

## **A comparative study of people with fragile bone in the lumbar (L<sub>1-5</sub>) at the practices of other sports activities ages (35\_45) years in the southern region**

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### **Abstract:**

*This article contributes to the entry of modern equipment in the exact detection of injuries of various kinds and this helps to develop appropriate solutions to those who suffer injuries. Osteoporosis is a common phenomenon among most people and for both sexes in which bone tissue loses calcium-mediated breach between the processes of formation of bone and disintegration. As a result, the bones become fragile and more prone to breakage and that prejudice is caused by increasing the disintegration process of the bone within the limits of the drafting of the bone (Remodeling) or due to a decrease bone formation process within the confines of the drafting of the bone. Duplication is complete (and this Taad platelets or bone barriers more than bone cortex because it owns an area of shallow and wide and because the process of drafting the bone needs to surface area, the platelet faster shift from the chaff) and reflected the importance of research to know the importance of the practice of physical activity for women and its impact future on the bones and find out the relationship in people with fragile bone in the lumbar between practices and practices of others. The research problem wording of the question ((What is the nature of the impact of the practice of physical*

*activity on the level of density and osteoporosis in women of the lumbar vertebrae (1-5) The objectives of the research was to identify the injury fragile bone Non practices for lumbar vertebrae (1\_5) by a device (Osteosys ) and to identify the differences among a sample search between practices and third-party practices by a device (Osteosys) and to identify the impact of the sports level of fragility bone activity of the practices of the sports activity either hypothesis, there was a positive effect to the exercise of physical activity on the fragile bone level with the practices of the lumbar vertebrae (1\_5) and there is a low the fragility of bone level of practices and there are significant differences between the practices and third-party practices and in favor of practices. As the conclusions was that the regular practice of physical activity sports lead to reduce the degree of injury in the fragile bone and not the regular practice of physical activity sports increases the incidence of lumbar vertebrae.*

**Key words:** fragile bone, lumbar area, sports activities

## **1. INTRODUCTION AND THE IMPORTANCE OF RESEARCH:**

It contributes to the entry of modern equipment in the exact detection of injuries of various kinds and this helps to develop appropriate solutions for those injuries. Although osteoporosis common phenomenon among most people and for both sexes in which bone tissue loses calcium-mediated breach between the processes of formation of bone and disintegration As a result, the bones become fragile and more prone to breakage and prejudice is caused by increasing the disintegration process of the bone within the limits of the drafting of the bone (Remodeling) or due to a decrease process bone formation within the limits of the drafting of the bone. Duplication is complete (and this Taad platelets or bone barriers more than bone cortex because it owns an area of shallow and wide and

because the process of drafting the need to bone surface area, the platelet faster shift from the chaff). (1)

Studies show the importance of sports practice for health and gain strength and proper, including the skeleton works as a prop and lever the body must be attention to studies that dealt with in the sport of entertainment or adult achievement of its importance not less important than the other devices. Because osteoporosis has become a problem and the phenomenon of interest to researchers in various fields of science as it affects one out of every twenty people and the lack of studies dealing with bone fragility, particularly in Physical Education, Science and show the scientific development of modern computers, which give us accurate knowledge of the type of injury rates, the researchers felt this study Thread to contribute to Altokha or reduce the incidence of this disease is not a sport therapeutic but to know the differences between the practices of sports activities and non-practice and could give thoughtful scientific predictions and then use them to curb the disease and achieve better health by relying on modern scientific instruments and the recent show and associated fragile bone .

Hence the importance of research to know the importance of the practice of physical activity for women and the future impact on the bones and find out the relationship between people with fragile bone in the lumbar practices and practices of others

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

Depending on the concept of systematic research of the problem, known as a thorough understanding of the facts and ideas and agreed that represent specifically for versatility and grasp the researcher (2)

In Astvhammep inter rely on scientific methods to get to the facts, and thus researchers formulate their problem by answering the following question.

