

## **The Effect of a Training Program with Rubber Ropes in Rehabilitating the fall of the Head and the Number of Times of Breathing for Young People Aged 20-22 Years**

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### **Abstract**

The strength of a healthy body improves the self-concept of individuals, as good strength enhances the functional ability of the functional organs of the human body and reduces stress and delays the emergence of fatigue, because a healthy body does not mean only the external shape of the body, but it is the mechanical relationship between the various body systems, bones, muscles, nerves and vitals, and whenever this relationship improves, the Textures are better. As for the postural deformities or deviations in the body, they result from an imbalance in the work of the muscles, ligaments and cartilage. Therefore, these deformities or deviations in the body can be corrected depending on the various rehabilitation programs and methods through which these cases can be evaluated. Among these deformities or deviations is the case of the head falling to the front, which increases the weight of the head when it is heading forward and pulls the cervical and thoracic vertebrae forward, forming a hunchback at the beginning of the thoracic vertebrae and pain in the neck area and impedes breathing.

### **1-1 Introduction and the importance of research:**

The strength of a healthy body improves the self-concept of individuals, as a good body enhances the functional ability of the functional devices in the human body and reduces stress and delays the emergence of fatigue, because a healthy body does not mean only the external shape of the body, but is the mechanical relationship between the various body systems of the body, muscle, nervous and vital and whenever this relationship improved Textures are better. As for the postural deformities or deviations in the body, they result from an imbalance in the work of the muscles, ligaments and cartilage. Therefore, these deformities or deviations in the body can be corrected depending on the various rehabilitation programs and methods through which these cases can be evaluated. Among these deformities or deviations is the case of the head falling to the imam, which increases the weight of the head when it is heading forward and pulls the cervical and thoracic vertebrae forward, forming a hump at the beginning of the thoracic vertebrae and pain in the neck area, which impedes normal breathing. The development of science has a positive impact on various aspects of life if it is used well. Among

these sciences are computer science, smart mobile devices and the programs for social communication and games, which provides a great opportunity for young people to use them extensively. The problem revolves around the method of wrong use that reflects negative effects on the physical structure for youth, continuing to use wrongly for long periods causes deformities in the body, including curvature and deviation of the back, as well as the fall of the head. The importance of research is to find ways and means of rehabilitation to correct cases and deformities of posture among young people, as there are many methods of treatment in rehabilitation programs, which depends on scientific experiences and facts studied to circulate and use them before Young people exposed to postural deformities and benefit from them before their development in a way that leads to the development of these cases, which leads to chronic injuries that are difficult to treat or require surgical interventions.

## **2-1 Research problem:**

The research problem revolves around postural deformities resulting from the wrong use of electronic devices such as computers and smart transmitters for long periods, which causes the head to fall forward and bend over the first thoracic vertebrae and the convergence of the shoulders towards the chest, which leads to predict neck and back pain, shortness of breath and body deformation and that exercises with rubber ropes It gives a positive effect in many injuries and deformities of the skeleton because of its effect on giving the appropriate limit and the motivation to continue performing the exercises. Therefore, the researcher felt that delving into this problem and scientifically tried to invest and rely in such a case.

## **3.1 Research Objective:**

Knowing the effect of the rehabilitation program with elastic ropes on the rehabilitation of the fall of the head and the number of times of breathing.

## **4.1 Imposing research:**

There are positive significant differences for the elastic rope rehabilitation program in the rehabilitation of the head fall and the number of times of breathing.

## **5.1 Research areas:**

5.1.1. The human domain: a sample of youth aged 20-22 years.

5.1.2. Spatial domain: Hall of Physical Education and Sports Sciences, University of Maysan/ Physiological Laboratory.

5.1.3. Temporary Domain: from 5/9 to 29/11/2018.

## **Research methodology and field procedures:**

### **3.1 Research Methodology:**

The nature of the problem is what determines the method of research used. Therefore, the researcher adopted that experimental approach (Amer Kanleji 2010, 108) due to its connection with the nature of the research.

### **3.2 Research Samples:**

The researcher conducted a head fall test in front of a number of Maysan University students aged between (20-22 years) who had a deformity from falling head forward. The researcher chose that a sample of ten students had a desire to do a rehabilitation program. Palmillette mutilation as well as the proximity of the injury.

