



Effectiveness of lumbar support on backache among postoperative patients

Parimala L*, Jeevapriya T

Department of Medical Surgical Nursing, Saveetha College of Nursing, SIMATS Thandalam, Chennai 602105, Tamil Nadu, India



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ABSTRACT

The post-operative period is a critical time during hospitalization. Back pain is one of the most common indispositions during the post-operative period. Many causes may be attributed to post-operative Back pain. A few of them maybe ACT during a medical procedure, length of medical procedure, a span of immobilization, and exacerbation of existing ailment. The study aims to assess the effectiveness of lumbar support on Backache among post-operative patients. A quantitative approach with the quasi-experimental design was chosen to evaluate the effectiveness of lumbar support on Backache among the post-operative patients at Saveetha Medical College Hospital. Sixty patients who fulfilled the inclusive criteria were selected by purposive sampling technique. Sociodemographic variables of samples were collected by interviewing them. The Numerical pain Rating Scale assessed the Backache. The study findings revealed were recorded. The present study findings depict that in the pre-test of the experimental group majority of them had severe pain, 68%. In contrast, in the post-test the pain level reduced from moderate to mild due to lumbar support among post-operative patients. In the control group, most of them had severe pain 62%, whereas, in the post-test, 52% had moderate level pain. The mean and standard deviation of the effectiveness of lumbar support on Backache among post-operative patients in the experimental group mean is 3.2. The standard deviation of 3.34 w-0, the mean difference is -2.87 z value is -4.7821. The investigation results delineated that there was an association between the degree of back pain and history of back pain among the experimental and the control group patients with $p < 0.05$.

*Corresponding Author

Name: Parimala L

Phone:

Email: parimala.scon@saveetha.com

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INTRODUCTION

The post-operative period is a critical time during hospitalization. Back pain is one of the most

common indispositions during the post-operative period. Many factors may lead to post-operative Back pain, for example, ACT during a medical procedure, length of medical procedure, a span of immobilization, and exacerbation of existing ailment.

A Cautious evaluation and prompt remediation may help the patient come back to ideal capacity rapidly, securely, and with how much ever solace as reasonably expected (Clarke *et al.*, 1993).

The detailed frequency of post-spinal pain ranges from 30% to 50% (Rhee *et al.*, 2010), and it was a significant reason for 13.4% of patients to deny spinal anaesthesia (Haddox and Bonica, 1998). The recurrence of post-operative spinal pain is by and large of sedation 46% (Deyo *et al.*, 1991).

Low back pain (LBP) is a fundamental medical issue in all nations. Lifetime predominance of LBP surpasses 70% with top point commonness between ages 25 to 65. Moreover, repetitive scenes of LBP happen now and again and consider a capable number of individuals who have permanent discomfort from LBP. Chronic LBP is available in 3% to 7% Of the population in all nations. The debilitation and inability related to LBP as often as possible lead to nonattendance from work and related loss of productivity (Brooks *et al.*, 2002; Cholewicki and McGill, 1996).

Low back pain (LBP) is portrayed as an agony restricted in the lower spine, regularly with single or twofold side radiation to the rear end and thighs. LBP is a common side effect that happens in people, and its commonness increments with age. The oldest text about LBP, which had survived to our times, is the Egyptian papyrus from 1500 years BC. Unfortunately, a description of symptoms only survived, while the part containing methods of the treatment did not endure until our times. Over the next centuries, back pain was regarded as a passing ailment or symptom of the spine structures through injury. The cure for back pain was resting in bed. After the discovery of degenerative changes in the intervertebral disc, it has been stated that damages of intervertebral discs are the cause of back pain. Therefore the treatment was taken up by surgeons; since Second World War concern on LBP has increased and spine, then many different therapies arose. However, despite the efforts of modern medicine, it doesn't cope much better with LBP than previous generations. Moreover, it seems that more and more people suffer from LBP (Steffee *et al.*, 1996).

