

# THE EFFECT OF EXERCISE IN IMPROVING HIP FLEXOR STRENGTH AND MUSCLE STRENGTH OF MEN FOR MEN WITH LOW BACK PAIN AT THE AGE OF 40-45 YEARS

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## ABSTRACT:

*The flexibility of the hip joint and the strength of the muscles of the two men have a direct impact on the injured and injured, and these characteristics also affect the reduction of low back pain, the goal of the study was the preparation of training exercises to improve the flexibility of the hip joint and the strength of the muscles of the two men for the research sample. The researcher used the experimental method. The study sample consisted of (12) aged (40-45) years and they accounted for 60% of the total study sample. The elasticity tests of the hip joint were conducted as well as tests The researchers concluded that the elasticity of the hip joint and the muscular strength of the two men played a role in alleviating the pain in the lower back. The researcher also concluded that the prepared method improves flexibility and muscle strength. The researcher recommends using these exercises for the flexibility of the hip joint and strength of the muscles of the two men in the rehabilitation of joints and muscles in general, and took the rehabilitation curriculum (8) weeks (3) weekly training sessions with a total of (24) training sessions, And the degree of difficulty in the curriculum of (15-30) minutes.*

**Keywords:** Rehabilitation - Flexibility - Strength - Lower back pain - Injured men.

## INTRODUCTION

The health aspect of human life is important and a major role in the permanence of life. Therefore, medicine, sports science, and therapeutic sports have turned to prevention of all injuries ... The importance of this aspect has been shown by several sciences of great interest (medical sciences, health sciences) It seeks to serve the society and the human being and its health, including the rehabilitation means which are one of the most important methods that can be used by specialists in the field of rehabilitation in the lower back by improving the flexibility and muscle strength of the body, and rehabilitation exercises of the most effective means of rehabilitation of various injuries, R P to normal function in the shortest possible time.

The importance of research is shown by the use of rehabilitation exercises in the rehabilitation of lower back pain and speed of return to normal life without pain or less pain.

The problem of research is the high percentage of individuals who suffer from loss of flexibility and strength of the cause of lumbar lumbar due to several reasons, including the long sitting incorrect and bad habits not to exercise physical activities, which called for scientific research to find the shortest way to apply the curriculum for the rehabilitation of patients with loss of flexibility and muscle strength The two men are intimidating the mother down the back to their normal lives and doing their work without using exercise. The goal of the research is to.

- Preparation of training exercises to improve the flexibility of the hip joint and strength of the muscles of the two men for the sample of the research.

- Identification of the effect of the training exercises in improving hip flexor strength and strength of the muscles of the two men for the research sample.

There are statistically significant differences between the results of the tribal and remote tests in the flexibility and strength of the muscles of both men and for the benefit of the tests of dimension.

- There are significant differences of statistical significance between the results of tribal and remote test in the degree of pain and in favor of remote tests.

## MATERIALS AND METHODS:

### Research Methodology:

The researcher used the experimental approach to design a single experimental group with a cardiac and post-traumatic test

### Search community and sample:

The research community consists of men with low back pain and an age of 40-45 years. The sample of the study was chosen from the patients who visited the physiotherapy centers in the health institutions in Maysan Governorate. The sample was selected in a random manner and the number of infected was 20. The experimental experiment was carried out on (6) of the patients and were excluded from the experiment, and 2 of the patients were excluded for not attending the experiment. The sample of the experiment consisted of (12) Society (60%) of the research community

### The researcher chose the following tests

1- test lift the man to the top of the lateral lying right - left:  
- (Mohamed Sobhi Hassanein) 1995, p. 117

The objective of the test is to measure the elasticity of the lateral hip joint

Description of the test: from the lying position on the right side and lift the left leg as high as possible and then stability and measured the angle between the two men in the Juno Mitr, and then repeat the same test of lying on the left

Method of registration: - degree Juno Mitter

2- Test the strength of the muscles of the two men by the device Dino Miter (Qasim Hassan Hussein and Bastoisi Ahmed) 1979, p. 114

Objective of the test: strength of the muscles of the two men.

Tools used: Dyno Meter - Registration form.

Test method: The person standing on the base of the device and the hands in front of the thighs, shorten the chain to suit the length of the casualty the patient slightly bending in the knees and erection of the back and pull the chain to the top strongly from the lever, record the result as read by the device of the installed time as a little attempt of installation

Method of recording: Measure the strength of the back muscles Read the recorded result in (kilogram)

.Measurement of pain: (Siham al-Ghamri) 2001, p. 1183. Siham al-Ghamri (2001), citing William William (1997), points out that the pain scale is the question of the patient after the manual examination by the doctor refers to the measurement of pain in the lower back where the scale is a line of 0 (0) and represents the absence of the delay represents 10 The patient can be indicated on any number representing the pain in the patient and the cases as a result of this measurement close to the diagnosis of the doctor as the patient is a clarification of the pain in a general way, showing the importance of clinical examination to determine the places accurately and used the researcher also illustrated drawing Or pain indicator is an assessment of the pain levels used by health centers around the world

