The Effect Of Using A Training Method To Rehabilitate Some Of The Injured Woman’s Muscles

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Abstract This section contained the introduction, the importance of research, a brief description of some of the problems facing women for the period after pregnancy and childbirth, the reasons for their occurrence, and the importance of treatment as the research problem came from the low level of physical fitness for women, which led to weakened body muscles in general and especially large ones, which caused their flaccidity and embodied the importance of research Rehabilitation of some muscles that are affected by pregnancy and childbirth, and reducing the contours that occur. As for the importance of research lies in the treatment of flaccidity early and in view of the lack of university and public libraries of research and studies on caring for the strength of women and returning it to what it was before pregnancy. Therefore, the researcher decided to prepare this study as a contribution to the possibility of setting an accurate scientific method and a modest attempt to raise the level of fitness of this sample by using circular training exercises effectively so that this sample serves the community.

As for the aims of the research, lies in preparing a method for the circular training method to restore and rehabilitate the muscles affected in postpartum women, and to identify the effect of the proposed training approach in rehabilitating the muscles of the affected woman after pregnancy and childbirth.

The researcher has assumed that the use of circular training method significantly affects the rehabilitation of the muscles of the affected woman after pregnancy and childbirth and that there are statistically significant differences between the pre and post tests in the research sample and in the interest of the post test.

As for the research fields, the human field included (20) women, all of whom have first births and their ages range between (25-30) years, and the temporal field is defined in the period from 18/1/2019 to 10/14/2019.

Key words : training method , rehabilitate some of the muscles , affected woman.

INTRODUCTION

One of the most important features of these technologies is the ease of use. The work that required long hours of hard work has become thanks to modern technology, accomplished in a matter of minutes by means of equipment and machinery until the human being has become idle and little movement because he can complete his work in a few minutes or seconds. And the lack of motor activity and the increase in intellectual burdens and psychological pressures in human life led to the determination of his motor activity and then threatening his general health in many aspects, which led to him suffering from diseases of lack of
movement (Hypokintic Disea) heart diseases, lower back pain, diabetes, obesity etc. as well as Some cases that affect the strength of women, especially in the post-pregnancy and childbirth stage resulting from the expansion of the general muscles and the relaxation of the body’s ligaments, where some women feel after birth that their lower limbs are not strong for their pregnancy and this is due to their weakness in addition to the many changes that are caused by the pregnancy in the muscles. The abdomen more than any other part of the body where those muscles increase in length to weakness, "Also, the areas of the abdomen and thighs are areas for storing fat during pregnancy, which negatively affects the shape of the woman and her strength, which made her feel a social problem that alienates her from often when It causes psychological effects on her, in addition to what is caused by the emergence of the abdominal area and the tendency of the pelvis to forward and lower, which exposes her to the lower back pain and her lack of physical competence and her motor skill, during which this woman is subject to change Hormonal and motor to allow the development of the fetus in the mother’s cavity. These changes continue until after birth, which causes blood circulation disorders that may lead to deep venous thrombosis in the lower extremities that may occur as a result of a lack of venous return due to the pressure of the uterus on the veins coming from the lower extremities and then congestion as well as weak interlocking abdominal muscles and muscles. The pelvic floor due to the increased fetal weight, as it causes flabby muscles in the pelvis, as well as the increased curvature of the lumbar vertebrae inside because of the large size of the abdomen leads to a disorder in the textures, which exposes the mother to health problems. Therefore, our focus should be on finding training curricula according to advanced scientific foundations that contain different sports exercises that can be used to deal with this situation, which has become a phenomenon that women in developed societies reach in order to reach the goal to be achieved in the treatment of this problem. One of these approaches and methods is the use of a circular training method to rehabilitate the muscles of a affected woman after pregnancy and childbirth, taking into account the following cases: the intensity of the exercise and the number of repetitions that are appropriate to the objective set out of the study, as well as the health conditions of the woman and consulting with the specialist doctor.