Lumbar supports are much of the time utilized in the administration of low back pain and are likewise a typical mediation in the industry to forestall back injuries. Lumbar supports are given as treatment to individuals who have LBP to cause the impedence and inability to disappear or diminish. Lumbar supports are given as mediation to anticipation to forestall the beginning of LBP (essential avoidance) or of forestalling repetitive LBP scenes (optional counteraction). Albeit a huge assortment of preventive and therapeutic interventions are accessible for LBP, the viability of the more significant part of these mediations has not been exhibited yet (Cloward, 1953).

There is proof to help the clinical viability of discectomy for the treatment of lumbar disc prolapsed. In 1995, 24,000 spinal surgeries were completed in the National Health Service in the United Kingdom, even though the extent of patients experiencing discectomy isn't clear. It is assessed that by fol-

lowing between vertebral disc medical procedures, just 70% of patients are fit to work inside a year. The purpose behind this is hazy, and it brings up issues concerning the arrangement and substance of recovery post-surgery (Fogel *et al.*, 2009).

A Cochrane audit inferred that there was substantial proof for early serious exercise programs, for example, starting four a month and a half post lumbar disc surgery. Improved useful status and quickly come back to work were found for the time being, yet at long haul follow-up, there was a pattern towards upgrades in long - term results with early recovery. No good-quality studies are investigating the immediate commencement of rehabilitation. The study objectives are to assess the pre and post-test level of pain on post-operative patients with Backache, to determine the effectiveness of lumbar support on Backache among post-operative patients and to associate the selected demographic variables with the level of pre-test and post-test effectiveness of lumbar support on Backache among post-operative patients (Makino *et al.*, 2017; Sasso *et al.*, 2004).

MATERIALS AND METHODS

A quantitative approach with the quasi-experimental design was chosen to assess the effectiveness of lumbar support on Backache among the post-operative patients at Saveetha Medical College Hospital. Sixty patients who fulfill the inclusive criteria were selected by purposive sampling technique. Sociodemographic variables were collected by interview method, which consists of age, the Numerical pain Rating Scale assessed sex, education, BMI, religion, past surgery experience, and the Backache. Informed consent was obtained before data collection. The project was approved by the Institutional ethical committee and evaluated the level of Backache among post-operative patients by using a numerical rating pain scale(pre-test). After assessing the level of Backache, lumbar support was given using a pillow, and again the level of Backache was evaluated using the same numerical rating pain scale(post-test). Descriptive and inferential statistics analyzed the data.

