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Effect of 8 Weeks of Treatment, Monitoring and Corrective Actions Abnormalities Hollow back (Lordosis) in Middle-Aged Male Workers (50-35) in Iran Oil Company

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ABSTRACT

The purpose of this study is to investigate the effect of 8 weeks correct exercise an investigation of eight week of remedial movements action on Control and remedy of lordosis disorder in NISOC middle aged male personnel (35-50) were evaluated by new York test method using post screen, and 200 having lumbar lordosis were identified , then by using a ruler their curved lumbar arch were measured,30subjects (average age (41±8.07) randomly selected from 50 subjects with curved lumbar arch higher than the mean they were divided into an experimental group (15 subject) and a control group (15subje in pretest the of lumbar arch was measured by the flexible ruler , the strength endure was measured by schober test, the extent of the hamstring muscle flexibility was measure by test. The experimental groups have undergone a corrective exercise for 8 weeks 2 week, each session 90minutes. the control group didn't do any corrective exercises this time pretest examinations were repeated for 2 groups. To diagnose the rate of effects of doing exercises on curved lumbar arch, strength endurance of independent – test at $\alpha=0.05$ was used. The result shows that: 1-there is a significant difference between the experimental group curved lumber arch the control group at $d=0.05$ 2-there is a significant difference between the rate of abdominal muscles endurance of the experimental group and control group in posttest $\alpha=0.05$, 3-There is a significant difference between the flexibility of lumbar muscles of experimental group and control group in posttest at $\alpha=0.05$, 4-there is a significant difference between the flexibility of hamstring muscles in test of the experimental and control droop at $\alpha=0.05$ The final result of the research show that doing corrective exercises for 8 weeks sessions a week 90 minutes each session could significantly decrease the lumbar arch.

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INTRODUCTION

Physical Education and Sports Science is one of the areas of human knowledge that in the present day is a special place. Excellent value and importance of various aspects of this phenomenon can be studied. One of the important objectives of physical education and sports science, training and fitness. Your physical health also encompasses a wide scale. Having good health is one of the aspects that play a role in movement and daily activities and sports skills are essential. Necessary to achieve a desired physical state of applying the right tools and techniques to achieve this goal is important. If not done carefully using the methods and practices, and on the other hand is not based on scientific findings, he cannot expect to achieve this goal. Therefore, special attention and look at the basics of movement and exercise there are scientific and research Accordingly, the researchers are trying to research efforts in the area of physical health to pave the way. This is how the human mind has always found the best way to stand, sit, move and operate as it is aware of the quality or physical condition. Body as a consequence of their coordination and cooperation among different organs, particularly muscles and bones. The bones and muscles of the body as a supportive context as mover of the body are supportive context and obviously the strengths and weaknesses of their influence on the formation and movement of limbs. The only way to strengthen the system depends on having enough mobility and strengthening exercises and sports activities and maintain the desired position of the extremities. Part of the physical education reform movement that aims to prevent and resolve some physical deformity by physical exercises. In other words, the following corrective action sports and motor programs that For people with physical effects can be used in an appropriate and desirable to. About the importance of natural curvature, some

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clinicians refer to the physical condition and size of the curvature of the lumbar spine structural damage such as Disks, external appendages, joints and nerve roots are related. In addition to the formation of bones and ligaments in the lumbar lordosis affect the muscles also play an undeniable role in this regard. Muscle weakness, twitching too short spasm and is often associated with an abnormal situation. Clinical studies indicate that lumbar lordosis, pelvic tilt, and abdominal muscle performance, – hip extensors cagey opening and subsequent impact of pelvic anterior tilt has increased lumbar lordosis. One of the most common causes of back pain is lumbar spinal curvature changes. Major changes in the curvature of the lumbar and pelvic motions is movement and change. Move your hips due to weak pelvic muscles including the abdominal muscles, lumbar opener waist and hip flexor is. If there is no balance of power in the muscles of the pelvis will rotate forward or backward, as if turning the front of the pelvis, lumbar lordosis increases. If an increase in lumbar lordosis was problematic in terms of aesthetic concerns about the appearance was limited, but if this is a permanent addition to being one of the most common causes of back pain is another condition that causes abnormalities such as disorder the front and back are rounded. Today, reliable solutions, yet low cost and affordable, opinions of experts and researchers have focused on sports science to how the guidelines can be an effective treatment for controlling symptoms and physical abnormalities, particularly abnormalities of the spine presented Therefore, in this study, the researcher is seeking to do corrective exercises for a period of 8 weeks, 3 sessions per week, each session for 90 minutes can control and treatment of lumbar lordosis staff, middle-aged man (50-35) aged Good to be back effectively? A study on a group of employees of the fire department showed The reduction of a risk factor to increase the flexibility of multiple muscles, resulting in back pain is the lumbar lordosis. Our study (1999), the reduced elastic waist opening and showed a significant correlation between the degree of lumbar lordosis. Studied the imbalance in muscle strength of the trunk extensors weaker as the risk of back pain were introduced. The study to assess the activity of the abdominal muscles and lower back muscles opener was found that the activity of external oblique muscle of the abdominal muscles, pelvic tilt exercises more and more activities can be seen.

MATERIALS AND METHODS

This is a quasi-experimental study, the target population consists of middle-aged male workers oil company in Ahwaz (700 = N) relative to average (50-35) years. The sports medicine clinic staff Oil Company of New York and the risk of complications of lumbar lordosis, test the corporate chessboard evaluated And 200 employees who had been identified with increased lumbar lordosis And then to determine the effect of the curvature of the lumbar lordosis were people with flexible ruler was used And the lumbar curve of the average angle of 50 people (56 degrees) was higher than 30 were randomly selected and then randomly assigned to two groups of 15 experimental and control groups. To test the research hypothesis of the t-test was used to compare pre-and post-tests for each group and means were compared by t-test post-test experimental and control groups were used. Statistical operations using SPSS and EXCEL software was used to plot graphs and tables.