### **3-3 Methods of gathering information, devices used, and research tools:**

#### **3-1-1 Methods of collecting information and used devices:**

- 1- Arab and foreign sources
- 2- Personal interviews with experts and specialists
- 3- Self-observation by the researcher
- 4- Data dump forms
- 5- Screen size determination device
- 6- Rubber cords
- 7- Stethoscope

#### **3-4 field research procedures:**

##### **3-4-1 determining the research variables and their tests:**

The research variables and their tests were determined after they were presented and discussed with some specialists in the field of sports injuries, as well as in the science of training and rehabilitation of injuries, where the researcher used the test of the strength screen after presenting this. Test prepared for the curvature of the spine in measuring the forward fall of the head, where the researcher presented this test after To modify how the body is positioned, as an explanatory point was placed on the parenchyma of the ear and another point on the acromial protrusion (Acromion) And measuring the difference between the weft ear and extrusion acromioclavicular Balumblymt t after standing laboratory sideways behind the screen textures. Specialists in the field of sports injuries agreed with this proposal, including Prof. Dr. Wissam Al-Sheikhly and Prof. Dr. Sakina Abdul-Jabbar. The number of breaths test was also determined to indicate the efficiency of the respiratory system.

##### **1- The Texture Screen Test (Muhammad Sobhi Hassanein 2003, 172,173):**

The purpose of the test: to measure the side bends of the body.

Tools: a rectangle of glass (20 x 180 cm) divided into squares (5 x 5 cm).

Performance specifications: The tester stands in front of the rectangle with its back touching it, provided that the arbitrator is standing behind the device. The calendar in this test depends on determining certain points on the body, such as placing two points on the nipples of the ears, and so on for the rest of the points.

## **2- Measuring the number of times you breathe:**

The number of breaths was measured with a stethoscope without the laboratory knowing that the measurement of the number of times of breathing was to get rid of the influence of the voluntary breathing process.

### **3-4-2 Exploratory Experience:**

It was an exploratory consisting of an experiment of (sample 5) request from the research community, and so on (3/9/2018).

### **3-4-3 Pre-Exams:**

The strength screen test was carried out on the sample, the degree of head falling forward in millimeters, the percentage of fall was fixed with the name of the laboratory in a special record and kept until the rehabilitation program ended, and the number of breaths was then measured. And were tribal tests on (5/9/2018) after the distribution of the program on the sample rehabilitative taking into account Alhdd and sizes and Alkthav data

### **3. 4.4. Experience key:**

It was on Sunday morning, corresponding to 5/8/2018 at nine and a half start experience major after the installation rate of fall head down to all the sample and measure the number of times breathing and distributed them approach to rehabilitation under the supervision of a researcher that team assistant work was applied Qualifying Program, as follows:

- The program consisted of (8) weeks, and each week included four qualifying training units. A sample rehabilitation unit is in (Appendix 1).
- The time of the rehabilitative training unit is (40) minutes, with (10 d) warm-up (25 d), the main section of the unit (5 d), stretching exercises.

The researcher took into account that in the curriculum to be a warm - up for all of the body, stressing the muscles in the neck, chest and back as well as a way of breathing deep in conducting exercises constant stretching and Alt R. KE confirmed the Section President on the number of repetitions and perform exercises easy and difficult as well as the gradient stressed exercises were focus on strengthening the muscles of the spine of the vertebrae thoracic and neck muscles rubber ropes and all directions neck, the researcher used the pillow rubber (roller) for the muscles of the chest where it was placed under the spine from the back column, ie the thoracic spine so that the neck dangling downwards and increases the breath inside the rib cage after Take a deep inhale

### **3-5 for statistical means:**

The researcher used the statistical bag (SPSS).

1-4 Presentation, analysis and discussion of the results of the pre and posttest of the research sample in the degree of head fall:

**Table (1).** It shows the differences between the pre and post measures of the control group in the studied variables

indication	level indication	The calculated value (v)	Post test		<i>The pretest</i>		measuring unit	Tests used
			P	s	P	s		
moral	0.00	9,66	2,25	10,44	3,75	1 6 .15	Mm	The degree of head fall
moral	0,00	8,50	2,25	15th	2,50	17	M Rh	The number of times you breathe

\*At the level of indication 0.05 and the degree of freedom( 9 )

