## An analytical study of common sports injuries among Qatar 2022 World Cup players.

## Prof. Dr. Mustafa Ibrahim Ahmed Ali Prof. Dr. Ahmed Mohamed Hussein Dr. MOhammad El-Darmally Omar Introduction and problem of research:-

Sports injuries are one of the biggest problems that prevent the training program from being fully implemented. Injuries mean staying away for a certain period from practicing the activity, and thus this leads to a decline in the general level of the player, whether physically or skillfully, because the injury is very difficult and often occurs suddenly, which This makes predicting their time of location and occurrence extremely difficult, and accordingly the role of the coach and the injury and rehabilitation specialist sports highlighted in reducing the occurrence of injuries, dealing with them as soon as they occur, and providing medical assistance during the training unit. (1:8)

Sports injuries of various types occur in various sports activities in varying proportions, and this depends on the nature of the sports activity and the technical performance requirements of each skill. Each sports activity also has its own injury and different degrees of risk, even if the injury differs in its type, location, and degree of occurrence according to the nature of the activity practiced. (7 : 22)

Football holds a prominent place among the various sporting activities, and everyone is keen to watch its matches because of the joy and excitement it adds to that sport due to its characteristic of competition in which two teams participate, through which they exchange changing playing defensive positions, whether or offensive, and the abilities and capabilities it requires from the players. To face the events and variables of the match with changing and rapid situations in order to achieve victory, as well as the effort made by the players on the field. Due to the large area of the field and the length of the match. (3:17)

The game of football is considered one of the games in which players are most exposed to sports injuries. The reason for this is due to the large increase in the number of players practicing this game, as they number about (22) million players, in addition to the characteristics of this game, in which there is a lot of friction between players, as Franke (1977) points out.) indicated that (6050% of all sports injuries in Europe occur in the game of football, and Ekstrand (1982, Keller.et al, 1989) indicates that (3.5-10%) of injuries among football players are treated in hospitals. It varies. Sports injuries in football in terms of severity, location, position, location of the injury in training and the match, and its causes, as (Ekstrand, Gilliquist, 1983) divided them into simple, moderate, and difficult injuries, and that the most common injuries were simple (62%),

medium (27%), and difficult (11%). He also points out that the part of the body most susceptible to injury is the knee, and this is consistent with what Smillie (1970) indicated that more than (30%) of cartilage tears in the knee are related to practicing physical activities, including (70%) while playing a game. Football (8) (9) (12)

As for the positions of the players, the results of international studies differed, as the results of the study (Memoster.Walter 1978) indicate that the football players most vulnerable to injury are attackers and midfielders, while (1980.Sullivan) indicates that goalkeepers are the most vulnerable to injury. (10) (13)

The results of studies indicate that friction plays a major role in the spread of sports injuries, and that games characterized by friction cause sports injuries more than others. The game of football is one of the games in which friction occurs most between players and in all playing centers, which increases the chances of injuries occurring, as indicated by (Nielson and Ydel 1989) that (10%) of injuries occur during contact with others and (39) occur while running in football. (11)

The majority of injuries that occur in the sporting field differ from those that occur in general life, but there are many injuries that are considered related to a specific game and rarely occur in another game, as the injury is considered the result of the body or part of the body being exposed to a force exceeding its capacity. Body for endurance. (5: 172) Medhat Qasim Abdel Razek (2002 AD) points out that attention must be given to sports injuries and their prevention because this has а significant impact on maintaining the player's level of progress and his continued practice of sports activity. Therefore, avoiding injuries must be the primary concern and goal of officials in the sports field. In addition to shortening the period of time required for the athlete to return to the sports format after suffering an injury. (63)

Since sports injuries are considered the most important factors that lead to the exclusion of athletes and their isolation from regular training or participation in competitions, and are also considered one of the most important problems facing all workers in the sports field, it was necessary to identify the factors that help the emergence and spread of injuries and to know their causes and locations. And its types, especially among goalkeepers, whose injuries may be one of the reasons for their isolation exclusion from or participating in sporting events and thus losing teams. (4:43)

Through the researchers' follow-up of the largest international sporting event in the world and the occurrence of sports injuries to players before the World Cup competition period, most notably the injury of the best player in the world, Karim Benzema, which called on the researchers to identify the causes of common sports injuries in the preparation period and the competition period in the FIFA World Cup, as Sports injuries can end a player's football career, and to the best of researchers' knowledge, no specialized scientific study has examined sports injuries at the FIFA World Cup in the State of Qatar.

