

Use the effect of some exercises for rehabilitation of injuries of the knee joint and its impact on some physical abilities and the achievement of the effectiveness of long jump for students

¹Lect. Dr. BAYDAA RAZZAQ JAWAD; ² Asst. Prof. Dr. ISRAA JAMEEL HUSSEIN AL_ SAADI;

³ Asst. Lect. FARAH ISAM ABDULAMEER

Abstract

The researchers extracted some aspects of benefit, the most important of the research approach, and the variables that must be measured, such as the dynamic range, the fixed muscle strength, and the accompanying surroundings in order to follow the change in the limb to be treated, and also previous studies helped in the diversity of methods of physical and motor measurements, choosing the most appropriate types with the available capabilities. Also, previous studies the researcher assisted in increasing the scientific result to achieve the aim of the study to discuss the results and reach scientific explanations. The researcher hopes to add new through the use of a proposed rehabilitation program to contribute to providing an effective way to rehabilitate the knee joint by focusing therapeutic exercises accompanied by natural means in order to return the injured to his normal state as soon as possible.

Keywords :rehabilitation, injuries ,knee injury, yard and field

Introduction

Therapeutic exercises are one of the most important ways to eliminate cases of functional dysfunction of the muscles and joints after medical examinations and chemotherapy as well as interest in understanding (mechanical) body movements and proper strength by performing exercises to develop muscle strength and joint flexibility and emphasize neuromuscular compatibility to restore the normal state and the full development of the body's capabilities to help Devices to perform its functions with the highest degree of efficiency, knowing that the place of therapeutic exercises and medical rehabilitation for cases is pathological after the end of the acute period of pain and the diagnosis of the specialist doctor . Physiotherapy is one of the support services as it is concerned with the development and treatment of the motor aspects of the affected person as well as relieves the nation by using a certain type of therapeutic exercises that in turn work to invest the potential of the individual in an attempt to overcome disability, injury or pain and then to move naturally As possible. (Internet source)

Literature review

Rehabilitation is defined as the process of renewing health and being able to work through various means that we can obtain the maximum physical, psychological and social possibility of recovery and keeping the disease chronically. (Smeeaa; 1990) I knew him, WHO Who "It is to benefit from the group organized services in the medical, social, educational and vocational education fields for training or re-employment." (Saaeed; 2000) As it is known as "restoring form and function to a pre-injury level" (Ammar, 1999) Many college students are subjected to knee injuries due to lack of physical fitness for a section of female students

^{1,2,3} College of Physical Education and Sports Science/ University of Baghdad

in addition to using inappropriate shoes and tools in the wrong way as well as pressure practical lessons and difficult techniques for some saliva that are wrongly performed such as triple jumping and long jumping and fitness lessons as well as in basketball lessons and not taking Sufficient rest for a minor injury, which increases the pressure on the joint and leads to the development of the injury, and its duplication, which causes a major problem for the student in performing practical lessons. This is what attracted the researcher to delve into the field of this problem. The goal of rehabilitation is a vital issue for the injured part to return to normal by strengthening the joints, muscles and ligaments that have been weakened by the injury.

Rehabilitation goals are divided into two parts: short-term goals, including pain control, maintaining and improving flexibility, and returning or increasing strength. And a top scorer in the long - term and include the restoration of the functional level of gar b to practice motor performance requirements and maintain a degree Collar for physical sound parts of the body and the prevention of a recurrence of the injury in the same area. (Aref; 2004) The therapeutic exercises include a group of external exercises to strengthen the muscles and maintain the flexibility of the joint. (Ammar; 2015) And it is a selection of exercises intended to correct, treat, injure, or deviate from the normal state so that it leads to a loss or hindrance in carrying out the full function of a member, with the aim of helping this member to return to his normal state to perform his full function (Smeeaa; 1990) and the therapeutic exercises are Certain movements, such as various pathological conditions, with a preventive and therapeutic purpose, in order to restore the body's functions to their normal state, while taking care of the anatomical, functional, physiological and educational aspects of the injured. (Hayat, 2002) Therapeutic exercises are one of the therapeutic methods designed and that work to quickly return the injured athlete to playing with psychological rehabilitation. (Bassam; 1994) Hence the role of therapeutic exercises in the rehabilitation and treatment of arthritis, as it works to reorganize the work of some organs and devices in which a type of damage occurs during an injury by automatically re-working the internal organs and organizing nervous work so that it is consistent with the functional viability of the body by regulating the secretion of hormones And metabolism. (Bassam; 1994) and therapeutic exercises determined by concepts, as defined as a practical use to move the data set body , in particular , to maintain or restore the normal functioning of the patient or the injured tissue (Saeed: 1990)