Research problem:
The lack of studies in this aspect, and through the researcher's modest experience in working in fitness centers for agility and field visits to these centers, I noticed that most centers lack curricula based on scientific and health foundations, most of which depend on personal experiences, so the researcher decided to contribute to solving this problem by setting A curriculum based on the various rehabilitation exercises that are an indication and guide that we can rely on for the purpose of rehabilitation of the affected muscles of women, such as the muscles of the abdomen, pelvis, back and thighs during the stages of pregnancy and childbirth as the muscles of the abdomen, pelvis, back and thighs, as the researcher hopes through this curriculum to develop solutions that help in upgrading the main pillar in Society is a woman

Research objectives:
- Preparing a suggested curriculum using the circular training method to rehabilitate the abdominal, back, pelvis, and thigh muscles affected in the postpartum stage.
- Identify the effect of the proposed rehabilitation approach on the use of circular training in the rehabilitation of the muscles of a woman's abdomen, back, pelvis, and thighs in the postpartum stage.
Research hypotheses:
- The use of the circular training method significantly affects the rehabilitation of the woman's muscles (abdomen - back - pelvis - thighs) after birth.
- There are no statistically significant differences between the pre and post tests of the research sample in the tests under discussion.

2. RESEARCH METHODOLOGY

The experimental approach is the closest approach to scientific research to solve the problem in the scientific way. It is also the most accurate method for scientific research to solve the problem in the scientific way to reach the accurate results. Control and control such conditions and variables.

Research community and samples
The sample of the research was determined by the intentional method of women aged between . (25 - 30) years of natural initial births. They numbered (20) women after they underwent a medical examination by the specialized doctors, and after confirming their safety and the absence of obstacles to practicing the training program, they were subjected to training, and they all adhered to the training program.

Research Tools
To provide a set of devices and tools necessary for the purpose of using them to solve the problem, whatever those tools, and to make sure that these tools are suitable for research to achieve hypotheses. In fact, the researcher used the devices, tools and means that helped the researcher to conduct his research, as follows:
- The tape measure
- A medical scale for measuring weight, with a ruler to measure height, making a scale scale Berkel-Belgium.
- Digital electronic stop hours 1/100 of the second type (Sport-Time), made in Japan, count (2).
- Caliper device for measuring the thickness of the German-made (folded) skin folds.
- Wooden box to measure the flexibility of the trunk.
- A tape recorder and cassette player, recording musical notes accompanying the program.
- A wooden ruler attached to the wooden box from the middle is divided (+50) (-50).
- Mat to perform ground movements.

The Testes
Measured variables:
- Weight, abdomen circumference, hip circumference, thigh circumference.
- Abdominal muscle strength, spinal elasticity, back elbow, half lumbar thighs.

Applied Test
Qualifying curriculum:
The researcher designed the rehabilitation curriculum exercises that serve the work of the muscles (abdomen, thighs, back, and pelvis) by choosing therapeutic exercises that are based on the latest scientific sources and references and the Internet was presented to a group of experts in the field of training and fitness taking into account the health conditions of the
research sample Increased intensity, and the specifications of the training curriculum were as follows:
- The curriculum period (8 weeks) took three training units for each week, starting from 10/4/2019 to 2/6/2019, as the program took two months.
- The number of units of the training curriculum was (24 units).
- The type of training followed is continuous circular training.
- Intensity is low and graded in training units.
- Size the number of iterations per exercise and increased with each week.
- The total time of the introductory part (460) minutes.
- The total time of the main part (1170) minutes.
- The total time of the closing part (240) minutes.
- The total total training time (1870) minutes.

RESULTS AND DISCUSSED

View and discuss search results:

Table (1) shows the arithmetic mean, standard deviations and the calculated value (t) for the pre and post tests for the Functional tests of the research sample.