# Scientific importance of the research:

The current study represents a database that can be consulted to analyze data on sports injuries in the FIFA World Cup Qatar 2020.

This study may help identify the most common injuries in world championships.

## research aims:-

The research aims to identify common sports injuries in the 2022 FIFA World Cup in the State of Qatar through

- Identifying the causes of common sports injuries in the 2022 FIFA World Cup in Qatar

- Identifying the common sports injuries in the 2022 FIFA World Cup in Qatar

- The parts of the body most vulnerable to injury for players in the 2022 FIFA World Cup in Qatar.

- The teams most at risk of injury to their players in the 2022 FIFA World Cup in Qatar

- Percentage of players who were injured during the World Cup competitions in Qatar 2022.

## Search queries:

- What are the common causes of sports injuries at the 2022 FIFA World Cup in Qatar?

- What are the common sports injuries during the FIFA World Cup/2022 competitions in Qatar?

What parts of the body are most vulnerable to injury for players in the 2021/2022 FIFA World Cup in Qatar?

- Which teams are most at risk of injury to their players in the 2021/2022 FIFA World Cup in Qatar?

- What is the percentage of players who were injured during the World Cup competition period in Qatar?

#### Some terms included in the search:-Sports injuries:

Damage to the tissues of the body. This damage is accompanied or not by a change in the tissues of the organ that prevents it from performing its function, as a result of any sudden and severe external impact. It is considered a result of the whole body or part of it being exposed to a force exceeding the rate of the body's ability to withstand (2:10).

FIFA World Cup Qatar 2022

It is the 22nd men's national team World Cup, held every four years and contested by the national teams of FIFA. It will be hosted by Qatar from November 20 to December 18, 2022. This is the first edition of the World Cup to be held in the Arab world and the second to be held in Asia after the 2002 edition, which was played in South Korea and Japan.[2] France is the defending champion, after defeating Croatia 4-2 in the 2018 World Cup final. (14) (15)

## **Research plan and procedures: Research Methodology :**

The researchers used the descriptive method.

## research community :

The research community includes players from the age of 20 to 40 years and participants in the FIFA World Cup in Qatar 2022, who number 32 teams with 26 players.

## The research sample :

The research sample includes players participating in the World Cup with their teams who were injured during the preparation period for the World Cup and the period of actual World Cup competitions in the State of

Qatar, men from the age of 20 to 40 years.

#### Steps to conduct a search

Feeling the problem and identifying it
Reading and reviewing Arab and foreign scientific studies and research

- Reference survey: The researchers reviewed previous studies and scientific references specialized in injuries to football players.

- Review international newspapers and magazines to access information published about players' injuries and verify their credibility through the websites of the national federations on their official websites.

- Data dump forms

- A form for emptying basic research data was designed

- Steps to conduct research

- Reference survey for scientific studies and research

- Design a form for recording basic data and study variables and present it to the experts

- Arriving at the form into which the data will be transcribed

- Appointing a group of assistants to collect information

- Surveying sports websites specialized in sports and football in particular

- Conducting statistical treatments

- Reaching, interpreting and discussing results

- Reaching conclusions and recommendations.

- Reaching, interpreting and discussing results

- Presentation of conclusions and recommendations

## Data collection tools:-

## **Reference survey:**

The researchers researched and reviewed scientific studies related to the research topic to identify the most appropriate ways to solve the research problem and strengthen the research problem.

#### Scientific observation:

Observing sports injuries among players in the World Cup.

## Scientific interview:

Individual and group interviews were conducted for a number of faculty members in the Department of Sports Health Sciences and experts and their opinions on the form for discharging the research variables.