What is the nature of the impact of the practice of physical activity on the level of density and osteoporosis in women with paragraphs cotton (1-5)

In this concept, the researchers gave the briefing to the problem of their research commensurate with the nature of the goals of the study.

### **Objectives:**

1\_altaraf to infect bone fragility Non practices for lumbar vertebrae (1\_5) by a device (Osteosys)

2\_altaraf the differences among a sample search between practices and practices by third-party device (Osteosys)

3\_altaraf effect on the level of sports activity in bone fragility practices of sports activity.

### **Assumptions:**

1\_hnalk positive effect to the exercise of physical activity on bone fragility level of the practices of the lumbar vertebrae (1\_5).

2\_hnalk decrease in bone fragility level of practices.

3\_hnalk significant differences between the practices and the practices of others and in favor of practices.

### **Areas of Research:**

1\_amajal temporal: 08/18/2015 to 08/25/2015

2\_amajal spatial: Clinic, Dr. Mohamed Hassan

Human 3\_amajal: People with the practices and practices of others ages (35\_45) years in the southern region

## **2- FIELD RESEARCH METHODOLOGY AND PROCEDURES: -**

### **2.1 Research Methodology: -**

The researcher used the descriptive manner Survey appropriate to the nature of the problem.

### **2-2 Society and the research sample: -**

Community included people with illnesses fragile bone of the practices and third-party practices in the southern region (Basra \_ Dhi Qar \_ Maysan) totaling (100) for a week either sample were: the auditors of the clinic, Dr. (Mohamed Hassan) in the Specialist in Basra Medical Center as the only center to measure those injuries in the southern region, reaching the sample (50 infected |) as it was by (25) infected with the practices and (25) infected non practices fragile bone and the sample proportion (83.5%) and is divided into two parts of practice and non-practice of reaching number of practices (25) infected with the practices and (25) of the non-infected practices.

**2-3 Homogeneity of the research community:** the purpose of making sure the homogeneity of the sample, the researchers using the arithmetic mean and standard deviation of the variable bone fragility of the research sample and using the coefficient of variation.

**Table (1) shows the homogeneity of the variable bone fragility among a sample search members**

Bone fragility	Arithmetic mean	standard deviation	The coefficient of variation
Practices	0,957	0,132	%72
Non practices	1,716	0,309	% 55

## **2-4 Instruments and tools used: -**

- 1 - foreign and Arab sources and references.
- 2\_ electronic balance
- 3\_ device for measuring bone density and fragility (Osteosys) Anglo-making
- 4\_jhaz not the type of laptop (DEEL)

## **2-5 Field research procedures: -**

### **2.5.1 Test density and bone fragility of the lumbar vertebrae (1\_5).**

Test Name: - Test injury density and bone fragility.

Test specifications: - lab sits for a certain period under the machine and after shedding comic book on the particular area of the injury and then begins to take the image of the affected area if it tracks four regions of the body, a lumbar region as well as the hip and the wrist joint and ankle, as these are the area's most vulnerable to infection.

Knock Date: - gives us a scalable device numbers from (2500) to the intensity and the lower sub-zero (0\_ 1\_2,500) increase the level of injury bone fragility of the lumbar vertebrae (1\_5) vertebrae

People with fragile been measuring bone in the lumbar spine by a device ((Osteosys During the 25 minutes gives the results of measurement by the said device was identified incidence through pathologist (Mohammad Hassan)

### **2.5.2 Exploratory experience: -**

This experiment was conducted on 12.12.2015 on (4) of the practices of the sports activity during which recognize the reality of the injury and the increase and overcome the difficulties that may arise in order to prepare for the main application. And the creation of assistant staff.

