

## Comparative Study of Sports Injuries in Football and Futsal Team

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### Abstract:

*Football and Futsal are the most popular and most attractive sports in the world and these sport disciplines have very complex techniques and of tactic which provide exercises, endurance, and power. The aim of this study was to compare sport injuries in football and futsal of the Markazi province teams in Iran . Descriptive and comparative study in which the researcher was able to view 480 athletes, football (240) and futsal (240) to randomly collect. Data collection tools the researcher made questionnaire. The formal validity and reliability using Cronbach's alpha was calculated .88. Kruskal-Wallis test was used to analyze the data. The results showed that the bone injury, joint injuries and muscle damage between athletes in football and futsal in Markazi was no significant difference. But in skin damage, there was a significant difference between football and futsal athletes, and football players suffer more damage than the Futsal players. Considering the high amount of damage in the athletes and especially indoor soccer athletes suggested to creating safety conditions for prevention of injury and special attention to review the environmental conditions in tournaments.*

**Key words:** Football and Futsal, bone injury, joint injuries, muscle damage and skin injury

## **Introduction**

Lively spirit, strong muscles, perseverance and will are all long-athletes makes their daily activities began with joy and with effort and persistence to achieve their life goals. So the difference a positive exercise can be considered successful for the group. On the other hand, despite many effects of exercise, activity can be different individual athletes prone to injury, so that the professional level and championship should always be alert to the emergence of the injuries. But do not be afraid of injuries, the benefits will be overlooked? (Rajabi, R. 1372). In recent years research in the field of sports injuries incidence has spread up the useful information in the field of pathology in different sports for sports teams, doctors, physiotherapists, trainers and athletes. The importance of addressing these contributions can be from two dimensions into consideration health and Championship that will give these two both line with each other. The human dimension of an athlete's need to have a healthy and away from physical injury and the competitive environment on the one hand and the Championship is also dependent on physical and mental health. Hence the role of scholars in sports science in field of study on the extent, prevalence, types and mechanisms of injury and factors associated with it have great importance (Wintrgrifith, H. 1926). One of the most important factors in the process of growth and development of problem sports Championship, neglect and lack of utilization of applied science and research in the sport. Including this science can be applied to sports pathology science reference that with the new findings and their application of many of the problems could prevent athletes. In such a situation that was expressed, find the process, causing the forced removal of youth athletics will have to somehow develop sport injuries and are in fact part of the material world, spiritual capital of revolution and the time goes easily to waste (Khalesi, a., 2001). The sport of football and

Futsal match component full mobility, which is different from the movements such as bending, running, hitting, speed of reaction and so on in its essence, and such movements sometimes quiet vegah are done very quickly and for a correct implementation of the professional levels of the body's physical capability in this field all of speed, stamina, power, coordination, and balance, chabaki ... So, we should be strengthening of the front were possible injuries (khabiri et al., 2005). Several reports of damage in the footballer is express, from which, including fractures of fingers, hand and face skin damage, soreness and knee and ankle injuries and the back and hamstring muscle. Abbott et al. (2007) study to evaluate the safety of club football and the question of whether the Executive can practice in safety process safety activities in the football club and up, with the aim to assess the safety of the sport, especially the four safety management programs in the sport of football in the city of Sydney Institute. The results showed significant differences in average scores on the test and control groups, clubs in the following policies, build agents, and safety in advance of testing. The test group to form effective clubs tried to increase the safety of their sports activities but were nevertheless the Club less safety having reported injuries among their athletes in this way was: the most injuries in extremity (44%) And after that head injury (24%) And upper extremity (19%) Also was a significant percentage. The most common injuries in this study, ankle sprains and fractures of the hand and head injuries, and the highest rate of injuries and reports (44%) owned by player halfbacks. The most basic information that teachers in relation to the field of sports, of which they have knowledge, familiarity and understanding of the value of physical activity. But unfortunately, some of the instructors and experts in physical education sport due to lack of understanding of the subject and the planning and achieving the desired goals with face. Some of the teachers using traditional exercise methods and reasonable exercise of non-

athletes to show that this leads to excessive non-appropriate ligament, tendons, joints, organs, muscles, bones that cause severe injuries in athletes. And according to the historical record a string of football and futsal in the country since the start of the activity and very little research has been done string, we hope that this study will be effective until the results of the above research using research done and witnessed the identification and prevention of the injury of our athletes in soccer and Futsal.