#### **Questionnaires:**

An electronic questionnaire was created for easy access to the largest number of experts, and a paper questionnaire was prepared for professors who wished to read the paper. The wording was modified, and the suggestions presented to the researchers were deleted and added, so that the model came out in the best possible form.

## Statistical treatments:-

The researchers used the appropriate statistical method, which is: arithmetic mean, standard deviation, estimated score, and percentage.

## - Conclusions:

– ما اسباب الاصابات الرياضيه الشائعه في كاس العالم لكرة القدم ٢٠٢٢م بدولة قطر
 – ما الاصابات الرياضيه الشائعه في فترة المنافسات لكاس العالم لكرة القدم ٢٠٢٢ بدولة قطر
 – ما اجزاء الجسم الاكثر عرضة للاصابة للاعبين في كاس العالم لكرة القدم ٢٠٢٢/٢٠٢١ بدولة قطر.
 – ما المنتخبات الاكثر عرضه لإصابة لاعبيها في كاس العالم لكرة القدم ٢٠٢٢/٢٠٢١ بدولة قطر.

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ما نسبة اللاعبين الذين تعرضوا للاصابة خلال فترة المنافسات لكأس العالم بدولة قطر.

Table (1)						
Frequencies and percentage of the most common sports injuries among players						
before the 2022 World Cup, n = 32 t						

Defote the $2022$ world Cup, $n = 52$ t						
õ	The elected	Repetition	%			
١	Belgium	1	2			
۲	France	10	20			
٣	Senegal	2	4			
٤	Brazil	2	4			
0	England	4	8			
٦	Argentinian	6	12			
٧	Spain	4	8			
٨	Portugal	3	6			
٩	Holland	1	2			
10	Mexico	1	2			
11	Germany	4	8			
12	Denmark	1	2			
13	Poland	1	2			
14	Canada	2	4			
15	Japan	1	2			
16	Saudi Arabia	1	2			
17	Morocco	2	4			
18	America	1	2			
19	Ghana	1	2			
20	Wales	1	2			
21	Switzerland	1	2			
22	the total	50	100			

Table (2)

Frequencies and percentage of body parts most susceptible to sports injuries among 2022 World Cup players n = 512 p

	8		
Μ	injury	Repetition	%
1	the leg	5	10
2	the shoulder	4	Z
3	knee	13	cat
4	Thigh	15	30
5	ankle	13	cat
	Total injuries	50	100%

Table (3)

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Frequencies and percentage of the most common sports injuries among 2022 World Cup players, n = 512 p

М	injury	Repetition	%
1	Ligaments are torn	15	30
2	fainting	-	0
3	injury	-	0
4	torsion	10	20
5	stripped off	-	0
6	broke down	3	i
7	Muscle tear	22	44
8	Shrink	_	0
9	bruised	-	0
10	Total injuries	50	100%

## Table (4)

Frequency and percentage of the number of yellow and red cards and the most difference for warning in the FIFA World Cup Qatar 2022 AD n = 512 p

М	The team.	Number of matches.	Colored cards.	Yellow	Red	percentage
	Total	74	166	163	3	100

It is clear from Table (4) the number of warnings that were issued to players in the teams participating in the World Cup. The team most exposed to warnings was the team that won the FIFA World Cup Qatar 2022, which is Argentina, followed by the Saudi team in second place.

Table	(5)
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Frequency and percentage of teams most exposed to injury in the FIFA World Cup Qatar 2022, n = 32

Team	percentage		
Argentina	8.22		
Morocco	12.33		
France	12.33		
Croatia	12.33		

It is clear from Table (5) that the players most exposed to injury are the players in the teams participating in the World Cup in the semi-final and final rounds, especially the top four. The teams least exposed to injuries were the team that won the FIFA World Cup Qatar 2022, which is Argentina, followed by the team that lost the tournament and ranked first. the second

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 Table (6)

 Frequencies and percentage of sports injuries according to the group stage and knockout stage

М	Africa	Asia	Europe	Australia	north America	south America	the total
Group stage	12	16	14	1	2	10	55
Knockout	5	-	12	-	-	1	18
Total	17	16	26	1	2	11	73
%	23.29	21.92	35.62	1.37	2.74	15.07	100

It is clear from Table (6) that the continent most exposed to injuries is Europe, with a rate of 35.62% of the Table (7)

number of injuries that occurred in the tournament.