Show Table (1). The results of the posttest were significant in the research variables (falling head forward and the number of times of breathing). The researcher attributed the development of the rehabilitative approach prepared by the researcher, as the program was built according to the principles and rules of mathematical training science for a period of (8) weeks by four Weekly training units, and as it is the most important symptom that accompanied the fall of the head of the Imam, as indicated by (Amir Walked Around Kar et al. 1395 AH, p. 96), which is "shortness of the front neck muscles, weakness in the muscles of the back of the neck and the muscles near the shoulders around the chest, as well as tightness in the rib cage, such as muscles Small and large chest "Therefore, the researcher said that these muscles must in the rehabilitation program and prepare appropriate exercises to strengthen these muscles, which led to their development, and this gave important results in the measurements that were scanned, deformation of the spine and falling head forward from the negative effects of the respiratory system as it is difficult to The patient breathes comfortably as well as increase the number of times he breathes. In one father, with a natural limit linking the person to the phase of fatigue faster, which made the researcher focus on respiratory processes in the content of the rehabilitation program, where he emphasized self-silence in some exercises after inhaling a large amount of air and then exhaling forcefully to the outside, and this is consistent with what it indicated (Sami Khalil 2008, p. 316): "Humping negatively affects the functions of the respiratory system. It limits the movement of the ribs and the expansion of the respiratory lung." This is without doubt that a different exercise threatens and its inclusion in increasing its intensity or size has an effect that exposes me to the functional organs of the body, including the respiratory system and the effects Negativity. This injury is very large, especially on the rib cage, to change the nature and function of respiratory processes, and this is consistent with (Muhammad Sobhi and Muhammad Abd al-Salam 1995 p. 164), "The effects of this deformation are negative. The sternum pressure is affected, the lowering of the rib cage, and

thus the small size of the chest and the space available for the movement of the lungs." The researchers also emphasized exercises that restore the spine to its normal position. It carries the curves and natural convexities, as the spine is the main column on which most of the functional organs and muscles that move the upper extremities rest, as the brace represents strengthening and supporting parts of the body correcting the curves of the spine and correcting it for most Working organs and muscles.

### **5.1. Conclusions:**

- 1- The researcher concluded that rehabilitative exercises had significant positive effects in improving the deformity of the frontal fall.
- 2- The rehabilitation program has a positive effect on breathing frequency and improving respiratory capacity
- 3- The rehabilitation program has positive effects on developing the motor side of the injured and instilling self-confidence to accomplish vital daily activity.

### **5.2. Recommendations:**

- 1- The researcher recommends the need to increase awareness among young people by paying attention to postural awareness of the body and using electronic devices properly.
- 2- The researcher recommends conducting scientific research and multiple studies to improve the body.
- 3- Developing rehabilitative curricula using modern methods to attract youth and continuing training for as long as possible.

### **Sample from the Rehabilitation Unit:**

Treatment depends mainly on spreading awareness of the rules in individuals and eliminating the initial cause of the deformity that is bad habits, and therapeutic exercises aim to:

- 1- Strengthening the muscles and ligaments of the back of the neck
- 2- Tighten the muscles and ligaments at the front of the neck until they reach the normal position
- 3- Restore flexibility in the cervical vertebrae and back
- 4- Strengthening the small and large chest muscles.

### **Forms of therapeutic exercises (Preparatory Section 10d)**

- 1- Warm-up exercises and start running.
- 2- Rotation of the weapon back and forth (10 repetitions).
- 1- 3 - Flex, extend, twist, and rotate the trunk and hip.
- 3- Turning the neck to the right, then to the left, then pulling steadily in all directions.

### **Typical exercises (Main Section 25d):**

## References

1. (Sit or stand) Interlocking of hands behind the neck - hands pressure on the neck and head back and forward 10 T in each direction.
- 2- (Lie on the stomach - arms above the body) Lift the head, chest and legs high (10 tons)
- 3- (Lying on the back - bending the arms at shoulder level) Extend the arms up and down, taking into account their contact with the ground 2 x 10 cm
- 4- The head is tied with ropes from the forehead area at low intensity, and the head is moved with 10-ton resistive rubber bands to all directions.
- 5- Holding the rubber cord with a suitable opening of low intensity and opening the arms aside with holding the breath when opening and holding, then exhaling as the arms return (10a)
- 6- Crouching on the hands by pulling a rubber rope from under the ton-Alp with the iron A, and lifting it up with the twisting of the avenue and the arms (10a).
- 7- Kneeling on the hands, alternating between the lower back down with the head raised, and the back up with the head lowered (10 c).
- 4- Note: There is a stability period in rope exercises, ranging from 5-10 seconds.
- 5- Typical exercises (last part 5d):
- 6- The closing section relies on relaxation, stretching exercises, and relaxation of working muscles.
- 7- Samia Khalil Muhammad: *Athletes' Injuries, Treatment and Rehabilitation*, Nass Printing Company, Cairo, 2008.
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- 9- Muhammad Sobhi Hassanein and Muhammad Abdel Salam Ragheb: *The Right Body for All*, First Edition, Arab Thought House, Cairo, 1995.
- 10-** To Carr and others walking around: reform movements honored him. Jab Wasfi Said Danesh, Tehran, 1395 AH.