## **Methodology**

Type research was description of the cause after the occurrence. Statistical Society of this study includes all (750) football and Futsal League players in central province of Iran in years 92-93. Using the formula Cochran the number of 480 (241 questionnaires football and Futsal players questionnaire 240) as a research samples selected randomly and information about them was collected and analyzed. The information needed through this study were collected by a questionnaire in two different part 1-individual information including the biography of sportsmen (weight, height, age, sports history, sports, business, authority) and 2-information regarding the necessary measures to identify the causes of damage in both football and Futsal players teams . Part of the questionnaire to identify different sections of damage including damage of articular (joint dislocation, sprain) bony damage (breakage, cracking the bone), muscle-tendinous origins of damage (muscle cramps, soreness or muscle tear or stretch marks injuries, beat – the tendinous origins and sprains) and skin damage (abrasion and blisters, tympanic membrane). Validity of the questionnaire was confirmed by use the comments of professors of sports injuries specialist and a number of expert physical medicine specialists. So 50 questionnaire divided between football and Futsal athletes who did not participate in

research, and finally the reliability of cronbach's alpha test of the questionnaire was 0.88. At beginning research in correspondence with the Administration and coordination of sport and youth minister and both federation in the central province obtaining the necessary permits and letters and introduction, the questionnaire by all athletes in the team between the instructors and distribution for the completion of data collection. After collecting the data and its categories, in order to analyze the findings, using descriptive statistics for showing the tables, average, standard deviation, and for test hypothesis Kruskal Wallis and SPSS software version 20 were used.

## **Results**

### **A: some descriptive examples of research results:**

1. Total quiz was 480 people (100%) of the total number, the 240 samples football (50%) and 240 samples indoor soccer (futsal) (50%).
2. Average age in football group was ( $25.03 \pm 2.01$ ) and the average age of the Futsal ( $19.43 \pm 1.64$ ).
3. Average of football athletes ( $73.12 \pm 4.24$ ) and the average weight of futsal ( $64.43 \pm 3.74$ ).
4. The average height of football athletes ( $176.33 \pm 2.9$ ) and the average height of futsal ( $174.64 \pm 2.23$ ) athletes.
5. Both the athletes groups training in three days per week and two training sessions per day.
6. Both the athletes groups training reported the most frequency of sports injury in the season matches.

### **(B) The results of the research hypothesis:**

1. Between football and Futsal athletes in terms of damage to the muscle and bone, joint, there was a significant difference between football and futsal and a greater injury were seen in Futsal.

2. In terms of skin damage significant difference among football and Futsal were not seen.

## **Discussion and conclusions**

According to the value of the Chi-square obtained (13.732) at a significant level ( $\text{sig}=.977$ ) to statistically, no significant differences between Futsal and football athletes in terms of the amount of damage and the average joint injuries 5.683 in football athletes and the average joint injuries in Futsal was 5.504 . The results of this study showed that among the two groups of athletes football and Futsal, articular damage in terms of the difference were significant, but the average joint damage showed the amount of damage in both the ballast, the findings with the results of most researchers, including the worker (2011), pitchers Qian et al. (2011), Shojaeddin (2008), Carter, et al. (2007), Kenney et al. (2000) and finches (2000) who believe that somehow the low safety halls and spaces for sport The relative increase of the articular extremity injury and upper, complies. At the present research the rate of injuries in both futsal and football athletes was high ratio; that in explaining the results achieved can be found in this thread mentions that the athletes have been activity in the sport environment (grass and lounge), given that the grass on the land, sometimes non-rigid and standard activity, away from the waiting is not that detailed more prone to damage. Because the land is unsuitable, the probability of the falling on grass in indoor and more, that this falling for athletes football and Futsal creates the problem. Of course, in addition to not observe safety issues and sports spaces (according to the history of research reports) can be other reasons, such as the low standard of equipment and facilities used by athletes and physical fitness are low as the reason the high rate of injury of the upper and lower extremities articular in football and Futsal.