Methodology

The experimental method was chosen, the sample was chosen intentionally, and the research community was determined in an intentional way. The group of the injured women in the first stage represented the students who suffered a knee joint injury in basketball, square, field, five-foot, physical fitness and other practical lessons. The tape measure, medical balls, medium rubber cords, sponge pads, wooden boxes (2) , the playing field, the field, forms for recording information, the dynamometer and the medical scale were used . It was the use of the following tests: test ran 30 meters from the first plane and measure the maximum speed and test long jump stability and partridge maximum distance in 10 seconds on one man (for Kgm) of the test measure the strength of the muscles of the two men by meter device

Results

Table 1 shows the statistical treatment for testing pre and post

The name of the test	the test	Arithmetic mean	standard deviation	Qq	P p	T test	Significance level	Kind of differences
Part 5 steps Right	Tribal	5.23	0.96	0.73	0.32	11.64	0.001	Morale
	after me	5.97	0.74					

Partition of 5 steps To the left	Tribal	5.16	1.10	0.66	0.61	11.64	0.001	Morale
	after me	5.83	0.67					
T ran 30 m	Tribal	6.73	0.89	0.66	0.77	11.64	0.001	Morale
	after me	6.06	0.72					
He jumped from constancy	Tribal	1.48	0.04	0.42	0.11	11.64	0.001	Morale
	after me	1.91	0.07					
Dynamometer test	Tribal	40.56	8.44	4.11	2.47	4.98	0.001	moral
	after me	36.44	7.31					

*Moral at the level of error 0.05 If the error level is less than 0.05

The researchers believe that the chosen group of exercises to treat or correct signs of deviation from the natural state leads to the loss or obstruction of a member from performing his full function and to help this member to his natural state or approaching him to do his job, and this is the benefit of the qualifications required by the researcher. And you see Layla Zahran As physical movements that form the body and develop its motor ability according to special rules that take into account educational foundations and scientific principles, to reach the individual to a high level of motor performance that helps him to work in various areas of life. (Layla; 2015) The exercises have proven their worth in terms of stimulating blood circulation and reducing chronic muscle contraction of the muscles of the legs, as well as reducing pain resulting from chronic muscle contraction, as well as improving the maintenance of muscle tone and functional ability, and stimulating and improving the muscles of the legs because it contains static and mobile exercises. The program achieved a positive effect on restoring the muscle strength of the knee joint and improving the level of the range of motion of the thigh and leg and the emergence of improvement in both. Therefore, the proposed training program was used to improve the muscle strength in favor of physical tests and the presence of significant differences in the tests compared to the tribal tests and thus the research hypotheses were achieved as the work of muscles The thigh contributes to the extension of the thigh. As a result of using the correct medical rest periods set for the injured student and regular athletic training and graduation of intensity in pregnancy and avoiding technical errors helped in the effectiveness of the therapeutic approach, and this was confirmed by Walid Kassas, as the number of injuries in the knee joint for the first stage students was a result of poor physical fitness during the lesson. (Walid; 2009) This result confirms that there are statistically significant differences between the pre and post measurements in the flexibility test in favor of the post measurement, that is, the effect of a proposed training program using therapeutic exercises and accompanying methods on the flexibility of the injured athletes, as well as interest in therapeutic exercises alongside other physical therapy methods The use of negative movements in the early stages of injury leads to concrete and advanced results. The effect of the therapeutic program and the selection of suitable and effective exercises are a cornerstone of the success of any treatment program related to the kinetic extension of the ankle joint. And Osama (Riyad) notes that clear changes can be made using elongation exercises on the components of the joint. This is because elongation that meets positive muscle movement around the joint, where the muscles are flat after contracting, and thus the elongation can be