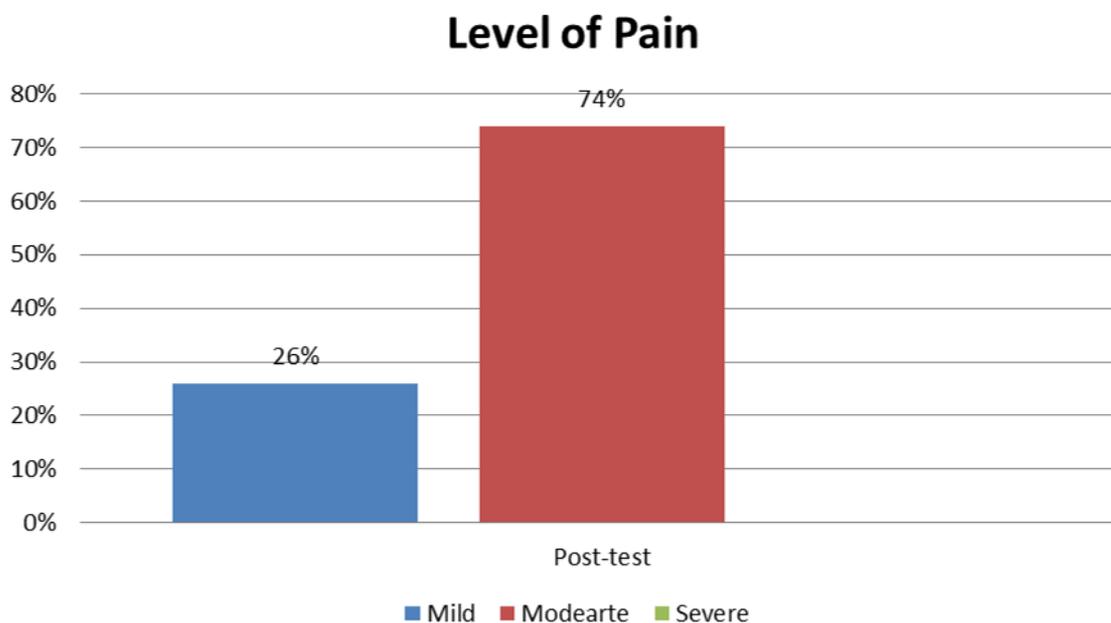
RESULTS AND DISCUSSION

The sample characteristics are out of 60 samples 27 (45%) belong to the age group of 25 - 45 yrs, 30(50%) were males, 23(38%) had a BMI of < 25, 25(42%) had higher education, 27 (45%) belong to Hindu religion and 34(57%) had a previous history of surgery.

The present study findings show that in the pre-test,

Table 1: Frequency and percentage distribution of backache among Postoperative patients in the experimental and control groups (N=60)

	Experimental group			Control group		
	Mild	Moderate	Severe	Mild	Moderate	Severe
Pretest	-	32%	68%	-	38%	62%
Post test	26%	74%	-	-	52%	48%

**Figure 1: Frequency and percentage distribution of backache among Postoperative patients in the experimental groups**

the majority of the experimental group had severe pain 68%, whereas, in the post-test, the pain level reduction was mild to mild due to lumbar support among post-operative patients. In the control group, the majority of them had severe pain 62%, whereas, in the post-test, 52% had a moderate level (Table 1 & Figure 1).

The mean and standard deviation of the effectiveness of lumbar support on Backache among post-operative patients in the experimental group mean is 3.2. The standard deviation of 3.34 w-0, the mean difference is -2.87 z value is -4.7821. The investigation results delineated that there was an association between the degree of back pain and history of back pain among the experimental and the control group patients with $p < 0.05$.

The present study findings depict that in the pre-test in the experimental group majority of them severe pain 68%, whereas in the post-test, the pain level reduction from moderate to mild due to lumbar support among post-operative patients. In the control group, the majority of them had severe pain 62%, whereas, in the post-test, 52% had a moderate level. The comparison of the level of Backache between

the study group and the control groups showed that in Mean and standard deviation of the effectiveness of lumbar support on Backache among post-operative patients in experimental group mean 3.2 and standard deviation of 3.34 w-0, mean difference is -2.87 z value is -4.7821 which was statistically significant at $p < 0.05$. This indicated both the experimental group and the control group had diminished degrees of back pain; however, the experimental group had a critical decrease in back pain when contrasted with the control group.

The examination discoveries were steady with the outcomes drawn by Hikkimott et al. (2000), who did a randomized preliminary to recognize the impact of lumbar help. Patients who got lumbar support demonstrated a substantial decrease in spinal pain contrast with control group (Hickmott et al., 1990). The investigation is additionally upheld by Abraham Jasila et al. (2014). They led the examination on the effectiveness of lumbar help on spinal pain among post-operative patients exposed to stomach medical procedures. The outcomes uncovered that during the pre-test, 3 (10%) of them had a moderate degree of spinal pain, and 27 (90%) had an extreme

spinal pain level in the examination gathering. While in post-test 3, none of them had severe spinal pain, 27 (90%) had mellow spinal pain, and 3 (10%) had moderate spinal pain in the investigation gathering. Among the patients in the benchmark group during the pre-test, all the patients had extreme spinal pain. Posttest 3 demonstrated that 28 (93.3%) had moderate and 2 (6.7%) had severe spinal pain in control group (Jasila and Seethalaksmi, 2014).

CONCLUSIONS

Back pain is a typical issue during the post-operative period. It has a considerable effect on the useful limits of patients. Spinal pain is one of the most overall disservices during the prompt post-operative period. There are many reasons for post-operative Back pain, for example, act during a medical procedure, the term of medical procedure, the span of immobilization, and disturbance of existing ailment. This investigation presumes that lumbar help during the post-operative period diminishes Back pain and improves comfort. It is a straightforward strategy and simple to rehearse.

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Conflicts Of Interest

The authors declare no conflicts of interest.

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