According to the value of the Chi-square obtained (10.674) at a significant level ( $\text{sig}=.221$ ) to statistically, no significant differences between Futsal and football athletes in the terms of bone damage and there was average bone damage around 5.966 in football athletes and the average bone injuries in Futsal athletes was 5.729. The results of this study showed that among bone damage were high in both groups, researchers findings including Malakoutian et al. (2008), Kargar (2012), Rajabi (1993), REZVANI (1996), Karen et al. (2001), Angland et al (2002), Hull (2007), finches (2000) who believe that somehow Sports Hall down safety Are causing the injuries and fractures of the lower extremity complies. In the present research the amount of bone injuries found in the central province of futsal and football athletes to the high ratio in both groups; that in explaining the results achieved can be found in this thread mentions that the athletes have been up in the sport of football and Futsal, due to the high speed of the players during the activity and the physical encounter between the bony injury types encountered in the upper and lower limbs. Of course, in addition to the terms contained in this exercise also can be other reasons, such as low fitness athletes and improper feeding athletes as being high because of the extent of the injury of the upper and lower extremities bone athletes football and Futsal.

According to the value of the Chi-square obtained (11.688) at a significant level ( $\text{sig}=.166$ ) to statistically, no significant differences between Futsal and football athletes in terms of the amount of muscle damage, and average muscle damage and 5.741 in football athletes and average muscle injuries in athletes of Futsal was 5.700. The results of this study showed that among the two athletes football and Futsal, in terms of muscle damage, there was no significant difference, but it's average damage showed the extent of the damage is high in both groups. The findings including Nobakht et al. (2007), Kargar (2012), REZVANI (1996), Ezatollah Soltani

(1998), Elahi et al (2004), Kouzechian et al. (2011), Karen et al. (2001), Angland et al. (2002), Abbott (2007), Goodarzi et al (1393) and Fuller (2007) who believe that somehow low relative safety sports venues will increase muscle injury and lower limb and upper injuries would be consistent. In the present research the amount of muscle injuries in football and futsal in central province, the ratio was high in both groups; that in explaining the results achieved can be similar to the above hypothesis with reference to this subject that athletes have been activity in the sport environment (grass and lounge), given that the grass on the land, sometimes non-rigid standards and activities, not far from where the more vulnerable joint. Because the land is unsuitable, the probability of the grass in indoor and more, that football and Futsal creates the problem. Of course, in addition to not observe safety issues and sports spaces (according to the history of research reports) can be other reasons, such as the low standard of equipment and facilities used by athletes and physical fitness are low as the reason the high amount of muscle injury and lower limb and upper athletes football and Futsal.

According to the value of the Chi-square obtained (6.504) at a significant level (sig=.05) too statistically, significant differences between Futsal and football athletes in terms of the amount of skin damage were seen. Skin damage and the average 2.837 in football athletes and the average skin damage in the Futsal athletes was 7.420. The results of this study similar to that most researchers, including Nobakht et al. (2007), Kargar (2012), REZVANI (1996), Ezatollah Soltani (1998), Elahi et al (2004), Karen et al. 2001, Hull (2007), Smith (1990), Finch (2000), Abbott (2007) and fuller (2007) who believe that somehow a skin injury field athletes The upper limit of the Hall are relatively consistent. In the present research the amount of available skin injuries in Futsal athletes was higher than in compared with football the because athletes futsal in a small space in terms of safety enclosure

around the ground. This encounter and contact athletes physical damage percent firmer levels Futsal skin conditions it is more that the aforementioned conditions arise could be the reasons for the difference between the two groups in skin damage.

Now, according to the results of a high amount of damage and in particular between the athletes will be proposed to the authorities of Futsal to create conditions of competition and venue safety factors causing the prevention of injury and special attention to athletes once again the environmental conditions hold review football and Futsal.

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