Results:

Table 1: Personal characteristic of participants.

Control group of 15 = n				Groups 15 = n				Variables
More Amount	Lowest Amount	Deviation Criteria	Mean	More Amount	Lowest Amount	Deviation Criteria	Mean	
50	35	8/07	41	50	35	7/06	42	Age (years)
189	164	7/09	170	187	163	8/07	169/4	Height (cm)
105	79	9/07	49/133	105	79	9/09	89/12	Weight (kg)

Table 2: summarizes the descriptive data of the experimental group in pre-test.

Groups 15 = n				Variables
More Amount	Lowest Amount	Deviation Criteria	Mean	
80	59	6/2579	68/302	Lumbar lordosis (degree)
34	6	5/8651	17/8	The amount of power - the strength of abdominal muscles. (Repeat)
15	9	1/089	12	Flexibility of the muscles of the waist (cm)
87	51	8/124	69/054	Flexibility of the hip muscles (O)

Table 3: Comparison of pre-test and post-test on lumbar lordosis in the experimental group.

P value	Degrees of freedom	t calculated	Standard error	SD	Mean	Number	Variable
0/001	14	6/982	0/3120	6/2579	68/302	15	Lumbar lordosis in the pre-test
				5/2841	65/299	15	In the case of lumbar lordosis

Table 4: Comparison of pre-and post-tests of strength - strength in experimental abdominal.

P value	Degrees of freedom	t calculated	Standard error	SD	Mean	Number	Variable
0/001	14	-15/466	0/8110	5/8651	17/8	15	The amount of power - muscle endurance Abdominal pretest
				8/320	30/4220	15	The amount of power - muscle endurance Abdominal posttest

Table 5: compares the power of the test - abdominal strength and control groups.

P value	Degrees of freedom	t calculated	Standard error	SD	Mean	Number	Variable
0/001	28	6/661	2/6521	4/8168	14/41	15	Control
				8/320	30/4220	15	Experimental

Table 6: Comparison of experimental flexibility of the back thigh muscles, control and experimental groups.

P value	Degrees of freedom	t calculated	Standard error	SD	Mean	Number	Variable
0/033	28	2/148	2/0012	3/9121	69/18	15	Control
				7/0185	74/3280	15	Experimental

Discussion:

The end result of this study shows that the implementation of corrective exercises for 8 weeks, 3 weeks, each session 90 minutes can make a significant improvement in the rate of complications of lumbar lordosis employees Employees in middle-aged men (50-35 years) is lordosis. And a movement of the muscles of the lower back, Williams has had a significant impact.

The results showed that:

1- 8 weeks of corrective actions on lumbar lordosis male employees aged (50-35) years, Iran has an effect on the oil company.

2- to 8-week corrective exercises done on the strength - endurance abs male employees aged (50-35) years, have the effect of Ahvaz oil company.

3- to 8-week corrective exercises done back on the amount of flex muscles male employees aged (50-35) years, has the effect of Ahvaz Oil Company. The findings indicate a significant difference between the experimental and control groups at post-test in lumbar lordosis is $p= 42\%$, On the management and treatment of lumbar lordosis changes abroad have been several researches that this study will lead to the creation of centers were called back school; The emphasis on linking theory with sporting activities for people with reduced lumbar lordosis is lordosis. But whether doing exercise can reduce lumbar lordosis may contribute to whether or not there were differences. Some of the relationship between physical activity and reducing lumbar lordosis believe that either the amount of physical activity, exercise And when performing job activities, are effective in reducing lumbar lordosis. The theory is based on the reduction of lumbar lordosis associated with sports activities is one of the major causes increased lumbar lordosis, Weakness in certain muscles of the trunk and pelvis and a series of short listed. Thus the short muscle weakness and increased lumbar lordosis and back pain. Because of the weak short series and some of the muscles that control the It's the pelvic muscles is lost, causing pelvic tilt forward and the result is an increase in lumbar lordosis. Because of the weak short series and some of the muscles of the pelvic muscles that control it disappears And causes the pelvis to rotate forward and the result is an increase in lumbar lordosis. Including the abdominal muscles, back opener, can opener and hip flexor. Thus for the prevention and treatment of lumbar lordosis should be strengthened muscles through exercise. Following the comments of the scholars, perhaps one reason why the study of lumbar lordosis, muscle strength noted. The proponent of this theory believes that, the impact of physical activity in the treatment and control of this disease in adolescents and young adult's ages will be higher. Because aging is a progressive increase in stiffness along with reduced range of motion in the spine, there is considerable and thus more difficult to treat. Results were obtained in the present study, the average age of the subjects (41 years), proves this theory. Thus, in this study, after 8 weeks of corrective movements on male workers aged (50-35) years, mean lumbar lordosis from 302/68 up to 299/65 ° C significantly decreased. This result with the result of a team of researchers including: Kamtf0rd and Mottram, nutmeg and colleagues, Sullivan, Richardson and Jules, Farzam Farzan, Alizadeh Aghdaie is consistent. What can be inferred from the findings of research in this area is to investigate the effectiveness of corrective exercises general control and management methods Complication of lumbar lordosis, the attention of researchers, and the medical community and the sport is still controversial, and further investigation is needed.

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