<table>
<thead>
<tr>
<th>Functional tests</th>
<th>measuring unit</th>
<th>A</th>
<th>Std</th>
<th>Calculated value of T</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>the weight</td>
<td>Kg</td>
<td>70.54</td>
<td>5.358</td>
<td>4.745</td>
<td>Sign</td>
</tr>
<tr>
<td></td>
<td></td>
<td>70.2</td>
<td>7.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdominal circumference</td>
<td>cm</td>
<td>92.21</td>
<td>7.014</td>
<td>7.12</td>
<td>Sign</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88.25</td>
<td>7.521</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hip circumference</td>
<td>cm</td>
<td>110.21</td>
<td>9.258</td>
<td>8.887</td>
<td>Sign</td>
</tr>
<tr>
<td></td>
<td></td>
<td>107.22</td>
<td>9.541</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thigh circumference</td>
<td>cm</td>
<td>59.258</td>
<td>59.889</td>
<td>7.148</td>
<td>Sign</td>
</tr>
<tr>
<td></td>
<td></td>
<td>59.784</td>
<td>59.214</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The members of the research sample have been affected by the oceans of their bodies in the nature of physical activity that they have practiced, which indicates the importance of practicing this effort to improve the oceans of all parts of the body in a manner that achieves proportionality and coordination of these parts. This shows that the approach prepared by the researcher to rehabilitate the postpartum muscles of a woman has a positive effect on the physical variables under discussion, as there is an improvement in the amount of abdominal circumference, hip and thighs. This improvement appeared in the decrease in the value of the arithmetic mean for him in the dimensional measurement, as this decrease was at the expense of the decrease in the amount of fat in these areas certainly if it is taken into consideration that the abdomen as a cavity is fixed in its circumference, especially in adults, and that any increase in this circumference is on Calculation of muscle mass or increase in the percentage of fat in this region, so a decrease in the percentage of fat is a positive phenomenon in the health of the individuals in the research sample1.

And the amount of decrease here appears clearly and prominently, and that all the changes that occurred were a result of the nature of the work of the members of the research sample, which resulted in an increase in the functional activity of the heart and working muscles, whereby with the performance of the exercises, the largest amount of muscles will be involved, with which it is necessary to expand the arterial blood vessels, thereby increasing the amount Energy expended according to the energy system used2.

And that what was mentioned above applies to the hip and thigh region, as the results showed a clear decrease in the circumferences of this region and this is due to the shortfall in the
amount of fat, as the practice of work often leaves its effects on the rate of the body's oceans and this effect appears clearly in the decrease in the amount of fat.

Table (2) shows the arithmetic mean, standard deviations and the calculated value (t) of the pre and post tests for the physical tests of the research sample.

<table>
<thead>
<tr>
<th>Physical tests</th>
<th>measuring unit</th>
<th>A</th>
<th>Std</th>
<th>Calculated value of T</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdominal muscle strength</td>
<td>Num</td>
<td>17.54</td>
<td>3.359</td>
<td>2.745</td>
<td>Sign</td>
</tr>
<tr>
<td>Spinal elasticity</td>
<td>cm</td>
<td>4.21</td>
<td>0.14</td>
<td>5.192</td>
<td>Sign</td>
</tr>
<tr>
<td>Back elbow</td>
<td>Num</td>
<td>17.2</td>
<td>4.558</td>
<td>2.897</td>
<td>Sign</td>
</tr>
<tr>
<td>Half lumbar thighs</td>
<td>Num</td>
<td>19.258</td>
<td>3.889</td>
<td>2.148</td>
<td>Sign</td>
</tr>
</tbody>
</table>

Through what the statistical results showed, a clear improvement in the level of all physical tests under study. As the difference for all the choices was significant. This shows the effect of the training and rehabilitation approach prepared by the researcher on the rehabilitation of the muscles of the affected woman after pregnancy and childbirth. Which affected the results of the strength of the abdominal muscles positively, as the sources indicate that the moving force exercises cause the widening of the blood vessels, which results in a flow in the volume and movement of the oxygen-carrying blood, and then achieve the increased exertion. Muscle strength training can increase the size of the cross section of the muscle by adding more contracting proteins (actin and myosin) and the increase in the size of the muscle cross as a result of the training. This condition is called muscular hypertrophy.

As for the development taking place, tests for the flexibility of the spine. The researcher attributes this development to the effectiveness of the curriculum prepared by the researcher. As "structured and continuous training can improve the muscular elasticity, and hence the widening of the kinetic range of joints, that is, the improvement of the ability of flexibility of the individual".