Frequencies and percentage of the most common causes of sports injuries among 2022 World Cup players, n = 512

М	Repetition	%
Reckless or violent intervention	42	57.53
Overload and physical stress	15	20.55
Sudden movements	10	13.70
Not warming up well	4	5.48
Mental state	2	2.74
the total	73	100

It is clear from Table (7) that the occurring in the tournament are the most frequent causes of injuries FIFA World Cup Qatar 2022.

Table (7)

Frequencies and percentage of the most common causes of sports injuries among 2022 World Cup players, n = 512

Μ	Repetition			%
	Group stage	Knockout	Total	
Reckless or violent intervention	12	5	42	57.53
Overload and physical stress	16	-	15	20.55
Sudden movements	14	12	10	13.70

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Follow Table (7)

Frequencies and percentage of the most common causes of sports injuries among 2022 World Cup players, n = 512

М	Repetition			%
	Group stage	Knockout	Total	
Not warming up well	1	-	4	5.48
Mental state	2	-	2	2.74
Fatuge	10	1		11.00
the total	55	18	73	100

It is clear from Table (8) that the continent most exposed to injuries is Europe, with a rate of 35.62% of the

number of injuries that occurred in the tournament.

Table (9)

## Frequencies and percentage of the most common sports injuries among 2022 World Cup players

М	injury	Repetition	%
1	Ligaments are torn	12	16.44
2	fainting	1	1.37
3	injury	2	2.74
4	Sprain ankle	4	5.48
5	Dislocation	2	2.74
6	Fractions	2	2.74
7	Muscle tear	31	42.47
8	cramp	4	5.48
9	bruised	15	20.55
	Total injuries	73	100%

It is clear from Table (9) that the most common injury is muscle tear, at a rate of 42.47%, and ligament tear

came in second place, accounting for 16.44% of the injuries that occurred in the tournament.

**Table (10)** 

## Frequencies and percentage of body parts most susceptible to sports injuries among 2022 World Cup players n = 512

Μ	Place/Part	Repetition	%
1	Head	4	5.48
2	Wrist	3	4.11
3	the leg	14	19.18
4	the shoulder	4	5.48
5	the trunk	2	2.74

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Follow Table (10)

Frequencies and percentage of body parts most susceptible to sports injuries among 2022 World Cup players n = 512

Μ	Place/Part	Repetition	%
6	Knee	15	20.55
7	Thigh	21	28.77
8	ankle	8	10.96
9	the trunk	2	2.74
	Total injuries	73	100%

It is clear from Table (10) that the parts of the body most exposed to injury were the thigh area, which is a muscle tear, with a rate of 28.77%. The knee came in second place, with a rate of 20.55%, and the leg area came in third place, amounting to 19.18% of injuries. Which happened in the tournament.

Table (11)Frequencies and percentage of the number of players who were exposed to sportsinjuries among the 2022 World Cup players  $n = ^{\Lambda T T} p$ 

Μ	Variable	Repetition	%
1	The total number of players participating in the	832	100%
	tournament		
2	The total number of players who actually participated in	512	61.54%
	the matches		
3	The number of players who were injured relative to the	73	14. Cat
	actual participants		
4	The total number of players who were injured in the first	20	27.40%
	half		
5	The total number of players who were injured in the	53	72.
	second half and extra time		60%

It is clear from Table (11) that 73 players were injured, and the percentage of

injuries in the second half occurred more in relation to the intensity of competition and the extra time of the matches in the knockout round than once, with a rate of 72.60% of the injuries that occurred in the tournament.

#### **Research recommendations:**

In light of the study results, the researchers recommend the following:

- Using the study and being guided by it as a scientific and accurate description of sports injuries in the FIFA World Cup Qatar 2022.

- Paying attention to such research, especially in international championships.

- Identify common sports injuries in different games.

- Conducting similar scientific studies on various world championships in different sports.

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