disability in their life.



**Figure No. 3.** Graph showing the percentage quality of life of low back pain patients after counselling

The above figure represents the percentage distribution of quality of life of low back pain patients after patient counselling. This suggests that 140(88.6%) patients had minimal disability and 18(11.4%) patients had moderate disability in their life due to low back pain.



**Figure No. 4.** Graph showing the mean of effectiveness of patient counselling on quality of life of low back pain patients.

The above figure represents the mean of effectiveness of patient counselling on quality of life of patients with low back pain. This shows that the disability of patients is reduced from severe to mild disability after patient counselling.

**Table No. 4:** Effectiveness of counselling on QOL

ODIQ	Mean	SD	N	Mean Difference	Paired t	p
Before						
counselling	2.9	0.3	158	1.8	43.35**	0.000
After counselling	1.1	0.3	158			

\*\*: - Significant at 0.01 level

#### 4. Discussion

From the study of 158 patients during a period of 6 months in a tertiary care hospital it was found that low back pain was most commonly seen in females 93 (58.9%). Similar results were found in study done by Manek and Macgreger[3]. Quality of life of low back pain patients was assessed by using Oswestry Disability Index questionnaire (ODIQ). This questioner consists of 10 sections. For each section the total possible score is 5. The scores are interpreted as 0-20% minimal disability, 21-40% moderate disability, 41-60% severe disability, 61-80% crippled, 81-100% bedridden. Questionnaires were conducted both before and after patient counselling to access the impact of patient counselling provided.

Figure 2 represents the pre-test score. It shows that 138 patients had severe disability before drug therapy and counselling section. After drug therapy and patient counselling quality of life was reassessed during follow-up visit. Apart from verbal messages, patient information leaflet in the local language (Malayalam) was provided to the patients.

Figure 3 represents Oswestry Disability Index Scores after counselling and treatments it shows that there is an improvement in the quality of life of low back pain patients, that is 140(88.6%) patients had minimal disability and 18 (11.4%) patients had moderate disability. Thus the counselling provided was effective in improving the quality of life of low back pain patients. Similar rsults were observed in a study conducted by Tavafian *et al.* showed that patient education improve patients quality of life[4-10].

#### 5. Conclusion

The present study was conducted to assess the impact of patient counselling on quality of life of low back pain patients. From the study, using a sample size of 158 patients who had low back pain. The effect of counselling on quality of life of low back pain patients was assessed using Oswestry disability index questionnaire before and after patient counselling. Patient counselling was given orally as well as using leaflets to improve the quality of life in low back pain patients which was found to be helpful in answering the Oswestry disability index questionnaire by the patients.

This study involved limited sample size and duration of study was also limited. Therefore further studies need to be done on large population and at different centres, to extrapolate the findings.

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#### References

- [1]. Effective Health Care. Acute and Chronic Low Back Pain. The Royal of Medicine Press Ltd. 2000; 6 (5): 0965-0288.
- [2]. Cesar G.Fontecha et al.Low back pain in adolescents:is lquality of life poorer in those seeking medical attention, spine. 2011;36(17):E1154-E1161.

- [3]. Manek N. Epidemiology of back disorders: prevalence, risk factors, and prognosis. Current Opinion in Rheumatology. 2005; 17: 134—40.
- [4]. Sedigheh Sadat Tavafian et al. Low back pain education and short term quality of life: a randomized trial. BMC musuloskeletal disorder 2007,8:21.
- [5]. Patnaik et al "Comparative safety and cost effective analysis between aceclofenac, lornxicam and diclofenac in patients of musculo skeletal disorders" IJPSR,2012; vol.3(9):3407-3411.
- [6]. Arul Praksam.k.c.et al. Comparative assessment of analgesic effect of different NSAID'S IN the management of low back pain. International journal of PharmTech Reaserch. 2011,3(3).
- [7]. Srijana Bhattarai et al. A study on factors affecting low back pain and safety and efficacy of NSAIDs in acute low back pain. Journal of clinical and diagnostic research, 2013;7(12):2752-2758.
- [8]. Faizal Vohra, Asawari Raut "Comparative efficacy, safety and tolerability of Diclofenac and Aceclofenac in musculoskeletal pain management". Indian Journal of pain January 2016;30:3-6.
- [9]. Anil Pareek, Nithin Chandurkar "Comparison of gastrointestinal safety and tolerability of aceclofenac with diclofenac: A multicentre, randomized, double-blind study in patients with knee osteoarthritis" Current Medical Research & Opinion Vol 29, No.7, 2013, 1-11.
- [10]. Patnaik et al "Comparative safety and cost effective analysis between aceclofenac, lornxicam and diclofenac in patients of musculo skeletal disorders" IJPSR,2012; vol.3(9):3407-3411.

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