Tribal tests: - After completing all the requirements of the tests and with the help of the team or the assistant staff on the research sample on Sunday and Monday, 8-9 / 4/2018 at 4:00 pm

Components of Qualitative Exercises: After preparing for the experiment and adjusting the variables, the researcher conducted a number of qualifying exercises (Appendix 15). He relied on the analysis of the scientific references and the researches that were carried out in this subject. They were divided into two stages, each stage contains a group of training exercises that correspond to the stage And the duration of the qualifying sessions (15- 30) minutes

Post-tests: After completing all the requirements, the researcher completed the tests and with the help of the team or the assistant staff on the research sample on Friday 13/6/2018 at 4:00 pm in the same conditions as the tribal tests..

### Statistical means

percentage -

Arithmetic mean -

standard deviation -

- Test T-Test for interrelated samples

**RESULT AND DISCUSSION:**

Table (1)

Shows the computational dynamics, standard deviations, calculated values (t), statistical significance of pre-and post-natal measurements to test hip elasticity

Morality of differences	Level of significance	Calculated T-TEST value	Difference between deviations	Difference between circles	Post-test		Tribal Test		measuring unit	Statistical treatments for tests	
					standard deviation	Arithmetic mean	standard deviation	Arithmetic mean			
moral	0.001	14.100	0.957	6.750	1.500	95.250	1.290	88.500	Degree / angle	Flexibility lift the right man	1
moral	0.19	4.621	2.380	5.500	3.403	92.250	1.258	86.750	Degree / angle	Flexibility lift the left man	2
moral	0.000	28.143	2.362	33.250	6.782	117.000	4.787	83.750	Kg	Strength of the muscles of the two men	3

Morality under freedom level 12 and level of significance (0.05)

Table (2)

Shows the computational circles, standard deviations, calculated T values, and statistical significance of pre-and post-natal measurement to test the degree of pain

Morality of differences	Level of significance	Calculated T-TEST value	Difference between deviations	Difference between circles	Post-test		Tribal Test		measuring unit	Statistical treatments for tests	
					standard deviation	Arithmetic mean	standard deviation	Arithmetic mean			
moral	0.003	9.000	0.500	2.250	0.816	3.000	0.500	5.250	Degree / number	Test the degree of pain	2

It is clear from the tables (1) (2) that there are significant differences between the tribal and remote tests of the sample of the research and for the tests of dimension and attributed the researcher improvement in the affected persons in the variable hip elasticity and strength of the muscles of the two men and the degree of pain due to exercise exercises used, (Mohamed Sobhi Hassanein 1995, p. 136) The lack of flexibility in the joints will determine the movement and determine the efficiency of the daily work of the injured

This is confirmed by the study of (fox, nordin, campello), quoting (Mohammed Mustafa Mohamed, p. 145) that exercise has a big role in the rehabilitation of the mother of the lower back if it contains the duplicates Graduation, and

exercises to develop flexibility and muscle strength of the most important exercises contained in the rehabilitation programs have a positive impact on the reduction of injury and reduce the pain. This is what Nahed Ahmed Abdel Rahim, 2011, p. 145 says, "The training exercises for flexibility and strength, and improves and increase the tone muscle and thus increase the muscle strength of weak muscles. What refers to (Lasev 1996 and others, p. 141) all there is an improvement in flexibility and muscle lengthening and its greater length becomes muscle strength at a good level of production of force collection

The course also plays a major role in improving the range of mobility, even pain, and relieving the pain in the affected people. The difference in the degree of pain is due

to the improvement of flexibility and strength through the rehabilitation exercises used in the method. It showed a decrease in the degree of pain. (Ahmed Saadallah 1996, p. 151). These carefully selected exercises for the lower back groups contributed to the physical ability to better levels, which reduced the degree of pain and these rehabilitation exercises have general objective effects On physiology of the body and show these physical responses in both muscles, bones, nerves, circulatory system and hormonal device.

#### CONCLUSIONS:

- The researcher concluded that there was an improvement in the elasticity of the hip joint and strength of the muscles of the legs of the injured.
- The researcher concluded a relationship between flexibility and strength in the reduction of low back pain.
- The researcher concluded by returning the injured from the exercise of their work freely and without limitation of some injuries and flexibility of the muscular atrophy of the spine.

#### ENDORSEMENT:

- Recommend the researcher to use these exercises rehabilitation in the rehabilitation of joints and muscles in general, which has an impact on flexibility and the workforce.

- Recommends the researcher to be guided by the curriculum exercises for the rehabilitation of the spine.
- The researcher recommends to pay attention to the application of the curriculum various rehabilitation exercises after 30 years of age to prevent injuries.

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