"Moving strength training demonstrated an increase in muscle elasticity for frequent muscle work on the muscles, ligaments and joints". And that this measurement is one of the important measures of strength and grace.

The results of the back stretching and thigh lengthening tests also showed that there is a significant moral difference, and this demonstrates the effectiveness of the approach prepared by the researcher in developing and stretching the muscles. The researcher attributes this development to the results of elongation based on the adaptations that occur within the muscle due to the increase in the capillary blood vessels density. As "this increase works to increase the density of blood that reaches the muscle during the duration of the exercise, which is loaded with oxygen, nutrients and hormones to the muscle, and at the same time it works to get rid of the metabolic waste and heat generated in the working muscles.".

The researcher believes that stretching back is one of the important ways in preparing the strength of women in a healthy and proper way. The thigh attempt is one of the basic constituents and important in the strength of the woman and carries energy and the researcher attributes that improvement in the results of the post-tests to the psychological state during the performance of physical exercises and accompanying music and the accompanying recreational atmosphere when practicing the vocabulary of the curriculum and this is consistent with what and the increase in flexibility and fitness elements Affected by psychological state.
Thus, it can be said that the aim of the research has been achieved and the effect of the prepared method has been identified in the rehabilitation of the postpartum woman's muscles through physical indicators (tests) which came positively in favor of the research sample. The researcher attributes the results of the research in the physical tests in the post test to the adoption of the method of circular training in the way of stations. This facilitates the sample's ease of performance and the prevention of injuries or exacerbation of the situation besides the use of variables such as pregnancy, repetition and time and as a result it is possible that it improves the physical and motor characteristics that have been identified Mediated tests.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion
Through the above presented results and the researcher’s analysis and discussion of these results, he reached the following conclusions:
- There is an evolution of the elasticity of the spine due to the effect of the proposed training approach on the joints of the spine, and this is what the test results revealed after completing the experiment. As the main objective of it was to measure the development of the elastic characteristic of these joints.
- The occurrence of developing the characteristic of back and thigh elongation as a result of the effect of the proposed approach on back and thigh elongation, as demonstrated by the results of the proposed tests after the completion of the experiment. As the main objective was to develop the characteristic of extension for the above regions.
- It was found that there is a decrease in the proposed body circumference, which is the abdominal circumference, hip circumference and femoral circumference. This is shown by the results of the proposed tests after completing the experiment. As the main goal was to lose the body's surroundings.
- It appeared that there is a decrease in the proposed folds of skin, which is the triple muscle, the upper pelvis and the middle of the thigh, and this is proven by the results of the proposed tests after completing the experiment. As the main goal was to shorten those folds.
- The curriculum prepared by the researcher led to a clear decrease in weight with respect to the research sample, and this was the result of regular training and gradually, and then obtaining the required results.

Recommendations
Through what has been concluded, the researcher recommends the following recommendations:
- The necessity of women exercising and exercising during the period of pregnancy and after childbirth to ensure that fat does not accumulate in the abdomen and thighs.
- Educating women about the importance of exercising and early physical activity during the postpartum period (postpartum) gradually, especially for the abdomen, back, pelvis and thighs.
- The necessity of opening sports centers in maternity hospitals to take care of the health of the pregnant mother during pregnancy and after childbirth in maternity and childhood social care centers.
- The researcher recommends following a well-studied and sound curriculum in fitness centers to ensure the development of the health status of the mother after childbirth.
- The researcher recommends benefiting from the study at the Women's Sports Bureau at the Olympic Committee.
- Conducting comparative studies between breastfeeding and non-breastfeeding women after their performance of the postpartum rehabilitative approach and its effect on various physical measures.
- The researcher recommends conducting comparative studies between mathematical women and non-mathematical women after they undergo the pre-natal rehabilitation approach and the extent of its effect on the two samples.
- Conducting comparative studies on the effect of the postpartum rehabilitative approach on women with multiple births and initial deliveries.

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