

# Efficacy of selected exercises in reducing low back pain among clients attending OPD at selected Lucknow hospitals.

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## Introduction

According to the Bureau of Labor and Statistics, workers account for 67% of all back strain and/or sprain claims. More than half of all back pain reports are from jobs that require heavy manual labour and material-handling activities. Back injuries are most common among truck drivers, heavy equipment operators, and construction workers. Rest, aspirin, physical therapy, and education are all common medical treatments. Long-term NSAID use must take into account gastrointestinal, renal, and potential cardiac toxicity. The most common surgical treatment for lumbar syndromes is in the United States, where the estimated rate is at least 40% higher than in other countries and more than 5 times higher than in Scotland and England. Aside from these surgeries, injuries to the posterior spinal muscles and their nerve supply may occur, resulting in continued loss of function and pain. According to research published in *The New England Journal of Medicine*, non-surgical therapies such as stretching and exercise can be as effective as surgery in relieving back pain. Back strengthening exercises are designed to stretch and strengthen the muscles that support the spine. Conditioning the back through flexibility and strengthening exercises not only helps the back avoid injury or reduces the severity of injury if the spine is traumatised, but it can also help relieve the pain associated with many back conditions. It fortifies the spinal column as well as the supporting muscles, ligaments, and tendons. Most back exercises target not only the back but also the abdominal, gluteus, and hip muscles.

These strong core muscles can help relieve back pain by providing strong support for the spine, keeping it in alignment and allowing for movements that extend or twist the spine. It is critical to include exercise as one of the nursing interventions for reducing low back pain. Because effective pain management is a significant challenge for physicians and other health care professionals, the researcher wishes to conduct a study on the effect of back strengthening exercises on low back pain reduction.

## Methodology

The researcher took a quantitative approach, employing a pretest-posttest design with a control group. As a conceptual framework, the researcher has used Pender's model. A pilot study was conducted to determine the study's practicability and feasibility. It has been demonstrated that the study was feasible and practicable. The study included 100 patients with mild to moderate low back pain. The administration of back strengthening exercises is the independent variable in this study, and the level of back pain is the dependent variable. The subjects were chosen using a convenience sampling technique, with 30 assigned to the experimental and control groups. The Aberdeen Low Back Pain Scale was used in the study. On the first day, the Aberdeen Low Back Pain Scale was used to conduct a pre-test in both the experimental and control groups. The experimental group received back strengthening exercises for 30 days. On the 45th day, the experimental and control groups were subjected to a post-test. According to the objectives stated above, the collected data was analysed using descriptive and inferential statistics.

## Results

The pretest for back pain revealed no significant difference between the experimental and control groups. As a result, the two groups were identical.

The study found that both the experimental and control groups experienced less low back pain. It was discovered that after performing back strengthening exercises, the experimental group experienced a significantly lower level of low back pain than the control group. The calculated 't' value of difference in mean reduction of back pain was 7.41,  $df=99$ ,  $P<0.05$ .

This clearly demonstrates that back strengthening exercises were extremely effective and beneficial in reducing back pain in patients suffering from low back pain.

There was no association found in this study between the level of back pain and selected demographic variables such as age, gender, education, occupation, body type, and family history.

#### Conclusion

The study concluded that Back strengthening exercises have been found to be an effective nursing intervention in the treatment of low back pain in patients. When compared to other pharmacological treatments, strengthening exercise has been found to have no side effects. The study's findings reveal that exercises can be used as a low-cost nursing intervention to relieve back pain in patients.

#### Reference

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