caused easily. Muscle stretching helps increase the elasticity of the muscle and tendon in it (Osama; 1994), and that therapeutic exercises contribute to increasing the walking distance, i.e. its movement, and that physical therapy has a major role in the treatment and rehabilitation of injuries, and therefore the ways in which it is treated are different. (Muhammad; 1999) The researchers attribute this result to the fact that the negative movement of the joint in the first stage of the injury helps in the flexibility of the joint. It indicates that the chosen therapeutic exercises in a manner commensurate with the nature of the injury and the gradient based on scientific foundations to increase the severity and frequency of these exercises, which are important correlation with the age stage on which the player has and the method of injury and which is called the injury mechanism and the occurrence of the injury as well as first aid which is the first natural step to rehabilitate the injury .The researchers confirm that the program's development, progression, and use of devices appropriate to the nature of the injury have a positive effect on the speed of recovery, the injury of the injury, the patient's return to his condition, and the normal condition he had before the injury occurred.

Conclusion

Through previous studies, the analysis concluded researcher Wen some aspects benefit the most important research methodology, and the variables that must be measured, such as range of motion, and muscle strength fixed, and the oceans associated so as to follow the change in the party to be treated as well as previous studies have helped in the diversity of methods of physical and kinetic measurements to choose the most suitable species with Available capabilities. Also, previous studies have helped the researcher to increase the scientific outcome to achieve the goal of the study to discuss the results and reach scientific explanations. The researcher hopes to add new through the use of a proposed rehabilitation program to contribute to providing an effective way to rehabilitate the knee joint by focusing therapeutic exercises accompanied by natural means in order to return the injured to his normal state as soon as possible.

References

1. Ammar Abdul Rahman Qabbh; 1999 , Sports Medicine, 2nd floor (Baghdad, Dar Al Kutub,
2. Ammar Mizal Shinta; 2015 , the effect of special exercises in the evaluation of the pelvic lateral tendency and leg length exercises that cause lower back pain for men ages (35-40) years: Master Thesis, College of Physical Education and Sports Science, University of Baghdad,
3. Aref Abdul-Jabbar; 2004 , The effect of a therapeutic approach using auxiliary devices and tools to correct some spinal deformities: Master Thesis; College of Physical Education, University of Baghdad,
4. Bassam Sami; 1994 , The Effect of Training on Some Physical Traits and Rehabilitation of Muscle Groups Working on the Knee Joint after Meniscus Cartilage Removal, Cairo
5. Internet: www.google.com \ alwatan \ html
6. Layla Zahran; 2015, Rhythmic Art Exercises, Cairo, House of Arab Thought
7. Muhammad Adnan Rushdie; 1999, Feedback in the sports field, p. 1. Alexandria University Youth Foundation.
8. Osama Riad; 1994, Sports Injuries Atlas, p. 1. Cairo, Arab Thought House.
9. Saeed Hasso: 1990 , Therapeutic exercises, (Baghdad, Dar Al-Hikma Press,
10. Saeed, 2000 , Introduction to Rehabilitation with Disabilities, p. 1 (Amman, Dar Al-Safa Publishing,
11. Semeeaa Khalil Muhammad; 1990 , Curative Sports, (University of Baghdad, Dar Al-Hekma Press,)
12. The life of the Deauville clinic; 2002, Sports Injuries , Part 1 (Alexandria, The Origination of Knowledge)

13. Walid Qassas; 2009 , Prevention , Treatment and Rehabilitation, 1st Floor, (Beirut, Lebanon, Sharif Al-Ansari Sons Company for Printing, Publishing and Distribution,