**2-6 Home experience: -**

The researchers conducting the main trial in Dr. Clinic (Muhammad Hassan) and the object in Basra on 08/18/2015 for a week on the auditors of practice and non-practice of sports activity .autam interview with each infected and develop the necessary questions in this area and these procedures were as follows: \_

- 1\_hl live a sport
- 2\_aa live a life of sports
- 3\_manua practice of sport
- 4\_km number of children
- 5\_manua job that you work out

**2.7 statistical methods:** - The researchers used statistical spss bag system

**3\_ SHOWING RESULTS ANALYZED AND DISCUSSED:**

**3\_1 Results:**

3\_1\_1 present and discuss the results of research society of people with fragile bone paragraphs cotton (1\_5) at the practices of others and practices.

**Table (2): Shows the arithmetic mean and standard deviation and the value of (T) calculated for the research community**

Bone fragility	Arithmetic mean	standard deviation	Values ( t)	Degree of freedom
Practices	0,957	0,132	9,358	14
Non practices	1,716	0,309		

\* Significance level of = 0.05

Shows of the table (2) The arithmetic mean of the group practices was (0.957) and standard deviation (0.132). Strangely was the arithmetic mean for others Practice Group (1.716) and

the standard deviation was (0.309) and then calculate the value of (T) for comparison between the two groups using the law (T) for the corresponding samples, which amounted to (9.358) and including the measurement of the amount of fragility are negative numbers show us moral differences when appropriated significant (0.05) and for the practice of Sport.

### **3-2 Discuss the results:**

The results indicated in the table (3) the existence of the incidence of fragile bone few practices compared to the non-exercise of Sport and that these differences between the two sets of research were big in the incidence of injury to the lumbar vertebrae note that the concentration ratio was within the associated osteoporosis health border with the practice of physical activity Sports regular non-practices, which emerged through the measuring results by the device (Osteosys) Who gives us the true lineage of evolution and researchers attribute it to physical exercise and regular practice of sport and significantly for a long time leads to an increase in the strength of the lumbar spine, as well as the nature of the practitioner activity that dominated antenna system which has helped physical activity in which to increase the effectiveness of practices for sport ((as it affects aerobics the skeleton in several ways Valtotar direct stress can increase bone density and metals here will prevent the occurrence of fragility either violent exercises to affect the hormones that are related to bones in reverse)) 3

And humans Thamer Hamdan and Ahmed as Abdul, but ((that regular exercise is good for the bones and general health and safety)) 4

And suggests the Mayo Clinic, "as the case gap with the rest of the body, the bones grow strongly during movement, and that physical activity increases bone mass." 5

This is consistent with the study conducted at the University of



California, which confirmed that the increase in the level of fat in the blood has nothing to downsample bone density and bone minerals and confirmed that cholesterol is responsible mainly for the development of osteoporosis, a disease.6

Recent research has indicated the presence of certain physical activities and relationship with osteoporosis (softening disease or osteoporosis) with simple exercises are important for the protection of the fragile The violent exercise can lead to an adverse effect on bone.7

## **4. CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 Conclusions:**

- 1\_ The regular practice of physical activity sports lead to reduce the degree of infection in bone fragility.
- 2\_ an lack of regular practice of physical activity sports increases the incidence of lumbar vertebrae.
- 3\_ need to emphasize awareness on the regular practice of regular physical activity to avoid osteoporosis.
- 4\_ need to ensure the satisfactory history of the samples before proceeding to study osteoporosis have.
- 5\_ need to adopt the descriptive manner survey or comparative study of this type of studies.

### **4\_2 Recommendations:**

- 1 comparative studies to identify the effect of the type of physical activity in the events and games on osteoporosis.
- 2\_ comparative studies to identify the effect of the prevailing energy system type in the exercises on osteoporosis.
- 3\_ajra similar studies on samples from female various ages and different sports and events.
- 4\_ajra comparative studies to identify the effect of pregnancy in the types of training exercise on osteoarthritis.
- 5\_ajra comparative studies between speed and strength

training exercises or endurance to get to know the impact on osteoporosis.

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