

***Evaluate the effectiveness of selected nursing intervention on management of back pain among employees working in a selected company, Bangalore.***



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**“Evaluate the Effectiveness of Selected Nursing Intervention on Management of Back Pain among Employees working in a Selected Company, Bangalore”.**

BY

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# **DISCUSSION**

## **CHAPTER-VI**

# DISCUSSION

## CHAPTER : VI

The discussion brings the research report to closure. A well – developed discussion section “Makes Sense” of the research results. This is the most important section of any research report.

Low back pain constitutes an important problem among the nurses. Prevention and treatment of low back pain are significant concerns. The cost of the problem is enormous, both in terms of individual human suffering and as it interrupt their daily activities it affects the family.

The present study was conducted to assess the effectiveness of nursing intervention on Management of the level of back pain among employees of a private company. This chapter presents the major findings of the study and discusses them in relation to similar studies conducted by other researchers.

In order to achieve the objectives, purposive sampling was used to select the samples. The study was conducted over a period of four weeks from 19<sup>th</sup> December 2016 to 17<sup>th</sup> January 2017. The data was collected from the 50 employees with back pain in The Source Hub, Bangalore. The findings of the study had been discussed with reference to the objectives.

### OBJECTIVES

1. To assess the pre-test and post-test level of back pain among employees.
2. To evaluate the effectiveness of selected nursing intervention on management of back pain among employees.
3. To determine the association between level of back pain and selected variables of employees.

### RESEARCH HYPOTHESIS

**H1-** There is a significant difference between the pre-test and post-test level of back pain among employees.

**H2-** There is a significant association of demographic variables with the pre-test levels of back pain.

The findings are discussed in the following section:

**Section -1** Demographic characteristics

**Section -2** Findings based on objectives

**Section -3** Findings based on hypothesis.

### Major findings of the study

#### Section – I

#### Demographic characteristics of the employees

In relation to the Gender, 5 (10%) employees were males whereas 45 (90%) were females who participated in this study.

Majority of the employees 40 (80%) were in the age group of 20-30 years whereas 10 (20%) employees were in the age group of 30-40 years.

In reference to the marital status, 33 (66%) employees were single whereas 17 (34%) employees were married.

With regard to the Educational status, 6 employees had qualification below bachelor's degree (12%), 39 employees had bachelor's degree (78%) whereas 5 employees had master's degree. Most of the employees 32 (64%) had the salary slab of 20000-30000 whereas 18 employees (36%) had the salary slab of 10000-20000.

In relation to the duration of working hours, working days per week and working shift, 12 (24%) employees were working for 6-8 hrs, 34 (68%) employees were working for 8-10 hrs and 4 (8%) employees were working for 10-12 hrs, 46 (92%) were working for 6 days and 4 (8%) were working for 7 days per week and 41 (82%) employees were working in general shift and 9 (18%) were working in morning shift.

The exercise frequency in past 12 months and type of exercise followed revealed that 14 (28%) employees were doing daily exercise, 11 (22%) employees were doing exercise weekly whereas 25 (50%) employees were doing exercise occasionally and 46 (92%) employees were relying on walking and 4 (8%) were doing yoga as exercise.

With regard to the family history of LBP, 7 (14%) employees had history of LBP whereas 43 (86%) employees had no history of LBP.

Majority of employees 40 (80%) were working from 3 years, 7 employees were working from 3-6 years whereas 3 employees were working from 6-10 years.

In context of BMI, 76% of the employees with normal BMI had back pain.

## **Section –B**

In this section, the objectives and hypothesis of the study were discussed. The objectives were achieved by the related and analysed data.

### **1. The first objective was to assess the pre-test and post-test level of back pain among employees in age group 20-50 years before and after intervention..**

This study was conducted among employees of a company with the help of Modified Oswestry low back pain questionnaire. The study results showed that majority of the employees (68%) had moderate level of back pain and (32%) had severe level of back pain before intervention. After intervention 64% of subjects had mild pain and 36% had moderate pain.

This study was supported by:-

A randomized control trial was conducted among 39 subjects in a selected hospital in who were detected with severe back pain in pre-test with an aim to assess the effectiveness of exercise therapy in reducing the risk of future episodes of back pain. The medical care group received advice on bed rest, absence from work, prescription of medication and advice to resume normal activity as tolerated. The exercise group performed localized stabilizing exercise, two sessions per week for four weeks. The recurrence of low back pain was assessed using blinded assessor by telephone at one and three year follow-up. In the one year follow up, 6 out of 20 subjects in the exercise group reported a recurrence of Low back pain in the previous year when compared with 16 out of 19 in the control group. By the

three-year follow up, 9 out of 20 of the exercise group had recurrence versus 16 out of 19 in the control group. Thus it was concluded that for patients with severe back pain (LBP), specific spinal stabilization exercise substantially reduces the level of back pain.

## **2. The second objective was to evaluate the effectiveness of selected nursing intervention on the level of back pain among employees of a company between age group of 20-50 years.**

The mean of pre-test was 15.92 which were more than that of the post-test mean value 8.48. The calculated value (16.72) of 't' test is greater than that of table value(1.96) at 5% level of significance which shows the effectiveness of applied nursing intervention over level of back pain among employees who were at the age group between 20-50 years. **The hypothesis H<sub>1</sub> stated 'There is a significant difference between the pre-test and post-test level of back pain among employees'**. Hence was accepted.

**The findings are supported by:-** A randomized controlled trial was conducted among 165 subjects with an aim to the estimate the effectiveness of soft tissue manipulation exercise and education, or both treatments combined in reducing non-specific low back pain and related disability. The Roland-Morris scale and pain using pain rating index of the Mc Gill Pain Questionnaire were used to obtain data from the subjects. All the subjects received the treatment over a month. The results shows at one month follow up the combined therapies group had less pain and disability than the other group. Thus it was concluded that the six sessions of the soft tissue manipulation exercise combined with education and exercise reduced pain and disability for patients with non-specific low back pain.

## **3. The third objective was to determine the association between level of back pain among employees with selected demographic variables**

Among the demographic variables analysed in this study Gender, marital status, Monthly income per month, duration of working hours, type of working shift, exercise frequency in the past 12months, family history of the LBP, Medical services provided by the company, history of injury /accidents, weight and BMI had significant association with level of Back Pain. The hypothesis H<sub>2</sub> stated ' **There is a significant association of demographic variables with the pre-test back pain levels** 'was accepted for these variables. For the remaining demographic variables hypothesis is rejected.

**This study was supported by:-** An exploratory survey was conducted among the registered nurses in a selected hospital in Hong Kong with an aim to investigate the prevalence and causes of mechanical low back pain. Using the questionnaire which elicited characteristics of the subjects' history and contributing factors to back pain, it was observed that 47 nursing staff out of 60, working at an acute care hospital reported occurrence of some form of back pain during their career and one third of nurses with back pain experienced pain at least once a month. The contributing factors identified were transferring patients from bed to chair and lifting patients without assistance. Stooping was identified as the most common static factor contributing to back pain.